

The Psychology of Friendship

edited by

MAHZAD HOJJAT

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OXFORD

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FOREWORD

Friendship is a commonplace notion, familiar to and cherished by people around the world and across history. The capacity for friendship is as fundamental to the human condition as are familial attachment; romantic, conjugal, and sexual loving; competition; and conflict (Brain, 1976). Since the time of Aristotle, friendship has been recognized as essential to the well-lived life. However, only in the last 35 years has markedly increased social scientific empirical work emerged addressing friendship as a distinctive category of human experience, cognitive and moral development, personal and social relationship, and communicative, associational, and political activity (Rawlins, 2009). Despite and perhaps because of its pervasive presence in human life, the word “friendship” references a vexing, intellectually captivating, continually evolving, and diversely apprehended array of phenomena. In this foreword, I point out why friendship is so vital yet elusive to study, and therefore why the present volume offers a worthwhile snapshot of this moment in the ever-unfolding saga and study of human friendship.

The words “friend” and “friendship” are used to describe a gamut of human relationships—ranging from long-standing attachments of considerable affection and loyalty, to someone just met at a bar or sports event, to a purchased affiliation with a library, museum, or opera house. Further complicating matters, friendship is unique in its capacity to arise as a free-standing relationship on its own terms between two persons, or as a sincerely lived dimension of other relationships, such as the friendship developed between siblings, spouses, parents and children, or coworkers. In these instances friendship is not a necessary part of the relationship; countless such bonds exist devoid of friendship. It is a negotiated attachment between persons that always reflects shared personal dispositions and material sociocultural possibilities. You cannot force or require friendship of any genuine emotional validity between people; and friendship may be restricted, prohibited, or even unthinkable in certain circumstances. Meanwhile, with the rapid proliferation of social media, the verb forms and related practices of “to friend” and “friending” someone have further

expanded, some would say diluted, the meanings of friendship, an issue I address in what follows.

Such varied meanings, coupled with friendship's contingent and flexible achievement across social settings, make it notoriously difficult to define friendship conclusively. Even so, I offer here five ideal-typical characteristics for recognizing friendship across diverse circumstances that set the stage for this volume (Rawlins, 1992, 2009). All of these features exist on continua resulting in multiple types and degrees of friendship. First and foremost, friendship is *voluntary*. People choose to regard and treat another person as a friend; friendship cannot be compelled. This voluntary basis for friendship contrasts with the irrevocable blood-based connection of kin, the legal and religious sanctions of marriage, and the contractual certification of economic and other partnerships. While all of these bonds, except kinship, may involve initial choices in undertaking the association, factors external to the relationship preserve the bond until and only when external measures are taken to nullify its existence. Some argue that this freely chosen quality of friendship enhances the moral quality of its dedications, even as it makes friendships highly susceptible to external circumstances. Throughout the life course the demands of one's marriage, family, and/or employment typically take precedence over those of friends—that is, unless these other bonds include friendship as a dimension, which can pose other challenges. There is wide disparity in the degree to which friendships are freely chosen and the extent to which they are a function of their social context. For example, it is often prudent to become friends with professional associates or seemingly necessary in specific settings to befriend those who share one's social position, privileges, or plight.

Second, friendship is a *personal* relationship. We live in friendship with someone because of that person's individual qualities, not simply because of membership in a certain class or category. This person-qua-person orientation of friendship, or friendship for the other's own sake, is considered essential for true friendship (Aristotle, 1980; Suttles, 1970). Nonetheless, actual friendships vary in the degree to which dedication to sheer personhood takes precedence. We may in fact become and remain friends with others because of their singular embodiment of a categorical virtue or commitment to a social cause that we share. Third, friendship is an *affective* bond—an emotional attachment. Persons care about, like, and may profoundly love their friends. Again, however, the depth of affect between friends may range from merely a situational, positive disposition to a lifelong devotion.

Fourth, friendship is a *mutual* relationship. As a free-standing bond, friendship is inherently relational; it is accomplished and sustained communicatively and through shared activities demonstrating each person's regard for the other. A one-sided stance of friendship toward another is only would-be friendship. Persons remain friends to the extent that they continue to meet mutually developed expectations and standards for worthwhile behavior. Fifth and finally, friendship tends toward an *equal* relationship. Although friends may differ in their personal attributes

or social station, friendship involves identifying areas of the relationship where the friends stand as equals. As C. S. Lewis (1960) remarked, friendships are always “about something” (p. 66), which functions as a leveler and occupies their shared attention and responsibility to each other. Striving in and for equality constitutes an inherently ethical quality of friendship. As such, beginning in childhood, participating in friendship is a site for ethical instruction, for cultivating understandings of fairness and cooperation. And throughout our lives issues of equality and power must be settled between friends.

Aristotle (1980) once observed that where there are friends, there is no need for justice, but where there is justice there still is a need for friendship. By this he meant that serving justice is a crucial concern that continually must be addressed and upheld between friends. In contrast, formal justice often requires overlooking the contingencies of a judged person’s life that friends typically will consider thoughtfully and with care in evaluating the other’s actions. In light of close friendship’s voluntary, personal, affective, mutual, and equal qualities, such friends negotiate a private moral sphere within the constraints of the cultural and public moralities shaping their possibilities. What does it mean to be fair to our friends? How do we decide which standards will be upheld in given cases—the idiosyncratic ones we have developed, tailored to our specific needs as friends, or the conventions of the larger social order? What happens when we do not meet the expectations that we have established either tacitly or explicitly in our friendship? It is important to note that many of our baseline notions of fairness and social justice are established with friends during childhood and adolescence. One reason for this accomplishment in friendship is that our close friends are the first persons in our lives who are not obligated to care about us. Friends earn and negotiate each other’s affection and respect.

Our practices of friendship influence and reflect how we organize our existential, personal, social, romantic, familial, occupational, religious, and political lives. Consequently, our participations in friendships also provide concrete measures of the freedom we have to pursue voluntary relationships (or dimensions of relationships) of affirmation, caring, utility, pleasure, and virtue patterned by the tasks, challenges, and enabling and constraining features of our life circumstances. Nevertheless, friendships remain highly susceptible to their enveloping circumstances and means of achievement.

Because of this simultaneous flexibility, relational constitution, and vulnerability to contextual determinants, understanding the achievement, maintenance, and psychological functions of friendship compels us to consider an array of attributes patterning human life. With their concern for each other’s personal well-being and just treatment, friends are mindful of the eligibilities for participation in supposedly voluntary associations. Cultural hierarchies of valued relationships often privilege family, marriage, and work relationships over friendships, even while, as mentioned, friendship also may or may not be permitted as a dimension of these bonds. Culturally sanctioned activities and feelings across the social spectrum of

relationships and roles exist, in effect prescribing who is allowed to care for whom, to what degree, and in what ways. Of paramount concern are the social identifications affecting friends' respective lived experiences and opportunities, as well as the support their friendship receives in its social milieu. Perceptions by third parties and the friends themselves of each person's ability, age, ethnicity, gender, race, religion, sexual orientation, and socioeconomic status remain vital considerations shaping and reflecting the experiences and possibilities of friendship. How personal and political friends recognize, address, and navigate the contingencies of such social identifiers potentially demonstrates the edifying world-shaping potentials of friendship (Monsour & Rawlins, 2014; Rawlins, 2009). Nevertheless, identity-related actions also may reveal the ways in which friendships fall short of their ideals and prey to oppressive social dictates.

Further, we must attend to interrelationships of friendship and stages of the life course. Important social cognitive developments and tests are associated with friendship and peer relations across childhood and adolescence. Achieving a mature grasp of friendship cannot take place to any meaningful degree without actual involvement in friendships. I have noted that from late adolescence across the life course, persons describe three enduring expectations of a close friend as somebody to talk to; to depend on for help, support, and caring in times of need; and to have fun and enjoy doing activities with (Rawlins, 1992). While these valued qualities of close friends remain the same, the circumstances, significance, and challenges of their achievement vary throughout life. Once persons have developed mature understandings and communicative practices for accomplishing friendship, the most common reasons for friendship termination across the life span involve peripheral factors and relationships (Rawlins, 1992). Events such as getting married or divorced, taking or losing jobs, moving away, or having children all threaten to displace the centrality of specific friendships in participants' lives. During later life, close friendship and companionship are cherished sources of life satisfaction and feelings of well-being, which are positively related to overall health (Rawlins, 1992; Uchino, 2004). Meanwhile, the mortality of friends and diminished abilities to share their presence are increasingly reasons for sorrow.

We believe that such persistent and consistently met expectations across our lives will remain key indicators of close friendship—a way to discern true versus false friends. But perhaps core characteristics for defining and experiencing friendship may be evolving along with the cultural and mediated conditions for their achievement—starting with early childhood. In that case high-minded conceptions of friendship could prove to be mere nostalgia and a reason for disappointment in the context of proliferating social media for achieving and living as friends irrespective of time, distance, or physical presence.

In this day and age, how do mediated or virtual friendships compare with friendships that are originally or primarily experienced face-to-face, or voiced in shared real time? Social media tangibly have changed definitions and ultimately conditions

of friendship. What are the implications of converting the nouns “friend” and “friendship” into the verb “friend” with its associated forms and instantly clicked practices to “friend” or “unfriend” another being that we may never meet in person, much less perform any co-present, shared activity in our entire life? These practices might highlight friendship’s fluid and active nature, its changeable, tentative, dialectical, and contingent workings. Perhaps the encompassing cultural grounds for friendship are shifting seismically with its conversion from a noun aspiring to some degree of confidence in its existence/persistence to a verb incessantly marking it as contingent on the gratifications or utility of the present or projected moment. The moral convictions of friendship are tied to friends’ dedication to a shared, well-lived life—to fulfilling the promises asserted by our overtures to friendship and our statements as friends. We must recall that offering friendship for much of recorded time has constituted a statement that we are who we present ourselves to be and that we will do what we say we are going to do. Any significant breach of this promise has traditionally been regarded with disdain as the behavior of a fair-weather friend or a faux friend.

Friendships are not always rosy, nor do they or should they always last. For many years I have argued that friendships involve inherent dialectical tensions animating and unsettling them (Rawlins, 1983, 1989). While some of our most gratifying moments are shared with our friends, some of our most hurtful experiences of disappointment or even betrayal when we thought we could count on someone are related to friendship. Due to their internally generated standards and situated cross-pressures and exigencies, friendships are always ripe for conflict. Our ideal expectations of friends, tempered by concrete constraints and the interplay of friendships with other roles and relationships, make them highly susceptible to circumstances. Treasured ascribed and achieved identities, once richly validated within our friendships, may become threatened by emerging rivalries or demands. Wrongdoings occur, personal and professional competitions arise, and with them the need for compassion and reconciliation. Such are the complex songs of friendship.

In light of these conceptual and substantive considerations facing friendship scholars, the present volume offers a needed, comprehensive, and compelling portrait of the state of social scientific inquiry into the psychology of friendship at this juncture. Overall, the book examines varieties, tensions, and psychological functions of friendship as a free-standing relationship and as a dimension of other primary relationships. It does so specifically in chapters addressing friendship and romantic relationships, friendships with coworkers, and the role of friendship in mentoring as well as the positive effects of experiencing animals as friends. Other chapters consider developmental issues, challenges, and normative patterns associated with friendships across the life course, including friendship during childhood and adolescence, throughout young and middle adulthood, and in old age. In addition, psychological challenges and benefits of friendship are investigated across the lived span of specific friendships. Individual chapters consider friendship and

physical health, connections between persons' mental health status and the difficulties of maintaining best friendships, and the efforts and contingencies of sustaining long-lasting friendships. The potential for conflict across the forms and degrees of friendship is scrutinized in chapters concerning competition in friendship; wrongdoing, betrayal, and forgiveness in friendships; and the aftermath of romantic relationships that have included friendship as a dimension. Along the way, the book also features a chapter addressing the potentially transformative consequences associated with friendship and burgeoning social media, and chapters examining the crucial implications of social identifiers such as gender, sexual orientation, race, and ethnicity in constituting our practices for understanding and participating in friendship.

Friendship has manifold psychological significance and time-honored recognition as indispensable for individual and communal well-being. Given its situated and mutable achievement, it is imperative to investigate the continually emerging practices, experiences, forms, and functions of friendship. In doing so, the chapters composing *The Psychology of Friendship* provide a valuable survey of current social scientific inquiry addressing this essential human relationship.

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INTRODUCTION

Psychological Aspects of Friendship Across the Life Span, Settings, and Relationships

MAHZAD HOJJAT AND ANNE MOYER

Friendships are important, potentially lifelong, close relationships that are essential to our social, psychological, and physical well-being. The friendship between the coeditors of this book is a good example of a long-lasting friendship (over two decades) that has passed the test of time and place, and is still going strong. Interestingly, our friendship began in a peer-mentoring program in graduate school (see chapter 9), and our first collaboration was a study on cross-sex friendships (chapter 4). The idea for our newest collaboration, this volume, came out of an informal discussion about the field of close relationships and how it has changed in the last few years. Further research confirmed our belief that even though research on relationships beyond those with kin and romantic partners has been increasing, no scholarly books with a specific focus on friendships have been written in recent years. Thus, our goal in editing this volume was to provide a scholarly, multidisciplinary compilation of the latest research and theory on friendship from scholars across various disciplines and countries.

This volume is composed of four parts and a foreword. In the foreword, William Rawlins describes how this vital relationship can be elusive to define and challenging to study due to variations in friendship's meanings, ways of forming, and even social proscriptions across contexts. In Part I, the chapters focus on how friendship develops, changes, and interacts with particular milestones during stages of the life course. Erdley and Day describe how friendships, in providing companionship, self-validation, and intimacy, are essential to socioemotional adjustment during childhood and adolescence. Wrzus, Zimmermann, Mund, and Neyer illustrate the ways in which the functions of friendship change as people reach young and middle adulthood and take on new roles (i.e., as workers, spouses, and parents) and engage

in new life tasks, and the ways that people's personalities and friendships mutually influence one another. Adams, Hahmann, and Blieszner emphasize a dynamic theoretical framework to describe friendships among older adults, whereby individual behavioral, cognitive, and affective characteristics shape friendship patterns that are embedded in a structural, cultural, temporal, and spatial context.

Part II explores whom we form friendships with. Monsour provides a cutting-edge approach to thinking regarding the long-standing research and theory on cross-sex and same-sex friendships by noting how an overreliance on binary conceptualizations of gender and biological sex is arbitrary and limiting. Rose and Hospital follow by reviewing research concerning facilitators of and barriers to friendship across differences of race, ethnicity, and sexual orientation. Ledbetter contributes a timely summary of how the emergence of social media not only has altered conceptualizations of friendship but also may reconfigure friendship networks and impact the well-being of users. VanderDrift, Agnew, and Besikci describe the ways that friendship within romantic relationships can enhance their quality and how individuals with varying attachment styles, patterns of interdependence, and culture may value and benefit from this differently. In another such dual-function interaction, Morrison and Cooper-Thomas relay the complexities of friendships in the workplace, which can vary from casual to very close, and the costs and benefits of managing and maintaining them. Similarly, Lunsford describes how mentorship, an instrumental relationship with an inherent power distance between roles, may evolve into friendship, or provide aspects of friendship while still representing a powerful association distinct from friendship. McConnell, Lloyd, and Buchanan's contribution suggests that, despite the fact that our relationships with pets necessarily involve much projection and anthropomorphizing, human-animal interactions represent an important social psychological model that informs us about human expectations, beliefs about theory of mind, and needs for social belongingness.

Friendships and the relationships that include them can sour and end, and this darker side is the purview of Part III. Clark, Fernandez, Harris, Hasan, and Votaw focus on factors that determine the characteristics of friendships in pairs of people who were formerly married or dating, noting the influence of such things as the social network that the pair is embedded in, individual differences in such things as attachment and feelings of goodwill, and situational factors such as the presence of children or new romantic partners. Relatedly, Hojjat, Boon, and Lozano explore the important topic of the ways in which our friends, whom we often depend on and deeply trust, can yet visit offense, harm, and betrayal on us, and how aspects of the transgression, the individuals involved, or the friendship determine forgiveness versus revenge outcomes. Hibbard and Walton suggest that competition and rivalry can be healthy and fulfilling in many sporting, social, and professional contexts, and can be important throughout the life span, but its aggressive and unempathetic nature can also threaten the quality of friendships.

What specific benefits can friendship confer, and how do we maintain friendships once they have formed? These are the guiding questions of Part IV. Holt-Lunstad explores the behavioral and biological pathways through which friendship's salutary effects on morbidity and mortality might operate. King's chapter outlines the mutually interacting influence of friendship and mental health; he presents data linking the maintenance of one's best friendships to psychiatric diagnoses and the ways in which particular symptom clusters pose potential risks to destabilizing friendships and the critical social support networks that moderate successful adaptation to life stress. As voluntary relationships, friendships are vulnerable to dissolution; Oswald describes how supportiveness, positivity, openness, and interaction as well as characteristics of the friendship itself contribute to its longevity.

In the epilogue of the book, Perlman deftly summarizes the important points and overarching themes from the chapters. Moreover, in an innovative approach, Perlman critically evaluates the contributions of the volume by glancing back at the history of the field, providing data on the present scholarship on friendship, and recommending future directions that are necessary to move the field forward.

This volume could be used, as a primary or secondary source, in advanced undergraduate and graduate seminars in a variety of fields, including but not limited to psychology, counseling, social work, communication studies, family studies, marriage and family therapy, nursing, and others. It is also hoped that the book will serve as a resource for scholars in any of the above-mentioned fields.

We are grateful to Abby Gross, Suzanne Walker, and Courtney McCarroll at Oxford University Press for their help in shaping the contents and organization of the book and bringing the volume to press. We also wish to thank our respective departments at the University of Massachusetts Dartmouth (Hojjat) and Stony Brook University (Moyer) for providing us with the necessary time and resources to devote to the editing of this volume.

The ideas brought by the contributors to the volume were thoughtful, insightful, and exciting, and were generated through their deep scholarship and expertise in their respective areas. We hope that these ideas inspire other scholars into further reflection and inquiry into one of our most fundamental and potentially edifying relationships.

PART I

FRIENDSHIP ACROSS THE LIFE SPAN

Friendship in Childhood and Adolescence

CYNTHIA A. ERDLEY AND HELEN J. DAY

Children's relationships with peers play a critical role in their psychological adjustment (Parker & Asher, 1987). Early studies on children's peer relationships focused primarily on the role of peer acceptance, or the degree to which the peer group likes a child. In recent decades, however, increased attention has been given to the role of friendship, defined as a close, mutual, dyadic relationship (Hartup, 1996). Peer group acceptance and friendship are related: For example, better accepted children are more likely to have friends (Nangle, Erdley, Newman, Mason, & Carpenter, 2003). Nevertheless, these aspects of peer experience make unique contributions to children's adjustment (Parker & Asher, 1993).

Friendship relations are distinct from other relationships. A meta-analysis by Newcomb and Bagwell (1995) revealed the many ways in which children's interactions with friends versus nonfriends differ. Children are more positively engaged with friends than nonfriends, with more smiling, talking, sharing, cooperating, and helping, and they show more effective task performance with friends. Although children are just as apt to engage in conflict with friends as with nonfriends, conflict resolution differs: Friends are more likely to use negotiation and to focus on preserving the relationship, whereas nonfriends are more apt to stand firm or use power assertion, resulting in less equitable outcomes. In addition, friendships are characterized by more equality and less intense competition and domination compared with relationships with nonfriends. Finally, friends tend to be similar in various demographic and behavioral characteristics, including age, race, attitudes toward school, and involvement in delinquency (Boivin & Vitaro, 1995; Dishion, Andrews, & Crosby, 1995). Indeed, this similarity in characteristics, referred to as homophily, plays an important role as children and adolescents select their friends (Dishion et al., 1995). Moreover, through socialization processes, friends tend to become even more similar to one another over time (Dishion, Spracklen, Andrews, & Patterson, 1996; Giletta et al., 2011).

In this chapter, we begin by discussing a theoretical perspective that helps explain why friendships are so important in the lives of children and adolescents. We next

describe the various functions that friends serve, highlighting developmental and gender differences. After presenting methods used to assess friendship experiences, we summarize research that has examined consequences of poor friendship experiences on children's and adolescents' socioemotional adjustment. We then describe friendship processes that could contribute to negative outcomes, including the reinforcement of delinquent behavior or depressive symptoms. The chapter concludes with suggestions for future directions for research, including an emphasis on implications for intervention.

A Theoretical Approach to Explaining the Importance of Friendships

Sullivan (1953) proposed the first major theory that attempted to explain why children's peer experiences are related to their adjustment. Briefly, Sullivan suggested that at different developmental periods, specific interpersonal needs emerge, and particular social relationships are best suited to meet those needs. During infancy (up to age 2 years), the primary need is for tenderness, which is satisfied by parents. Companionship arises as a key need in childhood (ages 2 to 6 years) and is also addressed by parents. Sullivan suggested that during the juvenile stage (ages 6 to 9 years), the major need is for acceptance, and while parents can fulfill this need, peers become important as well. Beginning in preadolescence (ages 9 to 12 years), the need for intimacy emerges and is primarily satisfied by same-sex peers, while these peers also play a key role in satisfying other social needs, including acceptance and companionship. Finally, during adolescence (ages 12 to 16 years), needs related to sexuality arise and are typically fulfilled by opposite-sex peers, who begin to meet the other social needs as well. Notably, according to Sullivan's theory, friendships emerge as highly significant relationships during preadolescence. Consistent with this idea, Furman and Buhrmester (1992) found that during adolescence, close friends begin to surpass parents as the primary source of social support.

Functions of Friendship

Across childhood and adolescence, friends fulfill a variety of critical functions that promote positive socioemotional adjustment. A basic function of friendship is *companionship*. Close friends frequently spend time together engaging in mutually enjoyable activities, and by early adolescence, same-sex peers are greater sources of companionship than are parents (Buhrmester & Furman, 1987). Friends often provide *instrumental aid*, and children expect that their friends will be more helpful than their acquaintances (Furman & Bierman, 1984). In addition, friends tend to offer a sense of *reliable alliance*, or being loyal and available. Having a friend to rely

on can promote feelings of security and protect one from anxiety and feelings of vulnerability (Furman & Robbins, 1985). Through providing comfort and support to one another, friends are also important sources of *nurturance*. Furthermore, being selected as a friend by a peer can contribute to *enhancement of worth*, by affirming one's competence and value. In addition, close friendships are an important source of *affection*. Furman and Robbins (1985) have argued that preadolescents and adolescents experience stronger positive feelings in their friendships than in other peer relationships and characterize this difference in intensity as the difference between loving and liking. Finally, friends play a key role in providing *intimacy*, as the level of disclosure tends to be more intense with close friends than with other peers.

Research has consistently indicated that compared with boys' friendships, girls' friendships are characterized by a greater exchange of emotional provisions. Girls report more emotional support and intimacy in their friendships (Rudolph, Ladd, & Dinella, 2007) and engage in more social conversation and disclosure (Rose, 2002). Furthermore, girls report higher levels of affection and validation (Parker & Asher, 1993). Overall, compared with boys, girls rely more strongly on their friendships as a source of self-definition (Rose & Rudolph, 2006).

These gender differences emerge by the late elementary school years. During early childhood, boys and girls rate their friendships as being similar in intimacy, but by preadolescence girls rate their same-sex friendships as more intimate than do boys, a gender difference that becomes even more pronounced by adolescence (Buhrmester & Furman, 1987). Interestingly, in early adolescence males and females rate their cross-sex friendships as relatively low in intimacy, but by later adolescence both males and females evaluate their cross-sex friendships as high in intimacy, with females judging their cross-sex friendships to be as intimate as their same-sex friendships and males rating their cross-sex friendships as more intimate than their same-sex friendships (Reisman, 1990).

Assessment of Friendship

Research on children's friendship experiences has focused on multiple aspects of friendship, including whether a child has a friend, how many friends the child has, the quality of those friendships, and the identity of the friends (Hartup, 1996). Given that the essence of friendship is reciprocity, assessing the existence of a friendship typically involves determining whether two children have positive feelings for one another. To evaluate these feelings, sociometric measures including nominations (e.g., of a child as a best friend or most liked peer) and/or ratings (e.g., of how much children like to play with a specific peer) are used. Researchers have employed these measures in different combinations to identify friendship dyads. A common definition requires mutual positive nominations (e.g., Parker & Asher, 1993). Other definitions involve the use of both nominations and ratings, for example, requiring that at least one child nominate

the other, and that both give each other high ratings (e.g., Berndt & Perry, 1986). In a comparison of various operational definitions of friendship, Erdley, Nangle, and Gold (1998) found that the definition requiring reciprocated positive nominations was the most restrictive, identifying fewer friendship dyads, whereas definitions using ratings were more lenient, identifying more friendship dyads. Erdley and colleagues (1998) suggested that the definition requiring mutual positive nominations identifies friendships that are qualitatively distinct. That is, it seems likely that these friendships are best friendships, whereas the use of more lenient definitions may identify “good” friendships, in which dyad members like one another, but do not necessarily view one another as close friends. Notably, many studies employing positive nominations have restricted children to nominating a maximum number of peers, typically three (e.g., Nangle et al., 2003). However, recent research has indicated that using unlimited nominations is more reliable (Marks, Babcock, Cillessen, & Crick, 2012). Allowing unlimited nominations is especially recommended for assessing the presence of friendships in adolescents, given that the reference group of peers in middle and high schools tends to be large (Cillessen, 2009).

In addition to measuring the existence of a friendship, it is important to assess friendship quality, or the degree to which the friendship is fulfilling key provisions (Bukowski & Hoza, 1989). Several measures of friendship quality have been developed, with the respondent usually evaluating a specific friendship identified as reciprocated. These measures, such as the Friendship Quality Questionnaire (Parker & Asher, 1993) and the Friendship Qualities Scale (Bukowski, Hoza, & Boivin, 1994) ask children to rate both positive (e.g., companionship, validation, intimacy) and negative (e.g., conflict frequency) aspects of the relationship. The Network of Relationships Inventory (NRI; Furman & Buhrmester, 1985, 1992) is typically administered to adolescents to assess the positive and negative dimensions of friendship quality. Notably, one criticism of these measures is their limited assessment of negative friendship features. In response, Furman and Buhrmester developed a new version of the NRI, the Relationship Qualities Version (NRI-RQV; Furman & Buhrmester, 2009). This revised measure includes a more diverse range of negative features, including conflict, criticism, dominance, exclusion, and pressure.

Consequences Associated With Friendship Experiences

Given the important functions that friendships can serve in supporting the well-being of children and adolescents, it is not surprising that those who do not have friends, or who have poor quality friendship experiences, are vulnerable to a variety of negative outcomes. Researchers have examined the ways in which friendship experiences relate to many aspects of socioemotional adjustment, including

loneliness, depression, anxiety, and self-esteem, as well as how children cope with peer victimization and function at school.

Loneliness

Initial research examining the association of peer relations experiences with loneliness focused on differences in loneliness as a function of peer group acceptance. These studies consistently demonstrated that children who are rejected by the peer group report the highest loneliness, whereas popular children report the lowest loneliness (see Asher, Parkhurst, Hymel, & Williams, 1990, for a review). More recent research has revealed that children's friendship experiences add to the prediction of loneliness, above and beyond the influence of peer group acceptance. For example, preschoolers who are rejected by peers but have stable mutual friendships are less lonely than their rejected peers who have no friends (Sanderson & Siegal, 1995). Similarly, elementary school students who have a friend are less lonely than those who lack a friend, regardless of acceptance level. However, even among children with a friend, lower quality friendship is associated with greater loneliness (Parker & Asher, 1993).

Nangle and colleagues (2003) expanded the examination of friendship experiences and loneliness by considering both quality and quantity of best and good friends among elementary school students. Results revealed that friendship directly predicted loneliness, but peer acceptance did not. Instead, peer acceptance predicted loneliness only through its association with friendship, suggesting that friendship plays a more central role than peer acceptance in determining children's loneliness. However, it should be noted that children who are better accepted are more likely to have friends and to have higher quality friendships (Parker & Asher, 1993). Thus, there appears to be a pathway in which higher peer acceptance increases children's likelihood of developing more friendships that are of higher quality, and this in turn helps protect children from loneliness (Nangle et al., 2003). Notably, longitudinal research indicates that quantity and quality of friendships in middle childhood predict loneliness in early adolescence (Zhou, Zhao, Sun, & Ding, 2006).

Depression

Many studies have found that children with lower quality friendships report more depressive symptoms (e.g., La Greca & Harrison, 2005; Preddy & Fite, 2012). Despite this well-established link, these variables typically have been studied concurrently, limiting inferences regarding causal direction. Several recent investigations, however, have examined the relations of friendship experiences and depressive symptoms using a longitudinal design, with the results suggesting that depressive symptoms contribute to more highly negative friendship experiences. Specifically, Rudolph, Ladd, and Dinella (2007) followed children from third to

sixth grade and found that both early-onset depressive symptoms and particularly the accumulation of symptoms across third to fifth grade predicted declines in the number of reciprocated friendships as well as poorer perceived friendship quality. Notably, these findings were observed in girls only, perhaps because compared with boys' friendships, girls' friendships involve greater exchange of emotional provisions, and it can be very difficult for depressed individuals to offer the emotional support and nurturance that girls expect in their friendships. Investigating sixth-through eighth-grade students, Prinstein, Borelli, Cheah, Simon, and Aikins (2005) found that for both girls and boys, greater depressive symptoms were associated with less stability in reciprocated friendships and increases in adolescents' perception of negative friendship quality over an 11-month period. Similar results were obtained by Oppenheimer and Hankin (2011), who examined short-term longitudinal and bidirectional associations between depressive symptoms and friendship qualities in adolescents (grades 6–10). Depressive symptoms predicted increases in negative qualities and decreases in positive qualities over a 5-week period, but positive and negative qualities did not predict increases in depressive symptoms. Together, these longitudinal studies suggest a downward spiral, in which depressive symptoms contribute to difficulties with friendships. However, it also seems likely that poor friendship quality predicts increases in later depressive symptoms, a possibility that future research should explore over longer time intervals.

An interesting recent line of inquiry has examined the importance of friendship participation for children at high risk for developing depression. Research by Brendgen et al. (2013) involving monozygotic and same-sex dizygotic twin pairs demonstrated that positive friendship experiences help protect fourth-grade students genetically vulnerable to depression from experiencing elevated depressive symptoms. Specifically, girls who had at least one close friend were less likely to exhibit depressive symptoms, and this protective effect was strongest among those who were most genetically vulnerable to depressive symptoms. In contrast, boys benefited from friendship participation regardless of genetic risk, although the beneficial effect was smaller than for girls. These results are consistent with findings that, compared with boys, girls derive more emotional support from their friendships (Rose & Rudolph, 2006). Results of the Brendgen et al. (2013) study highlight the importance of teaching social interaction skills that promote high-quality friendship experiences to help prevent the development of depression symptoms in at-risk children. Though not yet examined, perhaps the impact of friends in protecting genetically vulnerable individuals from depression is even stronger in adolescence, given the increasing importance of friendship across development (Buhrmester, 1990).

Anxiety

Difficulties in friendships are also related to greater feelings of anxiety (see Kingery, Erdley, Marshall, Whitaker, & Reuter, 2010, for a review). Children with elevated

anxiety have fewer friends overall, although they are as likely as their peers to have a best friend (Scharfstein, Alfano, Beidel, & Wong, 2011). Notably, however, the friends of children with a genetic disposition for anxiety are likely to be similarly anxious, and affiliation with anxious friends is related to increased anxiety symptoms (Poirier et al., 2015).

Lower overall friendship quality is associated with higher anxiety, with these links stronger for girls than boys (La Greca & Lopez, 1998). Longitudinal research that followed adolescents across a school year suggested a reciprocal relationship between friendship quality and anxiety, with higher friendship quality predicting lower anxiety several months later, and higher anxiety predicting lower friendship quality over time (Vernberg, Abwender, Ewell, & Beery, 1992). More recent studies have demonstrated the importance of considering negative and positive friendship qualities separately. Higher negative friendship qualities (e.g., conflict) are associated with elevated anxiety in both children and adolescents. Lower positive qualities (e.g., intimacy) are related to higher anxiety in adolescents, but for girls only among children (Greco & Morris, 2005; La Greca & Harrison, 2005). Thus, friendships with high positive features appear to provide protection against anxiety for girls by middle childhood, but not for boys until adolescence, which may reflect gender and developmental differences in the value ascribed to friendships (Rose & Rudolph, 2006). High negative friendship qualities, however, are consistently related to anxiety. Notably, Poirier and colleagues (2015) observed an increased risk for anxiety symptoms in best friends only when the negative features of the friendship were perceived as high. This suggests that it is particularly important to teach conflict-management skills to reduce negative experiences within friendships and to decrease the likelihood of anxiety symptoms.

Self-Esteem

Given that the functions of friendship include validation and emotional support, it is not surprising that children involved in friendships, and particularly high-quality friendships, are more apt to experience high self-esteem. Interestingly, Franco and Levitt (1998) found that within a middle childhood sample, friendship quality predicted self-esteem after accounting for the contribution of the family. This likely reflects the fact that friendships involve the voluntary association of equals who enhance feelings of being valued as individuals, whereas support from family may be viewed as obligatory.

Consistent with Sullivan's (1953) theory, both peer acceptance and friendship significantly predict self-esteem in middle childhood (Vandell & Hembree, 1994), but in adolescence, friendship is a stronger predictor of self-esteem than is peer acceptance (Bishop & Inderbitzen, 1995). Also demonstrating that friendships become increasingly important in adolescence, Buhrmester (1990) observed that friendship intimacy was more strongly predictive of self-esteem in adolescents

than in preadolescents. Adolescents with supportive friendships report higher self-esteem in the social, behavioral, and scholastic domains, whereas adolescents involved in friendships characterized by more negative features view their behavioral conduct as less competent and are less happy about themselves (Keefe & Berndt, 1996). Regarding friendship quantity, adolescents who have at least one reciprocal best friend have higher self-esteem than those without a best friend, but there is not a cumulative effect of number of friends on self-esteem (Bishop & Inderbitzen, 1995). Notably, these studies do not provide insights regarding direction of effects. Although it seems plausible that good friendships enhance self-esteem, it is also possible that those with higher self-esteem are better able to develop high-quality friendships, though it seems most likely that a reciprocal process occurs.

Peer Victimization

Friends can play an important role in reducing the incidence of peer victimization, as well as the risks associated with being victimized. Children who have a best friend are less likely to be victimized and experience decreases in victimization across the school year (Hodges, Boivin, Vitaro, & Bukowski, 1999). Furthermore, children with a greater number of friends are less likely to be victimized. Interestingly, when controlling for friendship quantity, friendship quality is a unique predictor of risk for victimization (Malcolm, Jensen-Campbell, Rex-Lear, & Waldrup, 2006). Thus, beyond having friends, it is important to have good-quality relationships in which friends provide companionship, support, and loyalty to protect against victimization.

For children who experience peer victimization, friends can buffer the negative effects. Indeed, Hodges and colleagues (1999) found that victimization predicted increases in internalizing and externalizing behaviors, but only for children without a mutual best friendship. Specific qualities of friendship also play a role in protecting children from the deleterious effects of victimization. In children, the positive friendship features of providing security and help have been found to weaken the link between victimization and internalizing distress (Schmidt & Bagwell, 2007). In adolescents, the association between relational victimization and internalizing problems was reduced when friendships were characterized by higher levels of help and lower levels of conflict, with lower conflict also weakening the association of relational victimization with externalizing problems (You & Bellmore, 2012).

Recent research (Calhoun et al., 2014) examining the biological consequences of victimization has demonstrated that adolescents who have experienced high levels of relational victimization show more blunted cortisol reactivity in response to social stressors. However, for these victimized adolescents, friendship experiences are associated with their biological capacity to handle stress. Specifically, when discussing a stressor, adolescents whose friendships are low in negative qualities and high in responsiveness show better stress recovery. Thus, positive friendship experiences actually impact adolescents' biological capacity to cope effectively with interpersonal stress.

School Adjustment

Friends have been found to play a significant role in students' functioning at school. Research examining children's transition to kindergarten has indicated that students who had more friends at the beginning of the school year and were able to maintain these friendships or make new friends developed more favorable perceptions of school and showed gains in school performance (Ladd, 1990). Furthermore, Ladd, Kochenderfer, and Coleman (1997) reported that across the kindergarten year, quantity of friends predicted various aspects of children's adjustment, including school liking, school involvement, and academic readiness. Similarly, a study involving third grade students found that number of friends predicted academic competence and self-concept (Vandell & Hembree, 1994). It appears that companionship and emotional support provided by friends contribute to students feeling more engaged in school.

Investigating the transition to middle school, Kingery, Erdley, and Marshall (2011) found that elementary school friendship quality and quantity each uniquely predicted loneliness as students began middle school. Additionally, friendship quality uniquely predicted self-esteem. When confronted with the novel experience of a school transition, high-quality friendships seem to be especially valuable in providing children with a sense of security and well-being.

Other studies have demonstrated that adolescents' adjustment to school is influenced by their involvement in friendships, friends' characteristics, and the features of these friendships. In research with middle school students, Wentzel, Barry, and Caldwell (2004) found that compared with sixth graders who had mutual friendships, friendless students had lower academic achievement, higher levels of depression, and lower self-worth. Furthermore, lack of involvement in friendship during sixth grade predicted emotional distress two years later, and students who had more prosocial friends in sixth grade were more prosocial in eighth grade. Other research (Berndt & Keefe, 1995) has shown that changes in students' academic achievement across the school year are predicted by friends' grades. Moreover, students whose best friendships had more positive features increased in their school involvement across the year, whereas those whose best friendships had more negative features increased in disruptive behavior. Thus, various aspects of friendship experiences are related to students' academic and socioemotional functioning in school.

The Dark Side of Friendship

The vast majority of research investigating the links between friendship and developmental outcomes has focused on the deleterious impact of failing to form reciprocated, high-quality friendships. However, a growing literature has emerged that suggests that having a friend is not always beneficial. Determining when and how certain friendships may actually be harmful has typically been addressed by

examining the characteristics of a child's friend. Given that friends tend to become more similar to each other over time, forming a close friendship with a peer who has negative characteristics (e.g., delinquent behavior, depressive symptoms) could put that child at risk of developing those same problems.

Deviancy Training

The so-called dark side of friendship was first investigated within groups of delinquent boys. Not only do delinquent boys tend to choose friends who are similarly delinquent (Boivin & Vitaro, 1995), but also these dyads develop even more problematic behaviors over time (Dishion et al., 1996), suggesting the presence of both selection and socialization effects. In observing the conversations of delinquent adolescent friend dyads, Dishion and colleagues (1996) noticed that these boys tended to respond positively when their friend discussed delinquent activities (e.g., by laughing), and this positive response was followed by even more rule-breaking talk between the boys, a process they termed deviancy training. Importantly, the more boys engaged in deviant talk, the more likely they were to show an increase in delinquent offenses two years later, even after controlling for their initial levels of delinquent behavior. In contrast, boys whose friends responded less positively to such talk did not show comparable increases. Deviancy training has also been found to predict increases in tobacco, alcohol, and marijuana use (Dishion, Capaldi, Spraklen, & Li, 1995), as well as risky sexual behavior and number of police arrests (Patterson, Dishion, & Yoerger, 2000). Although boys tend to show higher levels of antisocial behavior and participate in more peer deviancy training than girls, girls who do engage in deviancy training experience similar increases in antisocial behavior (Snyder, Schrepferman, Bullard, McEachern, & Patterson, 2012).

This process has significant implications for developmental pathways across childhood and beyond. Deviancy training has been observed even in young children. Among kindergarten students, befriending deviant peers and engaging in deviant talk predicted increases in conduct problems through first grade (Snyder et al., 2005). Thus, deviancy training may be a marker for the development of early-onset conduct problems. Because childhood-onset conduct disorder tends to be associated with longer-lasting antisocial behavior over time than adolescent-onset conduct disorder (Moffitt, 1993), recognizing such a marker could be beneficial for identifying children who are most in need of monitoring and intervention.

Depression Contagion

Just as friends of delinquent adolescents tend to be similarly delinquent, friends of depressed adolescents tend to experience similar levels of depression. As the result of a socialization process called depression contagion, adolescents whose friends have initially higher levels of depressive symptoms experience an increase in their

own depressive symptoms over time. For example, Giletta and colleagues (2011) compared newly formed adolescent friendships to well-established, stable friendships and found that only the new friendships differed significantly in initial depressive symptom levels, although both types of friendships demonstrated significant depression contagion effects over time. Notably, this effect was observed only in female friendships, and only in friendships that were rated as being “true” best friends. Thus, depression contagion in adolescence appears most likely to occur within female best-friend dyads. This observation is significant, given that beginning in adolescence, rates of depression in girls vastly outstrip rates in boys, a gender disparity that continues through adulthood (Nolen-Hoeksema & Girgus, 1994).

This phenomenon may in part be explained by specific patterns of interacting with others that are common in depressed individuals. Two of the most robustly researched interpersonal processes are excessive reassurance seeking and negative feedback seeking. According to Coyne’s (1976) interpersonal theory of depression, because depressed individuals often feel that they are inadequate, they tend to repeatedly ask for reassurance that they are okay, are performing a task correctly, or are deemed acceptable by their partner. Additionally, according to self-verification theory, because depressed individuals possess a negative self-image, they tend to actively seek out partners who provide feedback that confirms their negative self-perception (Swann, Wenzlaff, Krull, & Pelham, 1992). These interaction patterns are often unattractive to social partners and can lead to rejection, a process that is theorized to prolong depressed mood (Joiner, Metalsky, Katz, & Beach, 1999). Interestingly, while rates of these styles are similar in boys and girls, they are significantly associated with depressive symptoms only for girls (Borelli & Prinstein, 2006). Additionally, female adolescents’ high levels of reassurance seeking are associated with decreases in friendship quality as reported by their friend (Prinstein et al., 2005), while negative feedback seeking in girls is associated with increased perceived criticism from their best friends (Borelli & Prinstein, 2006). These findings provide clear support for the notion that adolescent girls are more susceptible to experiencing contagion effects from interacting with depressed friends, and are more likely to engage in interaction styles that are believed to promote depression contagion, exacerbate their own levels of depression, and increase the probability of their friends perceiving them negatively over time.

An additional process that contributes to depression contagion is co-rumination, defined as the excessive discussion of personal problems within a dyadic relationship (Rose, 2002). Co-rumination encompasses both the positive effects of intimate exchange and the deleterious effects of depressive rumination. Co-rumination is much more frequent in girls’ friendships than in boys’, and although co-rumination in girls’ friendship dyads is associated with higher friendship intimacy, it comes at a price of exacerbating depressive symptoms. Boys who co-ruminate appear to benefit from the intimate exchange, but do not typically report corresponding depressive symptoms (Rose, Carlson, & Waller, 2007). Particularly for girls, co-rumination

may influence the depressive cycle, an idea supported by findings that while adolescent girls experienced earlier onset of depressive episodes than boys, this gender difference was partially explained by co-rumination (Stone, Hankin, Gibb, & Abela, 2011). Overall, there is compelling support that co-rumination among female friends increases feelings of closeness, but at the same time this process elevates the risk for depressive symptoms.

Future Directions for Research

Friendships are clearly significant relationships in the lives of children and adolescents. Interestingly, studies have indicated that having even just one friend can protect a person from negative outcomes, including loneliness (Parker & Asher, 1993), low self-esteem (Bishop & Inderbitzen, 1995), and risk for peer victimization (Hodges et al., 1999). These findings illustrate the importance of promoting positive friendship experiences. However, to date, the vast majority of efforts to improve children's peer relations have focused on increasing overall peer acceptance (see Bierman & Powers, 2009, for a review), though the goal of helping a child to develop and maintain one good friendship seems more attainable than improving the child's reputation within the larger peer group (Asher, Parker, & Walker, 1996). Research on friendship intervention programs has been fairly limited and narrowly focused, primarily targeting children with ADHD. For example, at an ADHD summer treatment program, Hoza, Mrug, Pelham, Greiner, and Gnagy (2003) paired children with a specific "buddy." Buddy pairs had opportunities to interact frequently, and parents were encouraged to provide opportunities outside of the program to promote the friendship. In another investigation, Mikami, Lerner, Griggs, McGrath, and Calhoun (2010) specifically trained parents of children with ADHD to be friendship coaches. Both studies found that greater parental involvement was associated with children having higher-quality friendships. Despite these promising findings, more research evaluating friendship intervention programs is needed, and greater attention should be given to the ways that these programs should be tailored based on variables including child gender, behavioral characteristics, and developmental level.

Another important direction for future research is to more systematically examine the causal direction between friendship experiences and outcomes, particularly through employing longitudinal research. The majority of studies have used correlational designs, which prohibit conclusions regarding causality. Although it seems reasonable to assume that poor friendship experiences contribute to negative outcomes, it is equally plausible that negative outcomes can lead to poor friendship experiences. Indeed, longitudinal studies examining the relationships between depression and poor friendship experiences have indicated that depression seems to both precede (Rudolph et al., 2007) and follow (Brendgen et al., 2013) poor

friendship experiences. A better understanding of direction of effects would help in identifying which aspects of children's experience are most effective to target for intervention. For example, should anxiety be treated to improve friendship experiences, or should friendship skills be enhanced to decrease anxiety?

Research on friendship has primarily focused on typically developing children in Western cultures. It is important to examine whether, for example, in collectivist cultures, friendship may be even more central to individuals' well-being (Zhang et al., 2014). Furthermore, although some studies have investigated the friendships of those who are developing atypically, such as children with ADHD (e.g., Mikami et al., 2010) or autism spectrum disorder (e.g., Kasari, Locke, Gulsrud, & Rotheram-Fuller, 2011), more research is warranted, especially to determine what social skills should be targeted in these special populations to improve friendship experiences across development.

Finally, as electronic communication has exploded in recent years, it is imperative to examine how these modes of communication impact friendship experiences. Although new opportunities for developing and maintaining friendships are available, it appears that the electronic world largely reflects the face-to-face world (Valkenburg & Peter, 2007). That is, children who are socially successful have been found to enhance their existing friendships through electronic communication. In contrast, those who struggle socially may turn to online communication for support but tend not to experience as much closeness in these relationships. Future research should investigate further the role that electronic communication plays in friendship processes as a function of both gender and developmental level. As modes of social interaction continue to evolve, it is critical that positive friendship experiences in children and adolescents be encouraged to ensure optimal socioemotional adjustment.

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Friendships in Young and Middle Adulthood

Normative Patterns and Personality Differences

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Friendships are important throughout people's lives. From childhood to old age, most people have friends. Yet, why do people differ in how many and what kinds of friendships they have? Furthermore, how do friendships change throughout people's lives? And how do friendships change people's personality? Answers to these questions would provide a deeper knowledge of individual differences and normative changes in friendships and thus help to understand how friendships can contribute to well-being and health (Adams & Blieszner, 1995; Pinquart & Sörensen, 2000).

In their daily lives, people frequently use the term "friend" to describe a broad range of individuals with whom they maintain relationships, such as close acquaintances, family members, spouses, or coworkers. However, most scientific definitions of friendships concur on the following aspects that describe friendships and distinguish them from other relationships such as family relationships or romantic partners: Friendships are voluntary, informal peer relationships that rest on reciprocity, possess a positive quality (i.e., they are perceived as being pleasant), and (often) do not contain open sexuality (Argyle & Henderson, 1985; Blieszner & Roberto, 2004; Hartup & Stevens, 1997). In contrast to family relationships, friendships are voluntary regarding choice and formation, not based on kinship or legal arrangements. In contrast to professional relationships with coworkers, supervisors at work, or service staff, friendships are informal, personal, and largely without a (direct) hierarchy, whereas professional relationships are often based on contracts and regulations. In the present chapter, we focus on friendships in young and middle adulthood (i.e., approximately between 20–40 years and 40–60 years, respectively).

Other chapters of this book cover friendships in childhood (chapter 1, Erdley & Day) and old age (chapter 3, Adams, Hahmann, & Blieszner).

We first provide an overview on how friendships of young adults differ from (and are similar to) friendships during other developmental periods. Second, we summarize individual differences in friendships related to personality characteristics and other social relationships, for example, family members. Third, we address the normative development of friendship number and quality during young and middle adulthood. Fourth, we consider dynamic longitudinal transactions between friendships and personality. Finally, we discuss what is gained from studying the interdependencies among friendships and other relationships within people's personal networks.

Friendships in Young and Middle Adulthood

During childhood and adolescence, friends are mainly other children from the same (pre-) school class or neighborhood. Young adults in part maintain school friends (Asendorpf & Wilpers, 1998; Degenne & Lebeaux, 2005) and also acquire additional friends in close spatial proximity in daily life. For example, the closer young adults live within college dorms, the more likely they are to become friends (Festinger, Schachter, & Back, 1950). People working in the same work unit are also more likely to become friends compared with people working in different units of the same company (Stackman & Pinder, 1999). In a study by Back, Schmukle, and Egloff (2008), merely sitting next to each other during an introductory day increased students' likelihood of being friends 1 year later compared with other students, who were also attending the introduction and also met later during study courses. Therefore, in adulthood, people often become friends with others they meet regularly: in the neighborhood, at work, in sports clubs (Miche, Huxhold, & Stevens, 2013), or through one's romantic partner or existing friends (M. P. Johnson & Leslie, 1982).

In young and middle adulthood, friendships gain new functions and complexity compared with childhood friendships. While childhood friendships focus on play (cf. Erdley & Day, this volume; Fehr, 1996), during adolescence, friendships begin to replace parents as confidants and companions for leisure time activities (Fraleigh & Davis, 1997; Hartup & Stevens, 1997). Importantly, adolescents' friendships also serve as training models to prepare for intimate romantic relationships (Fraleigh, Roisman, Booth-LaForce, Owen, & Holland, 2013; Simpson, Collins, Tran, & Haydon, 2007). Although romantic partners become more important during young and middle adulthood as compared with adolescence, friends largely maintain their function as confidant, attachment figure, and partner for leisure activities. In addition to providing validation and emotional closeness, friends provide practical support as well (Fehr, 1996), for example, by helping move or lending

belongings. These functions correspond to the assumed underlying psychological dimensions of friendships: *emotional closeness* and *reciprocity of support* (Clark & Mills, 1979; Neyer, Wrzus, Wagner, & Lang, 2011).

Emotional Closeness and Reciprocal Support in Friendships

Friendships are typically emotionally close and reciprocally supportive relationships. At the same time, an individual's friendships often differ in their qualities (e.g., emotional closeness, Neyer et al., 2011). Namely, people feel varying degrees of closeness among their various friends. The emotional closeness to friends often relates to how similar they are in their interests, values, and personality traits (Floyd, 1995; Montoya, Horton, & Kirchner, 2008; Morry, 2007; Sutor, 1987). The similarity-attraction theory (Byrne, 1971) suggests that people seek out similar others as friends to validate their own self- and worldviews. As a result, interacting with similar others who share one's worldview is pleasant because one's self- and worldviews are confirmed (Reis & Shaver, 1988). Multiple pleasant interactions then also lead to perceiving the relationship with the other person as pleasant, resulting in feeling close to the other. Hence, similarity predicts emotional closeness among friends (Montoya et al., 2008). However, effects of similarity on closeness and liking in friendships are strongest for perceived similarity. Accordingly, Montoya and Horton (2013) refined the explanations for the similarity-attraction link stating that liking results from ascribing one's own positive characteristics to the other person (i.e., perceiving him/her as similar to oneself and one's positive characteristics). As a result, people with (assumed) positive characteristics are viewed more positively, that is, are liked better (Kaplan & Anderson, 1973; Montoya & Horton, 2013).

Another psychological dimension of friendships concerns the exchange of support. Overall, people aim for fairness in friendships. The general rule of reciprocity (Gouldner, 1960) applies to friendships as well, leading to long-term reciprocity of provided and received support. However, reciprocity of support also varies somewhat between friendships, for example, depending on the relationship duration. During the formation of friendships, people reciprocate favors and support quickly to avoid the impression of exploiting the other person (Lydon, Jamieson, & Holmes, 1997). In established friendships, however, such tit-for-tat behavior (immediate reciprocation; Axelrod & Hamilton, 1981) is detrimental as people value balanced relationships, but they avoid keeping detailed track of costs and benefits (Clark, 1984; Lydon et al., 1997; Silk, 2003).

Individual Differences in Friendship Networks

In addition to qualities of friendships differing within people, such as emotional closeness or reciprocity of support, friendships can differ between people.

Typological approaches highlight such differences in distinct types of friendship networks (Fiori, Smith, & Antonucci, 2007; Matthews, 2000; Miche et al., 2013). People differ in their networks and maintain either (1) relatively few long-term, emotionally close friends, (2) larger networks with close friends and also loose acquaintances, or (3) even social networks without friends and only family ties. The advantage of typological approaches is that they consider multiple relationships and their interdependencies. At the same time, typological approaches sometimes draw artificial boundaries in actual dimensional characteristics, such as emotional closeness with friends. Accordingly, Wrzus, Wagner, and Neyer (2012) used a continuous approach to examine relations between friendships and family relationships. They found that people who had fewer siblings and cousins in their social network reported more friends (and vice versa). In addition, people who felt emotionally less close to family members felt closer to their friends. Thus, the quantity and quality of other relationships seem to be two factors contributing to the diversity in how people maintain friendships. We return to this important point in the final section, “Future Research Areas and Conclusions.”

In sum, friendships during young and middle adulthood are largely similar to friendships during adolescence regarding function and the underlying psychological dimensions. These dimensions, emotional closeness and reciprocal support, are defining features of friendships, yet can also vary in their amount. Specifically, friendships for the same individual can be differently close and reciprocal in support. In addition, individuals differ in their friendships in general, and maintain, for example, few close friends, many friends and acquaintances, who are less close, or a mix of both. Personality characteristics explain some of these individual differences in friendships.

Friendships and Personality

People’s individual characteristics, that is, personality traits, affect many life domains and naturally also their friendships (Ozer & Benet-Martínez, 2006). Extraversion, agreeableness, and self-esteem most strongly affect both the number and the quality of friendships (Back, Schmukle & Egloff, 2011; Ozer & Benet-Martínez, 2006). In addition to individual characteristics, the configuration of friends’ personalities, that is, similar personality between friends, also influences the quality of friendships. Next, we detail effects of personality traits on the quantity and quality of friendships, and then address effects of personality similarity on friendship formation and quality. We mainly focus on the Big Five personality traits (e.g., extraversion, and agreeableness; McCrae & Costa, 2008) because they are more commonly studied regarding friendships compared with other personality characteristics such as goals, values, or identity (Hooker & McAdams, 2003; Roberts & Wood, 2006).

Personality Effects on the Number of Friendships

More extraverted young adults (especially less shy people) report more friends and also make new friends faster in novel settings (Anderson, John, Keltner, & Kring, 2001; Asendorpf & Wilpers, 1998; Paunonen, 2003). Studies on initial encounters and spontaneous liking of unknown others shed further light on how extraversion can lead to having more friends. More extraverted people dress more stylishly, behave more confidently, and express more positivity, for instance through smiling—factors that make extraverted people attractive to others and make others like them better (Back et al., 2011). Higher self-esteem and higher narcissism (specifically feeling admired) show similar effects on being liked at first sight (Back, Schmukle, & Egloff, 2010; Back, Schmukle et al., 2011; Back et al., 2013). This is likely due to self-esteem and narcissism showing some overlap with extraversion, and also with the behavioral cues that lead to being liked, that is, fashionable appearance, confident behavior, and positive facial expressions (Back et al., 2010; Back et al., 2013).

Agreeableness is related less consistently with having friends. Some studies found that people liked more agreeable young adults better (based on their online social network profile; Stopfer, Egloff, Nestler, & Back, 2013) and selected them more often as friends (Selfhout et al., 2010), whereas other studies found no significant associations (Anderson et al., 2001; Back, Schmukle et al., 2011; Paunonen, 2003). The discrepancies between studies point to potential gender differences in the effect of agreeableness, because the two studies with significant effects consisted of mostly females ($\approx 85\%$ female). Presumably, being liked depends more strongly on being agreeable and nice for women than for men (Birnbaum, Ein-Dor, Reis, & Segal, 2014).

Personality Effects on the Quality of Friendships

Personality traits also predict the quality of friendships. For example, people higher in extraversion have more contact with friends (Asendorpf & Wilpers, 1998; Mehl, Gosling, & Pennebaker, 2006) and report greater importance of, emotional closeness to, and perceived support from friends (Asendorpf & Wilpers, 1998; Neyer & Asendorpf, 2001). More optimistic people also typically perceive more social support from others compared with more pessimistic people (e.g., Brissette, Scheier, & Carver, 2002). Indeed, other people liked optimistic (and realistic) people better (Vollmann, Renner, & Weber, 2007), but were equally likely to potentially help optimistic, realistic, or pessimistic people (Vollmann et al., 2007; Vollmann & Renner, 2010). This finding suggests that the associations between extraversion and optimism, and perceived support may not extend to actual support. Actual support often depends on the needs and the resources of the supported and the supporting friend (Clark & Mills, 1979; Clark, Mills, & Powell, 1986). Again, agreeableness

showed diverse effects: More agreeable people reported greater friendship intensity (Heyl & Schmitt, 2007; M. A. Johnson, 1989) and less conflict with friends (Asendorpf & Wilpers, 1998), whereas Neyer and Asendorpf (2001) did not observe such effects.

Together, the effects of personality traits such as extraversion, narcissism, and self-esteem on the initial attraction toward new potential friends are fairly well understood, however, personality effects on the subsequent process of developing closeness, support, and conflict in friendships need further examination. Other traits, such as neuroticism, conscientiousness, and openness to new experiences, might relate to friendships only among specific groups of people or in specific situations. For example, neuroticism may only be relevant among male friends, for whom frequent worries and emotional instability are incompatible with traditional male gender roles. Hence, neuroticism predicted lower status and less influence only among male friends (Anderson et al., 2001).

Personality Similarity in Friendships

In addition to individuals' personality traits, the similarity in personality traits of friends further relates to friendship quality. In general, people state that they prefer others as friends who have similar attitudes, values, and interests (Sprecher & Regan, 2002). As described before, people usually like similar others because the similarity suggests that the other person has (similar) positive characteristics, which make him/her likable (Montoya & Horton, 2013). Simplified, one could say if people think they are good and the other person is similar to them, then the other person also has to be good.

Recent studies on real-life friendship formation showed that perceiving greater similarity in personality traits predicted friendship formation longitudinally (van Zalk & Denissen, 2015). However, actual similarity in attitudes, interests, or personality traits did not predict initial liking or later friendship intensity in real-life settings (Back, Schmukle et al., 2011; M. A. Johnson, 1989; van Zalk & Denissen, 2015; but see Montoya et al., 2008; Selfhout et al., 2010, for effects of actual personality similarity on friendship selection). Nonetheless, on average, friends are similar to each other in some personality traits (Selfhout et al., 2010), and even more similar to each other with respect to sociodemographic characteristics such as age, education, or socioeconomic status, described as social homogamy (McPherson, Smith-Lovin, & Cook, 2001; van Zalk & Denissen, 2015).

Similarity in traits, attitudes, or interests among friends may be a byproduct of social homogamy (e.g., meeting in the neighborhood where people of similar socioeconomic status and political orientation live; McPherson et al., 2001) and further environmental factors influencing friendship formations (e.g., meeting during shared leisure activities that indicate similar interests) instead of a product of active assortment (Back, Schmukle et al., 2011). Accordingly, liking and other friendship

qualities may depend less on personality similarity than on other factors such as goal facilitation and reciprocal support (Montoya & Horton, 2013; Neyer & Lang, 2003; Neyer et al., 2011). Such discrepancies between perceived and actual similarity in different personality characteristics regarding liking and closeness in friendships call for further examination of the underlying processes.

In sum, especially so-called social traits (extraversion, agreeableness; Denissen & Penke, 2008) and related characteristics (self-esteem, narcissism) reliably predict the formation and quality of friendships. This is not surprising given that these characteristics describe how people deal with each other: outgoing, dominant (extraversion), cooperative, friendly (agreeableness). Further efforts are needed to understand the divergent effects of perceived and actual similarity in various personality characteristics on friendship quality. Here, dyadic or round-robin study designs (Kenny, 1994) are necessary, because friendship and similarity of personality characteristics are phenomena that concern two (or more) people. These study designs enable researchers to examine how characteristics of one friend and the interaction between friends influence friendship quality (Back, Baumert et al., 2011). In addition, such studies should follow friends over time (i.e., short-term longitudinal studies), as friendships take time to develop. Next, we review the current knowledge on longitudinal friendship development, which, however, often neglects the dyadic aspects.

Friendship Development

Adolescents and young adults have the largest friendship networks and place the greatest emphasis on friendships compared with people at earlier and later periods in life (Hartup & Stevens, 1997; Wrzus, Hänel, Wagner, & Neyer, 2013). Next, we detail how friendships develop both normatively and related to life transitions during young and middle adulthood. We focus on changes in the number of friendships and then address qualitative changes.

Changes in the Number of Friendships

Socioemotional selectivity theory states that young adults are more strongly motivated to gather knowledge and information, as their remaining lifetime often seems infinite (Carstensen, 1995). Information acquisition is best achieved from diverse sources, such as a large number of friends. A recent meta-analysis confirmed that during young adulthood people continue to accumulate friends, hence their friendship networks increase (Wrzus et al., 2013). Figure 2.1 depicts the observed longitudinal changes in friendship networks, personal networks (mainly family members and friends), and global networks (various kinds of social relationships, e.g., with family, friends, coworkers, acquaintances, etc.). Studies with young adults (mean

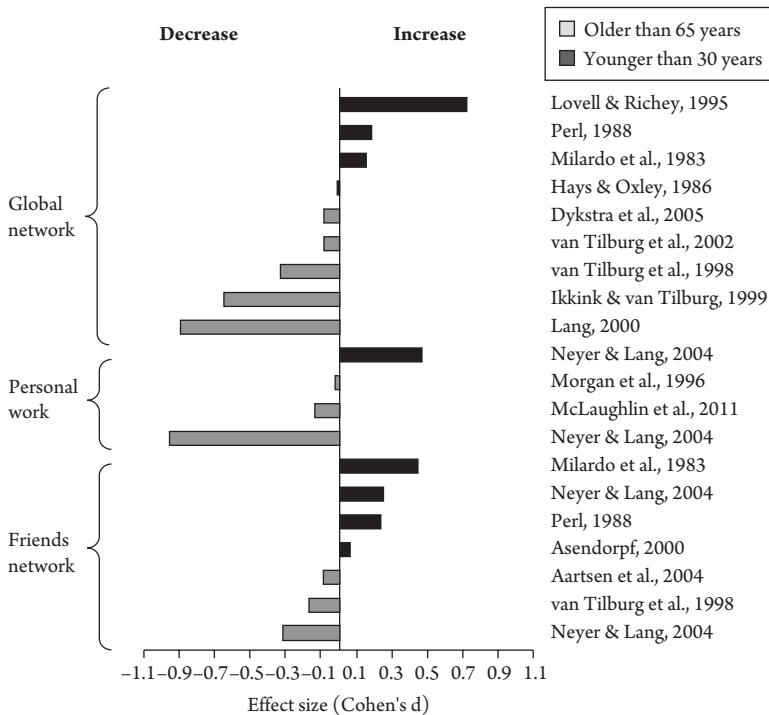


Figure 2.1 Observed longitudinal changes in selected social relationship networks in young (dark bars) and late adulthood (gray bars). Global networks consist of family members, friends, coworkers, acquaintances, and others. Personal networks consist mainly of family members and friends. Friend networks include only friends. Adapted from Wrzus, C., Hänel, M., Wagner, J., & Neyer, F. J. (2013). Social network change and life events across the lifespan: A meta-analysis. *Psychological Bulletin*, 139, 63. Copyright 2013 by the American Psychological Association.

sample age younger than 30 years) observed increases in the size of friendship networks, whereas studies with older adults (mean sample age older than 65 years) observed decreases in the size of friendship networks (no suitable longitudinal studies were available for middle adulthood). Since family networks did not change significantly in size across the life span (cross-sectionally and longitudinally; Wrzus et al., 2013), the observed changes in personal and global networks may be attributable to the observed changes in friendship networks.

Such normative changes are likely (at least in part) a result of normative life events (for integrative reviews, see Neyer, Mund, Zimmermann, & Wrzus, 2014; Wrzus et al., 2013). During young adulthood, people enter new contexts, where many people acquire new friends. For example, during the first months of college, people form on average about 10 new friendships (Asendorpf & Wilpers, 1998). When young adults enter the work force, they also establish new friendships (often

with coworkers; Morrison, 2002; Wrzus et al., 2013). Similarly, when young adults marry, their number of friends increases on average (M. P. Johnson & Leslie, 1982; Wrzus et al., 2013), partly due to becoming friends with the spouse's friends (Kearns & Leonard, 2004). Importantly, such context changes also challenge established social relationships, which might result in losses of existing friendships (Asendorpf & Wilpers, 1998; Zimmermann & Neyer, 2013). However, friendship gains often exceed losses and result in an overall increase in the number of friends.

During middle adulthood (and later on), information-acquisition goals become relatively less prevalent, whereas emotion-regulation goals become increasingly important, as the remaining lifetime is perceived as more and more limited (Carstensen, 1995). People then focus on close relationships, such as with close friends, which presumably satisfy emotion-regulation goals through pleasant interactions. In addition, work and family demands may restrict the available time and resources and urge people to select friends out of their larger friendship networks. Accordingly, the number of friends decreases, yet the amount of contact with the remaining friends increases (Mund & Neyer, 2014). In particular, becoming parents is related to a decrease in friendship networks (Bost, Cox, Burchinal, & Payne, 2002; Wrzus et al., 2013).

Changes in the Quality of Friendships

In young adulthood, as during other life periods, newly acquainted people become friends through regular, intimate, and pleasant interactions (Fehr, 2000; Hays, 1985). During intimate interactions, people share personal information (i.e., engage in self-disclosure), which engenders trust and emotional closeness and transforms acquaintances into friends, typically within a few weeks and months (Nezlek, 1993; Planalp & Benson, 1992). Yet, few studies have examined qualitative changes in existing friendships over time in young and middle adulthood. In one such study, however, when young adults entered college, attachment security with friends and perceived support increased over the next 18 months (Asendorpf & Wilpers, 2000). In addition, changes in attachment security and perceived support were related: Friendships that became more securely attached were also perceived as more supportive.

When people marry or become parents, not only the number but also the quality of friendships changes (Carbery & Buhrmester, 1998; Kearns & Leonard, 2004). Among single people, friends and best friends were more important for emotional needs (companionship, disclosure, reassurance) and support (advice and tangible help) than among married people or people with children (Carbery & Buhrmester, 1998). For the latter two groups, the partner largely fulfilled these functions. This suggests that friends fulfill emotional and supportive functions that are otherwise fulfilled by spouses. As a result, the importance of friends decreases to some extent when people marry and have children (although the number of friends increases

somewhat). Other studies found no consistent mean-level changes in average emotional closeness, perceived support, or conflict frequency with friends over 1.5, 4, or 8 years, and only moderate rank-order stability in these relationship qualities (Asendorpf & Wilpers, 1998; Neyer & Asendorpf, 2001; Neyer & Lehnart, 2007). This suggests considerable individual differences in the direction of friendship change. In other words, the quality of friendships did not change uniformly for everybody, but for some people friendships' quality improved, whereas for others the quality remained stable or worsened. Differences in people's personality traits contribute to the explanation of individual differences in qualitative changes of friends, as addressed in the next section.

In sum, the number of friends increases during young adulthood, and these increases are partly related to normative life transitions. At the same time, emotional closeness with and support among friends tends to increase most strongly among single people. When young adults engage in serious romantic relationships or become parents, the importance and quality of friendships tend to decrease on average (although some studies also show no meaningful average changes). These average effects conceal one important methodological drawback: Longitudinal studies often analyze changes in the average friendship networks, but not specific friendships. Thus, these studies do not follow specific relationships between person A and friends B, C, and D over time, but examine at later assessment points that person A now has four friends, which may be friends B, C, E, and F. Hence, future studies need to carefully track specific friendships to disentangle changes in the friendship network composition from qualitative changes in specific friendships (e.g., Wagner, Lütke, Roberts, & Trautwein, 2014).

Longitudinal Transactions Between Friendships and Personality

Not only do personality traits relate to differences in friendships cross-sectionally (e.g., more extraverted people report more friends) but also, more importantly, personality and friendships influence each other reciprocally over time. Friendships presumably are special in their greater susceptibility to personality effects as they are less regulated by societal restrictions and normative expectations than, for example, kin relationships.

Personality Effects on Friendship Development

Recent research on longitudinal effects of personality characteristics on the development of friendship qualities largely sustained the pattern of cross-sectional personality–relationship associations reported in the previous sections. For example, higher levels of extraversion, agreeableness, and neuroticism each predicted

friendship gains. Higher levels of openness, in contrast, decreased relationship persistence, thus fostering friendship losses (Zimmermann & Neyer, 2013).

With respect to relationship qualities, higher levels of extraversion accounted for subsequent increases in friendship importance and closeness with friends, whereas higher levels of openness predicted decreased contact. Higher levels of self-esteem promoted decreases of friendship insecurity, while high levels of neuroticism had inverse effects (Neyer & Asendorpf, 2001; Parker, Lüdtke, Trautwein, & Roberts, 2012). Mund and Neyer (2014) reported a similar pattern of effects for extraversion and neuroticism on friendship development, and additionally compared personality–relationship transactions across different relationship types (see Figure 2.2A). As expected, their analyses yielded greater effects of personality on the development of relationship qualities for friendships than for other relationship types (i.e., kin, romantic partners, and others). Notably, this study also extended previous cross-lagged designs by studying effects of earlier personality changes on subsequent changes in friendship qualities (so-called change-change effects). These analyses revealed that increases in agreeableness predicted subsequent increases in contact frequency as well as decreases in conflict. The findings illustrate that personality characteristics are important predictors to explain individual differences in friendship development across adulthood.

Friendship Effects on Personality Development

The effects of personality on friendship development are not unidirectional, as close relationships such as friendships require a certain amount of mutual adaptation in order to be maintained (Hartup & Stevens, 1997; Reis, Collins, & Berscheid, 2000). Accordingly, friendship experiences also retroact on personality and promote the dynamic codevelopment of individuals and their relationships. Earlier research focused on socializing effects of peer groups in childhood and adolescence (Harris, 1995), whereas recent publications examine the relevance of friendships for personality trait changes beyond adolescence and during the stages of adulthood (Reitz, Zimmermann, Hutteman, Specht, & Neyer, 2014; Wrzus & Neyer, 2016). Accordingly, research on the impact of different forms of living arrangements revealed that young adults who lived with roommates showed steeper increases in openness and agreeableness than those who stayed with their parents (Jonkmann, Thoemmes, Lüdtke, & Trautwein, 2014).

Effects of relationship fluctuation, that is, the persistence of established relationships and the initiation of new contacts, were substantiated in a study on international student exchange (Zimmermann & Neyer, 2013): International relationship gains of exchange students explained effects of going abroad on the development of openness and neuroticism. Furthermore, recent research also corroborated effects of relationship qualities. Best friend support accounted for increases in extraversion from age 17 to 23 years, whereas higher levels of conflict with best friends were

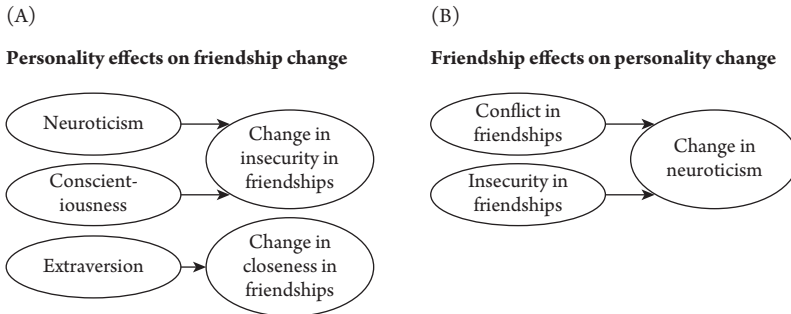


Figure 2.2 Selected findings from Mund and Neyer (2014) of (A) personality effects on friendship change and (B) friendship effects on personality change.

shown to predict decreases in extraversion and self-esteem (Sturaro, Denissen, van Aken, & Asendorpf, 2008). Likewise, increases of friendship conflict and higher levels of insecurity toward friends predicted increases in neuroticism across young adulthood (Figure 2.2B, Mund & Neyer, 2014). Again, a comparison of effects across different relationship categories corroborated the predominance of effects for friendships, that is, relationships that reflect self-selected lifestyles and social contexts (Mund & Neyer, 2014).

In sum, although earlier research raised doubts about friendships influencing personality development (Asendorpf & Wilpers, 1998; Neyer & Lehnart, 2007), recent studies evidenced such longitudinal transactions (for review see Wrzus & Neyer, 2016). The interplay of personality traits and friendships provides a generic example of a full transaction pattern (i.e., personality effects on relationships *and vice versa*), which emphasizes the importance of friendships in the person–environment interplay. However, the pattern of results is complex, as effects are scattered across all trait domains. Further research is needed to gain deeper insight into the specific contingencies between different personality traits and various relationship qualities. Furthermore, the processes that mediate mutual influences of personality and relationship characteristics as well as potential moderators of their interplay have yet to be examined. Research on effects of peer contagion suggested that friendship effects might vary by relationship quality (Prinstein, 2007; Urberg, Luo, Pilgrim, & Degirmencioglu, 2003).

Future Research Areas and Conclusions

The previous sections addressed characteristics and functions of friendships in young and middle adulthood, how friendships differ within and between people, how friendships change in general during young and middle adulthood, and how people's personality and friendships reciprocally affect each other over time.

Notably, most of this research exclusively focused on friendships or only compared friendships and other social relationships. Although this is practical for research purposes and simplifies research designs, we argue that a comprehensive understanding of friendships will only be achieved by considering the interdependencies with other relationships (e.g., with romantic partners, family members, and coworkers).

The first step in examining interdependencies among social relationships is to find characteristics that are common to all or most relationships. In the beginning, we distinguished friendships from spousal and family relationships and from professional relationships with, for example, coworkers or service staff. Importantly, all of these diverse relationships nonetheless can be described by a few common dimensions, such as *emotional closeness* and *reciprocity of support* (Clark & Mills, 1979; Neyer et al., 2011). In general, kin relationships are relatively close and unidirectional supportive (i.e., low in reciprocity of support), cooperative relationships are less close but reciprocally supportive, partner relationships are both emotionally close and reciprocally supportive, and friendships are considered as cooperative relationships that however can be quite close (Neyer et al., 2011). Self-evidently, more fine-grained relationship categories within these relationship types (i.e., different kin relationships such as with parents or second cousins) further vary in emotional closeness and reciprocity of support (Neyer & Lang, 2003).

Emotional closeness and *reciprocity of support* are suitable for both describing a large range of social relationships and examining interdependencies among friendships and other relationships. For example, how does support provided and received in friendships depend on how much support is provided to (or received from) spouses? First, studies show substantial interdependencies among these social relationships: For example, whether friends are primary attachment figures relates to whether other attachment figures (spouses, parents) are available or not (Doherty & Feeney, 2004). Similarly, people feel closer to their friends, the less close they feel to their family members (and vice versa), and “substituting” missing emotional closeness predicts higher well-being among young and middle-aged adults (Wrzus et al., 2011). The understanding of friendships and social relationships in general would benefit greatly from systematically testing interdependencies among the different relationship types (e.g., kin, partner, cooperative relationships) and among different specific relationships of a single type (e.g., different friendships of varying closeness).

Such studies on interdependencies among relationships present several methodological challenges. First, multiple relationships per person need to be assessed with comparable methods. This becomes easily laborious as the *average* number of relationships in social networks ranges from 3 to 40 (Wrzus et al., 2013). Second, interdependencies among relationships describe a dynamic process: Characteristics and changes in one relationship elicit or necessitate subsequent changes in other relationships. Accordingly, multiple relationships need to be assessed longitudinally. Furthermore, researchers should not rely on self-reported relationship

qualities, but consider the perspective of both relationship partners and/or behavioral observations.

To conclude, we discussed the nature of friendships in young and middle adulthood, and the reciprocal influences with people's personality over time. Beyond a comprehensive summary of the current knowledge in friendship research, we thus hope to have encouraged future research to incorporate more complex study designs, as advances in understanding friendships are most likely gained from understanding dyadic friendship processes and the interdependencies between friendships and other social relationships longitudinally.

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Interactive Motifs and Processes in Old Age Friendship

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Gerontologists were pioneers in the study of friendship, and although less research in this area is being conducted now than in the past, they continue to focus more attention on it than researchers who study other phases of life. This is probably due to their historical preoccupation with theoretical questions regarding successful aging and the role of continued social engagement in that process (Adams & Taylor, 2015). Friends are, however, important during later adulthood in many other ways as well, serving as sources of social support and contributing to physical health and even to longevity.

Early studies of older adult friendship tended to focus on the effects of quantity of social contact, but more recent ones have focused more on predictors of friendship patterns, including their dyadic and network processes and structural characteristics (e.g., Chatterjee & Mukherjee, 2014). In their 1992 book *Adult Friendship*, Blieszner and Adams introduced their integrative conceptual framework for friendship research, designed to organize the disparate literature focused on this topic. This framework has been revised twice to reflect recent research and theoretical developments (Adams & Blieszner, 1994; Ueno & Adams, 2006). The most recent version of the framework, now known as the Adams-Blieszner-Ueno integrative conceptual framework for friendship research (Figure 3.1), depicts *friendship patterns* as dynamic and contextualized. *Individual characteristics*, consisting of *social structural positions* and *psychological dispositions*, which affect each other through *interpretation* and *internalization*, lead to the development of *interactive motifs* (*cognitive, affective, and behavioral*), which in turn affect *friendship patterns*. Within both *friendship dyads* and *networks*, the *internal structure* of friendships facilitates and constrains their *interactive processes*, which reciprocally modify and sustain friendship structure. Friendships thereby form, are sustained, and dissolve over time. The structural, cultural, temporal, and spatial dimensions of the contexts in which friendships are embedded affect all elements of the model and, in turn, friendships

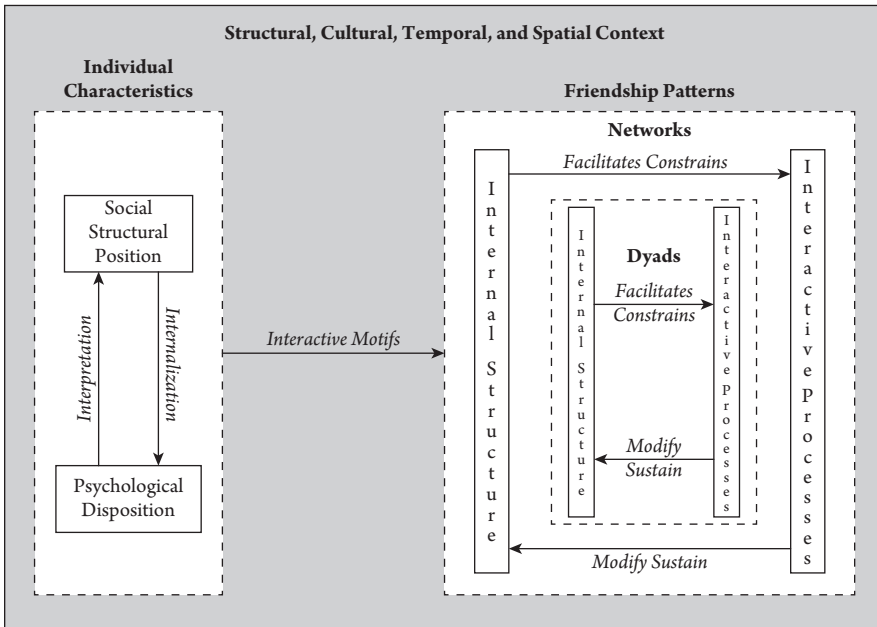


Figure 3.1 The Adams-Blieszner-Ueno integrative conceptual framework for friendship research. From Ueno, K., & Adams, R. G. (2006). Adult friendship: A decade review. In P. Noller & J. Feeney (Eds.), *Close relationships* (pp. 151–169). New York, NY: Psychology Press.

and individuals affect their contexts; in both directions, these effects are both direct and indirect.

This chapter addresses the connections between interactive motifs and dyadic and network structure and process. Although in previous publications Adams and Blieszner provided examples of the structural and dynamic elements of friendship patterns and developed and illustrated the notion of behavioral motif, except for a cursory treatment by Ueno and Adams (2006), the notions of cognitive and affective motifs have not been fully illustrated or elaborated. Furthermore, the connections between these two more psychological motifs and friendship network and dyadic structure and process have not been described. Therefore, in this chapter we define and differentiate among the three types of interactive motifs that influence friendship patterns, distinguish the notion of interactive motif from that of interactive process, and for each interactive motif, draw on examples from research on older adult friendship to illustrate the ways in which it might influence friendship patterns. We conclude with a discussion of possible interactive motif and process interventions that might promote positive friendship patterns.

Our review is illustrative rather than definitive, because of the limits of the existing research on older adult friendship. Many of the original studies were either ethnographies or surveys of small samples of older adults. Although contemporary

researchers now commonly compare the friendships of adults of various ages and sometimes examine friendship patterns longitudinally, knowledge of why friendship patterns change over time is still limited, because researchers often use the variable “age” as a proxy measure for stage of life course and developmental maturity without distinguishing between these two aspects of aging. Furthermore, researchers have not yet conducted large longitudinal studies of the friendship patterns of multiple cohorts. So the research on older adult friendships summarized here likely represents snapshots of particular cohorts during their later years rather than reflecting the structural and developmental characteristics of old age. This literature, however, organized according to the elements of the Adams-Blieszner-Ueno framework, generally demonstrates the importance of interactive motifs for determining friendship patterns.

Defining and Differentiating Interactive Motifs

Interactive motifs are the mechanisms by which individual characteristics, comprising both social locations and psychological dispositions, are manifested in everyday life and through which individual characteristics affect friendship patterns (the internal structural characteristics and processes of friendship). Interactive motifs are a person’s typical cognitive, affective, and behavioral propensities to think, feel, and act in certain ways across situations. Applied to relationships, interactive motifs reflect how individuals think about other people, respond to them emotionally, and engage with them. Because interactive motifs affect the interactions individuals have with others, they ultimately influence the patterns of friendships that emerge from these interactions. Although other factors surely influence an individual’s interactive motifs (e.g., the structural, cultural, temporal, and spatial contexts in which individuals and relationships are embedded), here we focus on motifs as mediators that explain effects of individual characteristics on friendship patterns.

Cognitive motif describes how individuals define, categorize, explain, predict, expect, and evaluate other people and relationships in general. Cognitions specifically about friendships and groups of individuals who constitute a pool of potential friends may vary systematically depending on individual characteristics, and they are likely to be important determinants of friendship patterns. For example, people in different socioeconomic strata have unique standards of behavior and therefore unique expectations for friends (Allan, 1989). These general expectations not only guide their choice of friends but also may influence the way they evaluate friends, how they feel about them, and how they treat them.

Social structural locations and predispositions not only shape what individuals think but also how they feel about people and relationships in general; in other words, they influence their *affective motif*. For example, people tend to like those who are from their own social groups more than those from different ones, and this

affective motif increases the chance of choosing friends of their own race or with the same level of economic resources even when the pool of potential friends is diverse. Liking within social groups thus promotes homogeneity in friendship networks (Chen, Edwards, Young, & Greenberger, 2001; Sprecher, 1998).

Desire for friendships is an affective motif that may explain the individual and group variations in friendship network size. For example, Field's (1999) longitudinal study of older adults demonstrated that older men's desire to develop new friends declined over time, unlike older women, who sustained the desire. These findings may explain the gradual decline of friendship network size among men, which was also found in that study. As Gilligan (1982) argued, women develop stronger emotional needs for personal relationships than men in their early socialization, and the affective difference is likely to contribute to a wide range of sex differences in friendship characteristics such as emotional closeness. Attachment style as a personality trait also varies across individuals and influences friendship patterns.

People have different rhythms to their everyday lives, which signify *behavioral motifs*, "the constellation of both the routine and unpredictable aspects of an individual's daily activities" (Adams & Blieszner, 1994, p. 169). In other words, individuals do what they are predisposed to do given the opportunities and constraints confronting them. Behavioral motif addresses what people do that brings them in contact with others and provides them with opportunities to form and sustain friendships of various types, thereby affecting their friendship patterns. Duneier (1992) provided a good illustration of behavioral motif in his book *Slim's Table*, in which he described friendships forming among older men because they ate in the same neighborhood restaurant at the same time each day. Similarly, Feld (1982) illustrated the importance of behavioral motif when he discussed how participating in activities brings people together with others who share their interests and are therefore similar to themselves.

Interactive Processes of Friendships

Before proceeding further, it is important to distinguish between interactive motifs and interactive processes, because both can be cognitive, affective, or behavioral. In the context of friendships, interactive motifs reflect how individuals think about other people, react to them emotionally, and spend their time with them. As such they act as mediators between individual characteristics such as stage of the life course or developmental maturity and friendship patterns.

In contrast, interactive processes are components of the friendship patterns themselves, reflecting their dynamic aspects. They are what friends exchange or share. As Adams and Blieszner (1994, pp. 173–174) wrote two decades ago:

Cognitive processes are the internal thoughts that each partner has about her- or himself, the friend and the friendship. These thoughts concern,

for example, how one assesses the stability of the friendship, explains shared experiences, or interprets one's own behavior and one's partner's intentions or needs, as well as evaluations and judgements of another's attractiveness, character, similarity to self and so on. *Affective* processes encompass emotional reactions to friends and friendship. Empathy, affection, trust, loyalty, satisfaction, commitment, joy and contentment are all positive or pleasurable emotions. Indifference, anger, hostility and jealousy are examples of negative or unpleasant ones. *Behavioral processes* are the action components of friendship. They include communication, such as disclosure of one's thoughts and feelings. Other behavioral processes are displays of affection, social support, resource exchange, cooperation, accommodation to a friend's desires, co-ordination, sharing activities and interests, concealment, manipulation, competition and the like.

Not only can interactive motifs, internal structural characteristics of friendships, and the context of friendship affect friendship processes but also the three types of processes interact with each other, such that cognitive processes can result in affective reactions that in turn influence future actions, behaviors can affect thoughts and emotions, and so on. Although interactive processes have been studied, the range of processes investigated is not comprehensive and relationships among the processes have not been studied systematically. Furthermore, though interactive processes occur within networks as well as within dyads, most of the research focuses on the latter level.

Having distinguished between interactive motifs and interactive processes as influences on relational outcomes exhibited in friendship patterns, we now turn attention to more detailed examination of research on each type of interactive motif and how it affects the way in which interactive processes are expressed within friendship.

Cognitive Motifs and Processes

Definition of Friendship as Fundamental Cognitive Motif

The fundamental cognitive motif of friendship is an individual's definition of this particular relationship. The characteristics and roles people expect of friends as well as the friend norms they perceive within their social groups shape how they think about friends and friendship and thus influence their openness to becoming better acquainted with persons they meet. Expectations of and norms for friendship also affect individuals' propensity to evaluate the desirability and quality of friendships once they are established, with implications for their efforts to sustain, intensify, or weaken ties with various friends. Research reveals important elements of friendship commonly held across social groups and cultures. Friends typically

are defined as people who mutually select each other for friendship; with whom one shares companionship, interests, and values; in whom one can confide; and for whom one feels concern and affection. Friends are expected to be trustworthy with respect to giving solid advice and holding confidences, to engage in appropriate levels of reciprocal self-disclosure about important aspects of life, and to show understanding, acceptance, tolerance, and respect to one another. Loyalty and commitment to sustaining the friendship are also mentioned as key components of friendship (Adams, Blieszner, & de Vries, 2000; Greif, 2009; Pahl & Pevalin, 2005; Shaw, Gulliver, & Shaw, 2014). Illustrating the principle of homophily, which states that people tend to affiliate with similar others (Galupo, Cartwright, & Savage, 2010), most friends are close in age, match in gender, belong to the same socioeconomic class, and share other demographic characteristics (Blieszner & Adams, 1992; Fehr, 1996).

These common elements of friendship notwithstanding, the definition of friendship, as revealed by who populates friend circles, varies somewhat by social locations such as age, gender, ethnicity, and social class and can differ across cultures. For example, using the British Household Panel Survey, Pahl, and Pevalin (2005) found a greater tendency among middle-aged and older adults as compared with younger ones to name relatives as close friends. The longitudinal data showed that regardless of age at entry in the study, adults, especially the oldest ones, were increasingly likely to name relatives as close friends over time. Changing life circumstances that accompany aging are likely to prompt revision of the definition of friend over time, especially among the oldest-old adults (Johnson & Troll, 1994; Pahl & Pevalin, 2005; Shaw et al., 2014). With respect to gender comparisons for broad conceptions of friendship, Pahl and Pevalin (2005) found that men were less likely than women to have a relative as their closest friend and men's likelihood of having their closest friend change over the years of adulthood from a nonrelative to a relative was lower than women's. In one of the few studies to compare African American and White men's perceptions of friendship, Greif (2009) reported more similarities than differences, but found some indication that African American men placed more emphasis than White men on expressiveness in friendships and were more likely to characterize friendship as involving assistance.

Two studies illustrate the way socioeconomic differences in cognitive motifs can lead to different friendship patterns. Adams and Blieszner (1998) showed that people with high socioeconomic status report more relationship problems. Interpreting the results, the researchers argued that high socioeconomic status allows people to develop and exercise greater cognitive facilities to be critical about relational problems. Similarly, in her study of working-class men and women, Walker (1995) concluded that working-class people value reciprocity and interdependence in material goods and services, whereas middle-class people tend to value sharing leisure activities and having extensive networks of interesting friends. These patterns seem to result from the need for practical support in the working class and the emphasis

on individuality in the middle class. These values specific to socioeconomic classes influence behavioral processes in friendship.

Looking at cultures outside the United States, a sample of older adults in India defined friendship in terms of expectations for self-disclosure, assistance, shared activities, trust, empathy, loyalty, and caring (Chatterjee & Mukherjee, 2014). These priorities corresponded closely with those of US and Canadian older adults (Adams et al., 2000). In a Polish-US cross-cultural comparison, Rybak and McAndrew (2006) found that Americans perceived all levels of friendship from acquaintances to closest friends as more intense and more intimate than Poles did. These findings about conceptions of friendship are intriguing, and additional cross-gender, cross-race, and cross-cultural probes of definitions of “friend” would be useful for extending and confirming the results of these few studies.

Expressions of Cognitive Processes: Thoughts About Friends

Trust, loyalty, commitment, tolerance, respect, consideration, affection, self-disclosure, and assistance not only are components of the definition of friendship but also are norms for friendship strongly endorsed by older adults. Felmlee and Muraco (2009) used an experimental design to explore gender effects among women and men aged 50 to 97 years on interpretation of vignettes in which friends may be perceived as violating normative expectations of friendship. They found that women viewed friend norm transgressions as more inappropriate than men did, and they placed more emphasis on intimacy in friendship than men did. In general, though, these older women and men did not differ on perceptions of most expectations when evaluating friend norm transgressions in cross-friend dyads. Nevertheless, the authors noted that in some cases, respondents offered contradictory interpretations of the vignette situations, such as some tolerating a friend who cancels joint plans in order to go out on a date versus others criticizing such a friend for breaking a promise. The authors also pointed to evidence of cultural specificity of friendship norms in the findings, concluding that friendship norms are influenced by diverse contextual factors beyond gender that must be taken into consideration when assessing perceptions of friends and friendship.

Although there were no differences between the middle-aged and older members of the Felmlee and Muraco (2009) cross-sectional sample, it is likely that expectations of friends change over time with age-related developmental changes, at least for some individuals. Johnson and Troll's (1994) interviews of women and men aged 85 years and older about their friendships revealed changes over 3 years in these oldest-old adults' views of friendship norms. They reported three accommodations to their changing circumstances. They no longer required face-to-face contact for enjoying and sustaining friendships, but relied instead on telephone calls and letters. They began to include acquaintances and hired help in their categorization of friends, expanding the number of potential friends and the range of

closeness they considered acceptable in friendship. Finally, they redefined “friend” to minimize the need for intimacy or shared interests, and instead cultivated caring relationships with new friends that were less personal and less committed than they might have expected in the past.

Those kinds of changes in expectations for friends were not disturbing, because they were initiated by the partners as accommodations to their changing needs and abilities. But Moremen’s (2008a) interviews showed that women aged 55 to 85 years who identified unwanted disruption of their friendship expectations and norms experienced strain in the friendship. For example, discovering that values actually were dissimilar, finding that a friend insisted on having her own way all the time or never reciprocated support, or learning that a friend had betrayed a confidence or told others lies about people or situations all were norm violations that cooled or ended friendships.

Another line of research illustrative of how cognitive processes affect friendship addresses outcomes of certain ways of thinking about the self and others. Morry, Hall, Mann, and Kito (2014) reported that how individuals think about themselves and perceive how their friends think about themselves affects friendship quality and functions. In other words, not only are self-assessments important in establishing and sustaining the quality of friendships but so also are perceptions of and judgments about the friends’ motives and behaviors. MacGregor, Fitzsimons, and Holmes (2013) found that people are reluctant to get too close to others whom they perceive as having low self-esteem, apparently suspecting such persons will be unable to offer support. In contrast, Slotter and Gardner (2011) found that individuals seek potential friends from among those whom they perceive as being able to help them achieve their goals. Indeed, the older women in Moremen’s (2008b) study evaluated their confidantes as contributing importantly to their health and well-being because of the many forms of support and assistance the friends offered.

Affective Motifs and Processes

Love, Liking, and Acceptance of Others as Fundamental Affective Motif

By whatever name, the primary affective motif is the degree to which people love, like, and accept others, both those similar to and different from the self. Like other affective motifs such as tendencies to get angry or hurt, or feel betrayed, this key affective motif exists on a continuum—some people are misanthropes and feel very little positive sentiment for people as a whole let alone for people who are different than they are, and others love everyone they meet. So affective motifs vary both by how much people tend to like or love others and also by whether these feelings apply across diverse groups. Although desire for friendships in general has been studied among older adults, as referenced previously, and certainly affects friendship

network size, this connection has not been documented. Similarly, intergroup tolerance has been studied extensively, but friendship researchers have not studied the effect it has on friendship patterns among older adults. Theoretically it follows that the more a person loves others and the more inclusive feelings a person has, the larger the pool of potential friends available to them will be, the more solidarity they will feel with their friends, the more diverse their network will be, and the less hierarchical their friendships will be. In addition to these hypothetical structural outcomes of an accepting affective motif, people who love people will approach friendships differently—perhaps feeling higher levels of intimacy, evaluating friendship partners less harshly, and putting more effort into their relationships.

Although no studies specifically address the notion of affective motif, Matthews's (1986) work on friendship styles suggests it varies across older adults. She identified three friendship styles, distinguished by the number, duration, and emotional closeness of relationships. Discerning older adults focus on a few close relationships, independent older adults refrain from close friendships, and acquisitive older adults acquire new friends across their life course. Although the differences in these styles do not reflect varying tolerance of diversity, they do reflect emotional capacity and possibly a difference in how open older adults are to friendships with others. A recent study by Miche, Huxhold, and Stevens (2013) confirmed these three types of friendship styles and further distinguished two rather than one type of acquisitive approach based on the degree of emotional closeness in relationships. Among other variables, these researchers found that friendship style varied by socioeconomic status, gender, and health, all indicators of individual characteristics that are predictors of friendship patterns and might be mediated by affective motif.

Similarly, although no researchers have examined how affective motif regarding relationships changes over the life course, Carstensen's robust research framed by socioemotional selectivity theory suggests that it does change (See Carstensen, Issacowitz, & Charles, 1999). Research confirmed in diverse samples demonstrated that older adults conserve emotional and physical energy by concentrating attention on a reduced number of close relationships, generally including family and close friends. It is also possible that affective motif in relation to friendship changes as family relationships evolve. As Allen, Blieszner, and Roberto (2011) reported, older adults from both mainstream and marginalized families reinterpreted their relationships as a way to adapt to the impermanence of family ties. In a similar way, they could also adapt to the voluntary nature of friendship and the increasing fragility of those ties as people age. Note that it is possible that friendship styles, as defined by Matthews, also change over time, but that has not been studied. Field's (1999) work suggested that men's affective motif might change over time more than women's does, as their desire to develop new friendships declined over time while women's desire was maintained. As future cohorts enter the third age, it is possible that their affective motifs will be different from those

of current older adults, given the increasing acceptance of diversity of younger cohorts (Howe & Strauss, 2000).

Expressions of Affective Processes: Feelings About Friends

Distinguishing between affective and cognitive processes is sometimes difficult, because of the limitations of language. For example, some people would say they are satisfied with their friends due to positive evaluations of them but others might just say they *feel* satisfied with their friends without thinking about it at all. So although we have described definition of friendship as the primary cognitive motif, the definitions respondents provide often include information about how positive affect is expressed in friendships. For example, in their examination of the definition of friendship in two North American cities, one in the United States and one in Canada, Adams, Blieszner, and De Vries (2000) reported that the older adults they studied mentioned caring as an affective dimensions of friendship, as did De Vries and Megathin (2009) in their study of homosexual and heterosexual older men and women and Grief (2009) in his comparison of the meaning of friendship for older African American and White men. The former two studies also described compatibility as an affective dimension of the definition of friendship, but this concept, like satisfaction, could be considered cognitive.

Similarly, the literature about problematic friendships and friendship dissolution includes information about negative affect expressed in friendship. In the same study cited previously, Blieszner and Adams (1998) reported that discussions of negative emotions dominated their older adult respondents' discussions of fading or problematic friendships and described examples of how betrayal, indifference, or hurt were feelings expressed about friendship.

Behavioral Motifs and Processes

Behavioral Motifs as Routine and Unpredictable Aspects of Daily Activities

Normative expectations exist not only for cognitive motifs, as described previously, but also for behavioral aspects of friendships, such as preferences for where to meet friends or how often to interact with them. In contrast to thoughts about friends, behavioral motifs are reproduced as everyday routines and therefore are easily assessed by analyzing what people do in everyday life that brings them in contact with other individuals. The broad applicability of behavioral motifs for different areas of research—on social integration or isolation, loneliness, deviant behavior, or popularity—readily leads to the inclusion of these items in quantitative research

designs. Individuals develop strategies to make contacts, to start friendships, and to maintain but also to end voluntarily these relationships. Behavioral motifs vary by gender, social status, life stage, family status, and other personal characteristics. They are highly influenced by personality traits that moderate openness to new contacts (Selfhout et al., 2010). In comparison with the other forms of interactive motifs, behavioral motifs are linked to several foci of activity (Feld & Carter, 1998), for example community services or social activities in general.

Expressions of Behavioral Processes: Doing Friendship

Behavioral processes describe practices of making and sustaining friendships, for example by looking at support exchanges or the frequency of contact. These processes are highly influenced by dispositional, structural, and contextual factors. Several studies have focused on gendered differences in friendship behaviors, such as Wright's (1982) assertion that men's friendships occur "side-by-side" whereas women's ties are "face-to-face." This dichotomy summarized research showing that women are more likely to emphasize self-disclosure and support as important aspects in friendships whereas men emphasize external activities. Wright also pointed out that sex differences are small and completely disappear when looking at very strong and long-lasting relationships. Several studies highlighted differences in talking patterns within friendships. Women are more likely than men to discuss personal matters with their friends and to choose friends to be their confidants (Connidis & Davies, 1990; Fox, Gibbs, & Auerbach, 1985; Hollstein 2002).

While the comparison of men's and women's friendships is an interesting area of research, we note that some gender differences actually are effects of different life-course experiences rather than resulting from gendered socialization regarding self-disclosure, intimacy, fondness, or supportiveness. This is especially true for differences that result from a gendered division of labor. For example, men confide in their coworkers (Fischer & Oliner, 1983) but change their behavior after retirement and mainly focus on their wives as confidantes (Hahmann 2013; Hollstein, 2002). Women who predominantly interacted in private spheres related to physical and emotional activities of childbearing were more likely to have networks dominated by friends and kin (Bost, Cox & Payne, 2002; Wellman, Wong, Tindall & Nazer, 1997). In contrast, other research did not find such gendered differences in friendship. The study on gender and the life cycle by Gillespie, Lever, Fredericks, and Royce (2014), for example, did not find substantial gender differences in the number of friends or sources for specific tasks, but showed how these patterns of friendship are moderated by age or parental status.

Focusing on life stages and transitions reveals several other strong influences on behavioral processes in friendships, including geographical mobility, the birth

of a child, or divorce (Bidart & Lavenu, 2005; Kalmijn, 2003; Terhell, Broese van Groenou, & van Tilburg, 2004). Transitions typically linked to older individuals, such as retirement, widowhood, declining health, or relocation to a retirement community, are also potential influences on friendship patterns.

With the death of a romantic partner, an individual not only loses one of the most important sources of emotional support and well-being (Connidis & Davies, 1990) but also may experience challenges in other dimensions of social support and everyday social activities. Ha (2008) showed how sources of support change over time of bereavement. While children are the most important sources of social support shortly after the partner's death, friends become more important in the long term, probably because of the shared experiences of loss that includes sympathetic reactions to bereavement, feelings of isolation, and emotional loneliness (Gallagher & Gerstel, 1993; Ha, 2008). In studies of older adults in Germany, Hollstein (2002) and Hahmann (2013) showed how widowhood also changes time patterns and therefore moderates the possibilities for starting and maintaining friendships that sometimes even become close enough to replace the lost partnership. Substitution of a friend for a partner is especially evident in behavioral processes such as shared vacations and family meetings, as well as in everyday routines and even caregiving situations. Respondents in Hahmann's study described how everyday care-related routines, such as morning phone calls, met their needs for security, especially in the face of declining health, and thus contributed to their subjective well-being.

Relocation to a new community offers options to start new friendships. Dupuis-Blanchard, Neufeld, and Strang (2009) demonstrated how social engagement—defined as both a thought process and a conscious behavior—shapes the forms of newly established social connections in a senior-designated apartment building. Residents who did not seek close interactions with other members of the community developed casual interactions that did not demand self-disclosure. Other patterns of interaction were analyzed as practices to deal with feelings of security, supportive behavior, and friendship. They resulted in diverse behavioral processes that provided opportunities to serve individuals or the community and promoted friendship formation within the community. Walters and Bartlett (2009) investigated relocation to a new (not age-specific) community after retirement. Their findings highlighted how agency (as a behavioral motif) leads to membership in a “leisure group” that meets for recreational activities but also can be seen as a starting point for new friendships that give support during times of need, such as while being homesick shortly after relocation or in bereavement.

Conclusion

Given the importance of friendship for contributing to health and well-being, Adams and Blieszner (1993) addressed the need to apply friendship research results to develop evidence-based interventions aimed at improving friendship interactions

and satisfaction. Some efforts to aid friendship success would profitably be targeted to modify friendship motifs, whereas others might usefully address interactive processes. These interventions could be dispositional or structural and designed to change either the processes or structure of friendship. For example, with respect to cognitive motifs, Adams and Blieszner (1993) cited work showing that self-defeating thought patterns related to social anxiety, lack of social sensitivity, or holding unrealistic expectations for friendship could interfere with the ability to engage in satisfying friendships. Dispositional interventions could not only address these areas but also lead to increases in the size and solidarity of friendship networks. With respect to affective motifs, fear of becoming close, feelings of alienation from or distrust of others, and difficulty expressing emotions would be hindrances. As with respect to cognitive motifs, these affective areas could be addressed through dispositional interventions, but also might be addressed by relocation to an environment in which the individual feels more comfortable, perhaps because of homogeneity of residents. Or alternatively, interventions designed to change intergroup relations in an immediate social environment could alleviate some of these feelings and simultaneously increase the diversity of friendship networks. Finally, in the domain of behavioral motifs, a tendency to choose people who are hard to befriend, lack of social and communication skills, and rigid interaction styles could make friendship development and sustainment difficult. A structural intervention, such as changing the immediate social environment by providing more opportunities for people to interact on a regular basis or by relocating an individual to an environment more conducive to friendship, might alleviate these issues. Psychological interventions based on cognitive-behavioral therapy and other modalities and structural interventions based on understandings of the importance of person–environment fit could fruitfully address these kinds of interactive motifs and promote satisfying friendships.

One outcome of meaningful friendships is alleviation of loneliness. Rook (1984) discussed many personal and contextual factors that can contribute to loneliness and focused her recommendations on interventions specifically aimed at preventing loneliness, reducing loneliness, and helping people cope with any loneliness they might experience. These strategies could be directed to helping people develop cognitive, affective, and behavioral motifs and processes that would enable them to establish positive close relationships. They could also be aimed at preventing loneliness from leading to more serious problems. In this regard, Bouwman, Aartsen, van Tilburg, and Stevens (2014) reported results of an online friendship intervention for older adults in the Netherlands that addressed the cognitive motif related to standards for friendship as well as behavioral strategies related to developing the friend network. After six weeks, the intervention appeared to be successful in reducing loneliness among those in the intervention group as compared with controls.

Martina, Stevens, and Westerhof (2012) provided another example of longitudinal intervention research, this time focused on improving self-management of resources and losses to maintain or improve older adults' well-being. Applied to

friendship, self-management entails cognitive motifs such as self-efficacy beliefs and a positive frame of mind, as well as behavioral processes such as taking the initiative and investing in relationships. Intervention group members completed a 12-week program of lessons and homework assignments designed to improve self-management in friendship. Comparison of intervention and control group members at 6 and 9 months after the program showed that the former took more initiative, engaged in more investment behavior, and had made more friends than those in the control group, although their self-efficacy scores did not change over time nor differ from those of the control group.

Friendship enrichment programs focus on guided reflections on all forms of interactive motifs to prevent older individuals from experiencing social isolation. Stevens and van Tilburg (2000) showed results on the effectiveness of these programs by comparing female participants with a control group drawn from a longitudinal sample on living arrangements and social networks in the Netherlands. The groups were matched on loneliness and important social variables, such as marital status, age, and network composition. The enrichment program improved quality and quantity of the participants' friendship ties regarding existing ones and those developed during the program, for example through educational activities that were part of the program. The authors highlighted how a change of behavioral motifs, such as the willingness to participate in friendship-enrichment programs to reduce feelings of loneliness, offered a chance to start new ties, which therefore influenced behavioral processes.

In this chapter we have defined and differentiated among the three types of interactive motifs that influence friendship patterns, made a distinction between the concept of interactive motif and interactive process, and, for each interactive motif, provided examples from research on older adult friendship to illustrate the ways in which it might affect friendship patterns. Much of what we have discussed is speculative due to the limitations of the literature on friendships and interventions related to friendship. Care should be taken in undertaking friendship interventions of any kind, as information on their latent consequences does not exist. We also note that these dispositional and structural interventions and other ones targeted to change interactive motifs and processes might also affect other aspects of friendship patterns, including the structural characteristics of dyads and networks. Future research is needed, perhaps using experimental designs, to determine what sorts of interventions targeting interactive motifs and processes are needed to change friendship patterns positively and effectively.

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PART II

WHO ARE OUR FRIENDS?

The Hackneyed Notions of Adult “Same-Sex” and “Opposite-Sex” Friendships

MICHAEL MONSOUR

When I was first asked to contribute a chapter to this book and supplied with the preliminary working title of “Same- and Opposite-Sex Friendships,” my initial reaction to the invitation and the title was positive. I agreed with the editors that there was a need for an edited volume on friendship that included multidisciplinary and cutting-edge views on this very important relationship. Although my excitement about writing this chapter has never waned, careful reflection on the title created serious misgivings about implicit assumptions embedded in it. The working title, which I was free to accept, reject, or change, indirectly suggested that friendships *and* gender could be conveniently bifurcated into two broad categories: same-sex and opposite-sex. An artificial gender binary (female and male) imposed on an arbitrary friendship typology (same-sex and opposite-sex friendships).

Coincidentally, Bill Rawlins and I had just finished publishing an article in which we argued for a less restrictive and more inclusive approach to conceptualizing friendships between members of different genders and/or biological sexes, and by extension, friendships between members of the same sex as well (Monsour & Rawlins, 2014). Our qualitative interviews with transitioning transsexuals about their “opposite-sex” friendships had dramatically demonstrated to both of us that the hackneyed notions of “same-” and “opposite-” sex friendships and the gender binary that reinforced those notions needed to be reexamined. But there had been another event in my life, much more compelling and personal than my career as a friendship and gender scholar, that gave me reservations about assumptions embedded in the title.

From 2005 to 2009 I had been involved in a close friendship with a postoperative male to female transsexual. It was a wonderfully enriching friendship in which I found myself, quite unintentionally, being both a *participant* and an *observer*. As an observer, I noticed that Susan (not her real name) usually embraced her femininity and being a woman. However, I also observed that when guest lecturing on

transgenderism in my classes, she would describe herself as “not a woman in the traditional sense, and certainly no longer a man, and but rather a two-spirited, surgically engineered hybrid.” As a participant in our friendship, I engaged in many gender-neutral activities with Susan, but we also were involved in traditionally masculine enterprises. My roles as both participant and observer led to many personal musings, musings that some qualitative methodologists claim have clear relevance to this chapter *because* they are personal (Lofland & Lofland, 1995).

One such musing was silently speculating to myself about the type of friendship I was in. After all, I had spent the last 17 years of my professional life writing about friendship and had published a book on opposite-sex friendship (Monsour, 2002). I curiously asked myself, “Is this a same-sex friendship or an opposite-sex one?” There was compelling evidence supporting both perspectives. Susan provided me with the highly valued “insider perspective” that men frequently mention as the most important advantage of an opposite-sex friendship (Monsour, 2002). She gave me a window into what it was like to be a woman in a male-dominated society. On the flip side, Susan and I loved to watch over-the-top testosterone-laden action movies—the kinds of movies that I had watched my entire adult life with my same-sex friends but never with my female ones. Although I leaned toward viewing the relationship as an opposite-sex friendship rather than a same-sexed one, neither label was a particularly good fit. Both were limiting and overly prescriptive. I began to wonder why friendship scholars, myself included, had locked all of us into a strict typological binary in which all friendships had to be either same-sex or opposite-sex. Why could they not be something different?

Ultimately, the lived experience of my friendship with Susan prompted me to write the following in a chapter on gender and friendship:

Because postoperative transgenders might constitute a third gender, or at least one that transcends the traditional masculine and feminine categories (Bolin, 1994), researchers and theoreticians should devote more time and energy investigating a community that could possibly serve as a catalyst for a paradigm shift in how gender is conceptualized.

(Monsour, 2006, p. 65)

The reader might be puzzled as to where I am going with these introductory remarks. Before I embark on my primary task of identifying current knowledge and future directions in the area of adult same-sex and opposite-sex friendships, it is important to explain from the outset where I am coming from, how my personal experience informs my professional persona. The categories of same-sex and opposite-sex friendships bother me on both personal and professional levels. Consequently, in writing this chapter I find myself, in the words of the qualitative researchers Lofland and Lofland, “starting from where I’m at,” that is, writing about

a topic that has personal relevance to me as a human being and scholar and unabashedly allowing my experiences to inform and enrich my writing (1995).

Therefore, this chapter is written from the perspective of a gender and friendship scholar whose friendships with gender-variant individuals has prompted him (me) to reevaluate the traditional binary-based typology of "same-" and "opposite-" sex friendships. As for the majority of the remaining content of this chapter, my primary purpose is to identify current knowledge on same-sex and opposite-sex adult friendships. Part of that analysis focuses on similarities and differences between those types of friendship. Additionally, four broad descriptive generalizations about the literature are made. The concluding section includes speculations about future directions in the study and practice of adult friendships. We begin our journey with a brief examination of the difficulty experienced by both scholars and laypersons in defining "friendship" and the equally problematic adjectives "same-sex" and "opposite-sex."

Defining Friendship

Friendship scholars still comment on the lack of consensus on the meaning of friendship and how that lack of agreement makes it difficult to compare friendship findings across studies (Chasin & Radtke, 2013). The purpose in this section is not to arrive at a concrete definition of friendship, but rather to explore some of the conundrums associated with trying to nail down such a definition. The problem becomes more complex and convoluted when adjectives such as "same-sex" and "opposite-sex" are employed in an attempt to distinguish one type of friendship from another. Critically examining these issues is of paramount importance to understanding current and future approaches to the study and practice of same- and opposite-sex friendships.

Although definitions of friendship are often traced back to books VIII and IX of Aristotle's *Nicomachean Ethics* (1980; Rawlins, 2009), for purposes of this chapter the beginning point is an observation made by Fehr almost 20 years ago: "Everyone knows what friendship is—until asked to define it. There are virtually as many definitions of friendship as there are social scientists studying the topic" (1996, p. 5). Fehr is referencing social scientific attempts to define friendship. In a classic book on adult friendships, Blieszner and Adams made a similar observation concerning lay definitions of friendship when they noted that despite the overlap in people's views of friendship, there is also "tremendous variation in emphasis across individuals" (1992, p. 1). The variability in scholarly and lay definitions of friendship is partly due to the number of factors that must be accounted for when defining friendship. Definitions depend on the stage of life in which the friendship occurs (Monsour, 2002; Rawlins, 1992), the culture in which it exists (Gudykunst & Ting Toomey, 1988), demographic variables (Wright, 1988), the level of intimacy (Fehr, 1996), and countless contextual factors (Adams & Allan, 1998).

In addition to individual variability in definitions of friendship that one might expect from *laypersons* who coconstruct their own friendship realities on a moment-by-moment basis (Chasin & Radtke, 2013; Rawlins, 2009), *scholars* employ a number of different methods for determining the meaning of friendship (Monsour, 1997). To a large degree, the method used to arrive at a definition of friendship determines important features of that definition (Monsour, 1997). Two of the more common methods are paradigm case formulations (Davis & Todd, 1985) and straightforwardly asking research participants what friendship means to them (Hays, 1988; Rubin, 1985). Allowing participants to define friendships in their own way is the method preferred by the authors who wrote the chapter on friendships in old age (see Adams, Blieszner, & Hahmann, chapter 3, this volume). In response to an e-mail sent out to authors asking if they were providing a formal definition of friendship in their chapter, Professor Adams replied, “We are not offering a formal definition of friendship and, in our work, value people defining friendship for themselves rather than using pre-determined definitions or categories” (personal e-mail communication, January 28, 2015).

All 16 of the lead contributors to this book were e-mailed and asked if they were providing a formal definition of friendship in their chapter. Their responses fell into three major categories that reflect current strategies for defining friendship. Some contributors indicated that they would provide a formal definition of friendship. Others responded that they would not provide a definition. The largest group specified that rather than providing a formal definition of friendship, they would identify characteristics of friendship such as its voluntary nature, the provision of social support, and enjoyment of one another’s company. Identifying typical characteristics of friendship is similar to using a paradigm case approach to defining friendships (Davis & Todd, 1985).

Some scholars are hesitant to provide a definition of friendship because in their theoretical view friendship is not a fixed relational category with identifiable characteristics, but rather a continuous work in progress in which the friends coconstruct through communication what friendship jointly means to them. Rawlins put it this way: “Static definitions of friendship fail to capture the lived actualities of friendship—their finitude, flexibility and fragility” (2009, p. 13). Similarly, other scholars take a postmodern perspective (Butler, 1990) on friendship that emphasizes the performative and socially constructed nature of self, gender, and friendships (Chasin & Radtke, 2013; Monsour & Rawlins, 2014). From this perspective, individuals coconstruct and establish through communication what it means to be a friend. From a postmodern perspective, characteristics of friendship flow naturally from the unfolding of the relationship in a broad range of interactional encounters. For example, Chasin and Radtke (2013) argue that friends discursively create their friendship “moment by moment” during specific interactions with one another.

The problem of arriving at an adequate definition of friendship is compounded when one adds the additional burden of trying to distinguish *same-sex* from

opposite-sex friendships. These adjectives have existed for as long as empirical friendship studies have been conducted (Kirkpatrick, 1937; Vreeland & Corey, 1937), and they deceptively appear to be nonproblematic. Friendship investigators routinely use these categories without a second thought as to what they really mean or what groups are being excluded by the use of that typology. Employment of the terms "same-sex" and "opposite-sex," and operationalizing friendship studies based on those concepts, is problematic, and friendship scholars need to more closely examine them and the assumptions that are embedded in those adjectives.

What does it mean to state that two individuals are in a *same-sex* or *opposite-sex* friendship and/or that they are of the *same* or *opposite sex* from one another? What decision rules are invoked when deciding whether a particular friendship is one or the other? Why must the friendship be one or the other? If friendship scholars and researchers believe that all friendships are either same-sex or opposite-sex (and it appears that most do), at a minimum there should be agreement about what constitutes biological sex. What biological traits make a person a female or a male? Are they absolute? Are they universal? There is an extensive literature on these topics that space limitations prevent us from thoroughly exploring, but a few observations can be made that illustrate why the binary categorization of all friendships as either same-sex or opposite-sex is fraught with difficulties.

Biologists struggle when trying to draw an absolute dichotomy between "male" and "female," because decision rules for distinguishing one biological sex from another come with caveats, clarifications, and political agendas (Dreger, 1998; Fausto-Sterling, 1999; Harper, 2007; Kessler, 1998). For example, anatomical differences between two individuals are often the litmus test for deciding if they are of opposite sexes. More than any other single factor, a person's anatomy at birth determines whether that person is viewed by the medical establishment as male or female, and biological sex assignment is initially made according to the presence or absence at birth of male genitalia (Harper, 2007; Kessler, 1998). However, intersex individuals born with ambiguous genitalia make the assignment of biological sex based on genitalia problematic (Harper, 2007). Some estimates conclude that roughly one person in every 1,500 is born with ambiguous genitalia (Fausto-Sterling, 1999). By mathematical extension, roughly 200,000 individuals in the United States are born with mixed genitalia that render biological sex assignment difficult at best. If one's friend has both male and female genitalia, is that friend of the same or opposite sex as oneself?

Chromosomal testing also appears to be an ironclad methodology for determining one's biological sex, but it is not. Although an XY chromosome pair normally results in a male and an XX chromosome pair in a female, other groupings are possible such as XXX, XXY, and XYY (Harper, 2007). Many individuals have a genetic sex that falls outside the binary boundaries of XX and XY (Dreger, 1998), clearly demonstrating that "genetic sex is not always exclusively binary" (Harper, 2007, p. 168). As noted by Ellis and Eriksen (2002, p. 290), "One in 500 people

has a genetic sex other than XX (female) or XY (male).” Again, by mathematical extension, approximately 600,000 of the 300,000,000 people in the United States have a genetic sex other than XX or XY. When these numbers are combined with those persons born with ambiguous genitalia, a staggering 800,000 individuals in the United States do not clearly fall into either the male or female biological sex categories.

Some may argue that these numbers are not large enough to warrant a challenge to the current status quo of viewing all friendships as either same-sex or opposite-sex. I invite those individuals to consider the observations of Thomas Kuhn in his seminal work *The Structure of Scientific Revolutions* (1962). Kuhn identifies a number of characteristics of problematic paradigms, that is, paradigms that are in need of change but whose proponents are stubbornly resistant to any modifications in the received view. The outdated *gender paradigm* that friendship scholars implicitly endorse with their use of the binary typology of same-sex and opposite-sex friendship is one such problematic paradigm.

Kuhn notes that a paradigm begins to be questioned because of the existence of anomalies that cannot be explained by the existing paradigm. In addition to the hundreds of thousands of individuals who are intersexed and/or have a genetic sex other than XX or XY, there are other recurring anomalies that the gender paradigm cannot explain. The most obvious anomaly is reflected in the contention of some scholars and thousands of practicing transgenderists that a third gender exists and has existed for thousands of years (see the excellent book edited by Herdt, 1996). As observed by Kuhn, proponents of existing paradigms typically discount the anomalies and claim that they are the exception that proves the rule. Friendship scholars can no longer afford to ignore these growing segments of the population whose very existence challenges the gender binary and the two-sex friendship typology that we have employed for so long.

If genetic sex is not exclusively binary, then the friendship categories of “same-sex” and “opposite-sex” are called into question because those categories are based on the gender binary. Indeed, Harper contends that biological sex occurs on a continuum, with individuals displaying differing degrees of biological maleness and femaleness (2007). If an objective observer used the chromosome test, my relationship with Susan would clearly be considered a same-sex one because we both had the XY pairing. However, if that same observer employed the anatomical distinction test, postsurgery Susan and I would be considered opposite-sex friends. Current conceptualizations of friendship would not allow for her to be both a same-sex and an opposite-sex friend of mine, although in the lived reality of our friendship that is exactly what she was.

So how does a friendship scholar decide whether a particular friendship is same-sex or opposite-sex? Even asking such a question implicitly accepts the gender binary because it endorses the paradigmatic perspective that there are only two genders/biological sexes (Monsour & Rawlins, 2014). Such a view ignores the

growing literature on third sexes, third genders, and the transgender community (Cole, Denny, Eyster, & Samons, 2000; Herdt, 1996). Nevertheless, one approach for determining whether a friendship is same- or opposite-sex (or some other as yet unnamed type of friendship), the one advocated in this chapter, is to ask the individuals in the friendship how they view the relationship. When using this approach, same-sex friendships would be those friendships in which both members of the relationship perceive that they are of the same-sex, with "sex" encompassing both biological sex and gender identities (Monsour & Rawlins, 2014). If two individuals both perceive themselves and each other as males, then that would be a same-sex friendship, even if one or both of the individuals did not have male genitalia or the "correct" chromosomal pairing. Similarly, an opposite-sex friendship would be one in which both friends believe that they each occupy distinctly different gender identities, typically "female" and "male," but not limited to those two categories (Harper, 2007).

The word "opposite" in "opposite-sex friendships" is troublesome, which partly explains why friendships between males and females have alternatively been referred to as cross-sex friendships (Booth & Hess, 1974), cross-gender friendships, or other-sex friendships (Monsour, 2002). Use of the words "opposite-sex" erroneously implies that women and men share no similarities and are completely opposite of one another, which is clearly not the case. Researchers from the fields of communication and psychology contend that the similarities in communication styles of women and men are much more prevalent and significant than are the differences (Canary, Emmers-Sommer, & Faulkner, 1997; Hall, Carter, & Horgan, 2000). Since communication is, among other things, the behavioral manifestation of beliefs, attitudes, and values that people have about friendship (Monsour, 2002), then it logically follows that a lack of pervasive and significant gender differences in communication styles suggests great similarity in same-sex and opposite-sex friendships.

Partly as a result of frustrations with the very limited view of gender and friendship, Rawlins and I recently proposed the term "postmodern friendships" (Monsour & Rawlins, 2014). Postmodern friendships are those relationships in which individuals "co-construct the individual and dyadic realities within specific friendships . . . involving negotiating and affirming (or not) identities and intersubjectively creating relational and personal realities through communication" (Monsour & Rawlins, 2014, p. 13). Individuals in a particular friendship are free to create their own individual and joint gender identities and to decide for themselves what friendship expectations, if any, come with those negotiated identities. For example, through our extended conversations about each other, the relationship, and gender identity issues, Susan and I negotiated the degree to which labels such as "same-sex" and "opposite-sex" made sense within the lived reality of our specific friendship.

Now that some attention has been devoted to unraveling some of the complexities of the deceptively simple terms "friendship," "same-sex friendship," and

“opposite-sex friendship,” let us move to some observations about current knowledge on same- and opposite-sex friendships. From this point forward the term “other-sex” takes the place of “opposite-sex” because it is less problematic.

Current Knowledge on Adult Same- and Other-Sex Friendships

Despite observations from scholars that adult friendships are an understudied social relationship (Muraco, 2012), there is nonetheless a robust empirical literature going back at least to 1935 for adult same-sex friendships (Vreeland & Corey) and 1937 for other-sex ones (Kirkpatrick). However, it is important to note that empirical studies of other-sex friendships did not begin in earnest until the investigations conducted by Booth and Hess (1976) and Rawlins (1982). The adult friendship literature becomes even more unmanageable when considering that theoretical treatises on adult friendships in Western societies have their origins in the writings of Aristotle over 2,300 years ago (1980).

The sheer volume of friendship materials available necessitate restricting the time frame to about the last 30 years and narrowing the focus to four broad descriptive generalizations. No doubt, important works on friendship will be missing from this chapter, which in no way diminishes their importance. Academic friendship scholars should also acknowledge that some of the more profound descriptions of friendship do not appear in the academic literature, but instead can be found in film, poetry, literature, and music. For instance, friendship scholars like myself can pontificate as much as we like about the “functions of friendship” (Monsour, 2002), but none have said it better than Kahlil Gibran when he wrote, “And let there be no *purpose* in friendship save the deepening of the spirit” (1923).

Four Broad Descriptive Generalizations

Four broad descriptive generalizations about the same-sex and other-sex friendship literatures are made in this section. No claim is made that these generalizations comprehensively reflect the voluminous amount of material available. For example, I particularly call the reader’s attention to the growing role of modern technology in friendships (see Ledbetter, chapter 6, this volume).

Similarities and Differences in Same-Sex and Other-Sex Friendships

The first generalization focuses on the similarities and differences between same-sex and other-sex friendships. On the most fundamental and significant level, both types of friendships are similar in that they are each variations of the same

paradigmatic relationship: friendship. As I explain in an earlier work (Monsour, 2002), based on the writings of Davis and Todd (1985) and Fehr (1996):

Paradigm case formulations are generated by the use of theory, by relying on past research, or by researcher intuition. . . . A paradigm formulation involves the construction of a complex paradigm case of the concept under investigation against which others can be recognized as variations of the paradigm case. (p. 25)

Consequently, regardless of the gender composition of the friendship, there are certain paradigmatic characteristics that the vast majority of friendships possess. Although friendship scholars use different terms and labels for these characteristics, they mostly all fall into the broad categories of providing affect, aid, and affirmation (Monsour, 2002).

Perhaps the most significant difference between same-sex and other-sex friendships is the intrinsic advantage that one type of friendship has over the other. In the case of other-sex friendships, that core advantage is the provision of an "insider's perspective" on how members of the other sex think, feel, and behave (Monsour, 2002; Rawlins, 2009; Werking, 1997). In a similar fashion, same-sex friends provide one another with a different type of insider's perspective, that is, they both know what it is like to be a member of that sex and thus are in a position to provide a particular type of understanding and social support that other-sex friends cannot provide. My relationship with Susan was unique in that she could provide me with both of these core advantages that are normally reserved only for more traditional same-sex and other-sex friendships.

Academic Books

A second generalization pertains to the excellent academic books that have been written over the last 30 years. Space restrictions make it impossible to identify and describe all of the books that have been written (e.g., also see Fehr, 1996; Greif, 2009), so the focus is on selected books that have either stood the test of time (Blieszner & Adams, 1992; Rubin, 1985) and/or are particularly insightful or groundbreaking (Muraco, 2012; Rawlins, 2009; Werking, 1997). There are a reasonable number of solid academic books available for the serious friendship scholar. My expectation is that the current edited volume will be a substantive contribution to books on friendship.

The identified books are presented in chronological order, starting with Lilian Rubin's 1985 book *Just Friends: The Role of Friendship in Our Lives*. Professor Rubin died in the summer of 2014 at the age of 90 and left behind an impressive scholarly legacy on a variety of topics. The most important of her many works for friendship scholars is her book *Just Friends*. Rubin cogently lays out the marginalized position

of friendship in a world in which those relationships often come in a distant second to romantic relationships. Her book is based on interviews with individuals from all walks of life, including gays and lesbians, and she was an especially keen observer of friendships between women and men, though her book focused on same-sex friendships as well.

In 1992, Rosemary Blieszner and Rebecca Adams, two of the contributors to this book (see chapter 3), published their book *Adult Friendship*. As a newly minted PhD with a burning interest in friendship, I found in their book a range of new ideas and an excellent critical review of older ones. I found their “integrative model of friendship,” which incorporates both sociological and psychological principles, particularly illuminating. Their chapter on the history of friendship and friendship research serves as an excellent way to contextualize the work of other friendship scholars.

In 1997, Kathy Werking published *We’re Just Good Friends: Women and Men in NonRomantic Relationships*. Her work is the first and in some ways the best academic analysis of other-sex friendships that has appeared in book form. As suggested by the title, her work focuses almost exclusively on nonromantic friendships between women and men, though throughout the book she juxtaposes other-sex friendships with same-sex ones. Based on qualitative interviews, she artfully dissects the challenges faced by men and women in nonromantic friendships.

Five years after Werking’s excellent book, my own book on other-sex friendships was released: *Women and Men as Friends: Relationships Across the Life Span in the 21st Century* (2002). A developmental approach was taken, examining other-sex friendships “from the cradle to the grave.” There are chapters on each of the major stages of the life cycle, and each chapter explores the same three themes. One theme focuses on generic and unique benefits of other-sex friends; one examines the social and structural barriers to other-sex friendship; and the final theme describes how communication with other-sex friends impacts a person’s evolving sense of self.

In 2009, William Rawlins released his second book on friendship, *The Compass of Friendship: Narratives, Identities, and Dialogues* (see also, Rawlins, 1992). Justice to Rawlins’s book cannot be accomplished in just a few brief sentences. Professor Rawlins has established himself as a leading scholar in friendship, a reputation dating back over 33 years (Rawlins, 1982). As was true with his first book, *Friendship Matters: Communication, Dialectics, and the Life Course* (1992), Rawlins masterfully imposes a communication-based perspective on the intriguing and complicated dynamics of both same-sex and other-sex friendships and has intriguing chapters on cross-race friendships and the ethical and political potentials of friendship.

The last book for examination, *Odd Couples: Friendships at the Intersection of Gender and Sexual Orientation*, was written by Ann Muraco and released in 2012. Muraco uses feminist intersectional theory (Crenshaw, 1989), and qualitative interviews to uncover the wonderful richness of the friendships between gay men and straight women and straight men and lesbians. This book is important because

of the role it can play in counteracting the heteronormative bias examined in the next section. The interested reader is also alerted to a similar book that came out in 2001, *Between Gay and Straight: Understanding Friendship Across Sexual Orientation* (Tilman-Healy).

Heteronormative Bias in Other-Sex Friendship Studies

A heteronormative bias permeates many of the investigations of other-sex friendships (Rawlins, 2009; Rose, 2000; Rumens, 2012; Werking, 1997). As noted by Rawlins (2009), the heteronormative bias privileges heterosexuality and sexualizes friendships between women and men. That bias has led to dozens of studies focusing on romantic and sexual attraction and tension in other-sex friendships, often framed as the "challenges" of friendships between women and men (O'Meara, 1989; Rawlins, 1982). These studies are still quite common (see Bleske-Rechek, 2012). These challenges do exist in many friendships, and they are worthy of empirical investigation. However, friendship scholars need to acknowledge that by focusing on these challenges friendship researchers are playing their own role in sexualizing friendships that occur between women and men.

Another manifestation of the heteronormative bias is the tremendous popularity of studies targeting the so-called friends with benefits relationship, in which women and men have sexual contact in their friendship without romantic involvement (Quirk, Owen, & Fincham, 2014). Even a cursory review of the literature over the last 10 years reveals *hundreds of studies* focusing on this phenomenon. Although these studies certainly have their place and serve a useful function (Furman & Shaffer, 2011), the reader is invited to consider the possibility that perhaps too much time and attention has been dedicated to this aspect of other-sex friendship, since it is relevant only to those friendships in which both individuals are heterosexual and it tends to marginalize those individuals who are not. More attention needs to be given to conducting research on other types of friendships such as cross-category friendships in which "individuals are positioned differently across social identities" (Galupo & Gonzalez, 2013, p. 780).

Theoretical Perspectives on Adult Friendships

Assessing the same-sex and other-sex friendship literatures and examining similarities and differences between those two types of friendship would not be complete without a brief examination of theories that are being fruitfully applied to friendship dynamics. Perhaps I inadvertently overlooked them, but to my knowledge these theories have not been applied to the *systematic* investigation of similarities and differences between same-sex and other-sex friendships. The four theories that appear to be most popular and to hold the most promise are social constructionism (Gergen, 1991; Monsour & Rawlins, 2014), attachment theory (Bowlby, 1969;

Fraley Heffernan, Vicary, & Brumbaugh, 2011), feminist intersectional theory (Crenshaw, 1989; Galupo & Gonzalez, 2013), and dialectical theory (Baxter & Braithwaite, 2007; Hall & Baym, 2011; Rawlins, 1992).

Social constructionism (Gergen, 1991) is my personal and professional theory of choice because it most clearly relates to my growing conviction that the categories of same-sex and other-sex friendships should be replaced with a more fluid conceptualization that recognizes individual and dyadic agency and freedom in constructing the meaning of individual relationships (Rawlins, 2009). This theory proposes that through an ongoing process of communication, individuals intersubjectively create the meaning of their particular friendships, a meaning that will often transcend and not neatly fit into the category of same-sex and other-sex friendships. There is little doubt that the relationship I had with Susan is best explained through the lens of social constructionism.

The 500-pound gorilla in this group of theories is attachment theory. Fraley and colleagues recently noted that, "During the last 30 years, attachment theory has become one of the leading theoretical frameworks for the social psychological study of close relationships and personality dynamics" (2013, p. 817). The basic idea behind attachment theory is that the relationship formed between an infant/toddler and his or her primary caregiver significantly impacts the relationships, including friendships (Ahmed & Brumbaugh, 2014; Chow & Tan, 2013), that the infant/toddler has for the rest of his or her life (Bowlby, 1969; Shulman, Elicker, & Stroufe, 1994). Even though the primary caregiver is the first attachment figure in a person's life, individuals also form attachment relationships with friends (Ahmed & Brumbaugh, 2014; Fraley et al., 2011; Monsour, 2002). Whether or not attachment styles differ in same-sex friendships and other-sex friendships is open to empirical investigation. For example, are individuals with a particular type of attachment style more likely to gravitate toward a particular type of friendship, and if so, why?

As observed by Carbin and Edenheim, "In the last 10 years the use of the concept intersectionality has practically exploded in European and North American gender research" (2013, p.233). Feminist intersectional theory examines the intersections between gender identity, sexual orientation, socioeconomic class, age, and race as a way of explaining all kinds of relationship issues, particularly as they relate to power dynamics (Crenshaw, 1989). The theory has specifically been applied to friendships (Galupo & Gonzalez, 2013). With more attention being given to the friendships of gender-variant individuals such as transgendered persons (Monsour & Rawlins, 2014) and the friendships of nonheterosexual persons (Muraco, 2012), intersectional theory promises to be one of the more productive frameworks for unraveling some of the complexities of same-sex and other-sex friendships. In my friendship with Susan, her genetic biological sex, which was male (defined as an XY sex chromosome pairing), intersected with her gender identity, which was female, and her sexual orientation, which went from being heterosexual when she was a

male the first 50 years of her life to a continued attraction to females after her transition and a brief experimentation with men.

The reader is invited to examine Rawlins's 1992 book *Friendship Matters: Communication, Dialectics, and the Life Course* for or an exemplary summary and synthesis of dialectical theory as applied to same-sex and other-sex friendship dynamics. Dialectical theory focuses on the contradictions that permeate all close personal relationships. Friends want to be connected to one another, and yet they also desire autonomy and freedom. Friends want predictability in their friendships, and yet they ironically also want novelty and a belief that their friend can surprise them from time to time. For example, dialectical theory is a particularly potent theoretical framework when applied to the freedoms and constraints offered by present-day technologies (Hall & Baym, 2011).

Summary Remarks and Future Directions

The reader might believe that an inordinate amount of valuable space in this chapter has been devoted to critiquing the degree to which terms such as "same-sex" and "opposite-sex" are still valid ways of writing and talking about friendship. It is abundantly clear that the vast majority of friendship scholars still employ that typology and apparently see nothing wrong with it, despite the fact that it categorically excludes individuals who identify as third sex and many other members of the transgender community. I admit I have been guilty of this in all but a few of my publications.

I also admit that my use of the term "hackneyed" in the title of this chapter is a misnomer. Technically, a hackneyed term or phrase is one that lacks significance through having been overused. There is nothing in the definition of "hackneyed" to suggest that the word or words in question are outdated and just plain incorrect, which is what I am claiming. So even though the labels "same-sex" and "opposite-sex" may be somewhat hackneyed in the sense that they are overused by friendship scholars, I also believe the assumptions underlying those labels are incorrect because not all friendships are either one or the other. After years of reflection, I now know that my friendship with Susan was neither same-sex nor opposite-sex, or even other-sex, but rather some beautiful blending of the wide range of gender identities that we all have available to us. The fact that there are currently no other options available, at least no options popularized in the academic literature, gives one pause for thought.

Along similar lines, Rawlins made the following observation when echoing Judith Butler's (1990) concerns about binary conceptualizations of gender: "there is nothing intrinsically natural about separating all human beings into two opposing categories on the basis of one physical attribute of their overall being-in-the-world" (Rawlins, 2009, p. 125). An extension of that observation is that there is also

nothing “intrinsically natural” about separating friendships into the categories of same-sex friendships and opposite-sex friendships because that false dichotomy is also based on one physical attribute and ignores a large body of research establishing that biological sex and gender are not binary concepts (Harper, 2007; Herdt, 1996). Research conducted by friendship scholars has been constrained by an overreliance on binary conceptualizations of gender and biological sex, resulting in the arbitrary breakdown of friendships into those two categories (Monsour & Rawlins, 2014).

I also examined difficulties inherent in defining friendships and how those difficulties are exacerbated when the adjectives “same-sex” and “opposite-sex” are included. I additionally made a number of broad descriptive generalizations about the respective literatures. I noted that there are a respectable number of excellent academic books on friendship. However, all of those books employ the now outdated same-sex and opposite-sex friendship typology. There is a pressing need for a text on the friendships of individuals who fall outside of binary boundaries. A future direction for the study of friendships is to move beyond these rigid and static binary conceptions of gender and friendships and explore the lived realities of friends who do not so neatly fit into those biological boxes.

I also identified a few additional broad generalizations about the same-sex and opposite-sex friendship literatures. Each of those generalizations can be linked to my concerns about the limited nature of the same-sex/opposite-sex friendship typology. Perhaps most obvious is the heteronormative bias permeating other-sex friendship studies. That bias has its origins in ignoring a marginalized part of our population, gays and lesbians. Similarly, the current binary sex-based friendship typology ignores the rather *large and growing* population of transgendered people, which includes transsexuals, transvestites, transgenderists, androgynes, intersex individuals, genderqueer people, and persons identifying as third sex (Monsour & Rawlins, 2014).

One of my tasks in writing this chapter, as reasonably requested by the editors, was to make sure that my chapter covered the current knowledge on same and opposite-sex *differences and similarities* in friendship. Since I am contending that the categories of same-sex and opposite-sex are themselves flawed, identification of differences and similarities in those categories might be of questionable validity and significance. That typology is based on the assumption that the gender binary is an accurate, comprehensive, and inclusive way of categorizing human beings. It is not.

Based on Lofland and Lofland’s dictum about “starting from where I am at,” this chapter was written from the dual and complementary perspectives of an individual who has conducted friendship and gender research *and* been engaged in same-sex and other-sex friendships. I also had the honor and opportunity to be involved in a relationship that made me deeply doubt the validity of the two-sex typology. A paradigm shift needs to occur in the way friendship and gender scholars view gender and biological sex and the connected constructs of “same” and “opposite” sex friendships.

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Friendships Across Race, Ethnicity, and Sexual Orientation

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Racial and ethnic diversity in the United States is rapidly increasing. By 2043, non-Hispanic Whites will be a minority population in the United States (Lichter, 2013). Simultaneously, awareness of diversity concerning sexual orientation has become more normative since the legalization of same-sex marriage in the United States in 2015. These changes have profound implications for the sociocultural barriers that separate racial, ethnic, and sexual orientation groups and provide a unique opportunity for the development of friendship across these identities. It is likely that people's desire and ability to form cross-race, ethnic, and sexual orientation friendships will be critical to motivate a transition to a more open and inclusive society. Thus, our knowledge of friendships across these differences will become increasingly important.

In this chapter, we present a selective review of research on friendships across the identities of race, ethnicity, and sexual orientation. First, barriers to and facilitators of these friendships are described. Next, research on cross-race, ethnic, and sexual orientation friendship across the lifespan is reviewed. The role of gender is also discussed as an important variable affecting cross-identity friendships. Directions for future research are presented as well.

“Crossing the Line” in Friendship

Friendships in the United States typically occur between individuals that are of similar race and ethnicity, as well as homogeneous in terms of age, gender, social class, sexual orientation, and culture (McPherson, Smith-Lovin, & Cook, 2001). They also tend to be based on propinquity, or physical or psychological proximity. This means that cross-race/ethnic friendships require individuals to “cross the color line,” that is, to bridge the geographical, physical, or psychological gap between

the groups. Likewise, friendship across sexual orientation requires a metaphorical “crossing of the line” to step over the social and psychological boundary created by homophobia and heterosexism.

Barriers to Friendship Across Race, Ethnicity, and Sexual Orientation

Many barriers impede friendships across race, ethnicity, and sexual orientation, including segregation of neighborhoods and schools, prejudice, the expectation that the minority person must assimilate into the majority culture, lack of trust, and peer influences (Rose, 2012).

Segregation

The term “color line” refers to laws mandating the racial segregation of Blacks and Native Americans from Whites and from each other that were enacted in the United States from the colonial period until the Civil Rights Act of 1964. Although an official color line between Whites and those of other races no longer exists today, physical and social segregation persists. Individuals are inclined to form relationships with others who share the same social network (Quillian & Campbell, 2003). Such networks frequently are based in neighborhoods, which tend to be segregated even in racially mixed cities (Cable, 2013), and in schools and workplaces, which tend to be stratified by both race/ethnicity and social class (US Bureau of Labor Statistics, 2013).

There is no parallel legal precedent in the United States for the segregation of lesbians, gay men, bisexuals, and transgendered (LGBT) people from heterosexuals. However, openly LGBT people as identified by the 2010 US Census tend to congregate in urban areas (O’Connor, 2013). The cities with the highest population of same-sex couples were Ft. Lauderdale, Seattle, San Francisco, Minneapolis, and Portland, Maine, and some specific neighborhoods within these cities are known to have a higher concentration of LGBT people (e.g., Wilton Manors in Ft. Lauderdale and the Castro District of San Francisco). If or how this geographic clustering of LGBT people affects cross-orientation friendship has not been studied to date.

Prejudice

Prejudice against people of other races, ethnicities, or sexual orientation is likely to inhibit the formation of friendship across difference. Prejudices that many White people hold toward those of other races/ethnicities may impede the development of cross-race friendships even when these people live, go to school, or work together. Recent research indicated that a majority of Whites expressed racial bias against Black people (Associated Press, 2012). Respondents were asked whether they agreed or disagreed with a series of statements about Black people and how

well they thought certain words, such as “friendly,” “hardworking,” “violent,” and “lazy,” described Blacks and Whites. About 51% of Americans expressed explicit anti-Black attitudes in response to these questions.

Negative sentiments of Whites toward Hispanics, Asians, and Native Americans are common in the United States, too. In an Associated Press survey done in 2011, 52% of non-Hispanic Whites expressed anti-Hispanic attitudes. One in four Americans surveyed in 2001 had very negative attitudes toward Asian Americans as well. Native Americans still are portrayed in television and movies only as historic figures, perpetuating false—often romanticized—images among non-Natives. The use of Indian mascots for professional sports teams also contributes to the trivializing of Native American cultures (Chaney, Burke, & Burkley, 2011). In sum, these findings indicate that most White Americans are racially prejudiced whether they recognize those feelings or not. White people’s beliefs regarding how minorities evaluate them also affect interracial friendships. Research indicates that Whites believe racial minorities evaluate them as being prejudiced, closed minded, arrogant, and selfish (e.g., Vorauer, Main, & O’Connell, 1998). This may lead White people to avoid interracial contact (Shelton & Richeson, 2005).

Less is known about the prejudices of racial/ethnic minorities toward each other and how that might affect cross-race/ethnic friendships. Confounding the study of cross-race/ethnic friendships even further is the fact that the panethnic terms “Asian” and “Hispanic” (or “Latino”) subsume a variety of races and ethnicities (US Census Bureau, 2011). Asian Americans have a common race, but have highly diverse religions, ethnic backgrounds, and languages. Hispanics often report different racial identifications, but share the common language of Spanish and are predominantly Catholic (Kao & Joyner, 2006). As assessed by the 2010 US Census, more than half of the Hispanic population identified as White and no other race (about 27 million), about 40% classified themselves as “other race” or “two or more races,” and less than 5% described themselves as only Black, American Indian/Alaska Native, or Native Hawaiian/Pacific Islander (US Census Bureau, 2011).

In terms of sexual orientation, until recently, a majority of heterosexuals exhibited prejudice, or negative attitudes toward LGBT people. From the 1970s until 1993, more than two-thirds of the public considered homosexuality to be “always wrong” as measured by the ongoing General Social Survey (GSS; Herek & McLemore, 2013). By 2010, most respondents said same-sex sexual relations are “never wrong” or wrong “only sometimes.” Negative attitudes are more likely to be expressed by heterosexuals who are men, older, or less educated, or who live in rural areas, the Midwest or the southern United States (Herek & McLemore, 2013).

Expectation of Assimilation

The dominant group’s expectation for the minority person to assimilate into their social world also poses a barrier to friendship. For example, Asian American women described being accepted as friends into White women’s social circles only after

they assimilated into and shared the norms, values, and attitudes of the White group (Seráfica, Weng, & Kim, 2000). The norm of heterosexuality likewise means that many heterosexuals expect lesbians, gay men, bisexuals, and transgendered people to listen to stories about their spouses or families or endorse their family structures, but do not reciprocate an interest in LGBT lifestyles and do not recognize the effort it takes for them to manage their identity in each new interaction. On an almost daily basis, LGBT people are going to encounter new people who do not know their sexual orientation (e.g., the insurance salesman, the doctor, the new neighbors). This creates considerable interactional difficulty for LGBT individuals and may cause them to avoid or limit social interactions with heterosexuals.

Trust

Friends are expected to be trustworthy as well as considerate, affectionate, self-disclosing, and companionable. Failing to meet these expectations can impair friendship (Argyle & Henderson, 1984). Trust may be more difficult to establish in cross-race/ethnic friendships, especially if the minority person anticipates that Whites will be prejudiced, deny that racism exists, treat them as subordinate or inferior, or expect them to assimilate into White culture. Lack of trust may also occur due to racial microaggressions toward the minority group that are unconsciously expressed by the White or majority-group person. Microaggressions are “common-place verbal or behavioral indignities, whether intentional or unintentional, which communicate hostile, derogatory, or negative racial slights and insults” (Sue et al., 2007, p. 278). For instance, a White person might ask an Asian American, “Where are you from?” The question implies that the Asian American must be foreign, not American. The concept of microaggressions has been extended to include the discriminatory experiences of other minority groups such as women, LGBT people, and the disabled (e.g., Sue, 2010). Any one incident may not seem significant, but multiple daily experiences with microaggressions have long-term negative effects such as self-doubt, anxiety, helplessness, fear, diminished self-esteem, and feelings of isolation. Individuals with multiple minority identities (e.g., a Black lesbian woman), may experience a compounding effect of microaggressions (Balsam, Molina, Beadnell, Simoni, & Walters, 2011), which could cause them, in turn, to avoid interactions with majority group members.

Trust also may be affected by different cultural norms. For instance, Chinese undergraduates in Asian countries, compared with undergraduates in the United States, are more constrained in terms of emotional expression and tend to self-disclose less to their friends across various topics, such as work or opinions (Chen, 1995). Within the United States, Black and Asian women have been found to have lower expectations for emotional support in friendship than White women (Samter, Whaley, Mortenson, & Burleson, 1997). These different cultural expectations for self-disclosure or emotional support could create mistrust or discomfort in cross-race/ethnic friendships.

Establishing trust is also an issue in friendships across sexual orientation. The coming-out process continues to occur throughout the life span—it is not a one-time event. All LGBT individuals have to make decisions regarding self-disclosure with every new social interaction throughout life. Anxiety also may affect trust in interactions across race, ethnicity, or sexual orientation. Majority group members may feel anxious because they have limited information or contact with minority group members. Minority group members may be anxious because they are wary about possible bias being expressed by members of the majority group. When people are anxious, they may respond with distancing nonverbal behaviors, such as using closed posture or failing to maintain eye contact, which can easily be misinterpreted by members of the other group as a sign of disinterest or disregard.

Peer Influences

Racial integration in schools appears to facilitate cross-race friendships in the early grades but less so among adolescents. For example, across 350 elementary schools, 92% of children reported having cross-race/ethnic friends (Lee, Howes, & Chamberlain, 2007). Patchen (1982) found that cross-race peers from 12 mixed-race schools often did school work together, had friendly talks, and walked together, but interracial contact outside of the school setting was much less frequent. Older children tend to view same-race peers as having both higher status and as being more attractive, leading them to prefer same-race friends (Fishbein, 2002).

In terms of sexual orientation, peer influences play a particularly important role for sexual minority youth. Given that many LGBT youth are estranged from or have not disclosed their sexual orientation to their families, they may rely greatly on their friends for social support. However, peer influences concerning cross-sexual orientation may be at their most negative in adolescence. Rivers, Duncan, and Besag (2007) reported that over 1.6 million public school students are bullied because of either actual or perceived sexual orientation.

Facilitators of Friendship Across Race, Ethnicity, and Sexual Orientation

Three facilitators of friendship across race are also applicable to friendships across ethnicity and sexual orientation: contact, transformative experiences, and becoming an ally (Rose, 2012).

Contact

Contact between members of different races, ethnicities, and sexual orientations is a prerequisite for the development of cross-identity friendships (Jones, Dovidio, & Vietze, 2014). The contact hypothesis proposed by Allport (1954) has been well supported by numerous studies showing that contact reduces prejudice between groups provided that the group members have equal status, common goals,

cooperation, and the support of relevant authorities. For instance, Pettigrew and Tropp (2006) conducted a meta-analysis of 515 studies examining interracial contact that included studies of all age ranges from childhood to adulthood. They concluded that greater intergroup contact is associated with less prejudice even if the conditions for the interaction were not optimal (e.g., the individuals or groups were not of equal status). Furthermore, cross-group friendships reduced prejudice even more than mere contact (Page-Gould, Mendoza Denton, & Tropp, 2008) and promoted self-disclosure and positive intergroup attitudes as well (Pettigrew, Tropp, Wagner, & Christ, 2011).

Research indicates that certain conditions encourage privileged majority group members, or *in-group* members, to interact with traditionally disadvantaged minority group members, or *out-group* members. For instance, having in-group members engage in a perspective-taking task, such as writing an essay about a person in a photograph who was a member of a negatively stereotyped group, was found to increase in-group members' willingness to meet with the person in the photograph (Wang, Tai, Ku, & Galinsky, 2014). *Extended contact* that occurs via "friends of friends" also has been shown to increase racial tolerance. For example, college students who watched cross-race friends complete a task together became significantly more positive toward the racial group of the friend's friend than did students who watched a neutral or hostile cross-race interaction (Wright, Aron, McLaughlin-Volpe, & Ropp, 1997). *Imagined contact* also may serve to facilitate positive intergroup contact and friendship. Imagined contact is the "mental stimulation of a social interaction with a member or members of an out-group category" (Crisp & Turner, 2009, p. 234). Simply imagining a particular social context can evoke a response similar to those experienced in the context itself. For instance, heterosexual men who imagined talking to a homosexual man subsequently were found to evaluate homosexual men in general more positively, and to stereotype them less, than participants who imagined an outdoor scene (Turner, Crisp, & Lambert, 2007).

Contact is more effective at improving intergroup attitudes for the privileged group than the minority or disadvantaged group. Minority group members experience contact with majority group members differently than majority group members experience contact with minority people (Tropp & Pettigrew, 2005). This may be partly because minority group members are better at detecting evidence of prejudice and discrimination (e.g., Richeson & Shelton, 2005) and may be mistrustful of majority group members that fail to recognize prejudice (Hall & Rose, 1996).

Transformative Experiences

Chance or deliberately sought events sometimes serve as the catalyst for an individual or group to become aware of prejudice and discrimination and spur them to challenge it. The antiracism trainer and expert Judith H. Katz (2003) described her turning point that occurred during a 6-day residential seminar that was attended

by 85% Black and Puerto Rican and 15% White participants: “For the first time in my life I found myself in a situation that was not white or Jewish dominated. I was confronted both subtly and overtly with my whiteness, my assumptions, and my values. No longer in the majority, I felt the need to seek out the support of other white people—to eat, talk, socialize, and identify with them” (p. viii). The experience of being a minority and being challenged by people of color to take action to address racism was a motivating force for Katz to uncover racism within herself and to actively combat it.

Educational materials also may provide a means to facilitate transformative experiences. For example, McIntosh’s (2009) description of white-skin privilege was a catalyst for Whites to more deeply understand the social role power they had based on skin color—and to dismantle it in the interest of fairness to others. White-skin privileges include: (1) knowing that when civilization or culture is mentioned, it is usually about your heritage; (2) being able to be around people that look like you whenever you choose; (3) being fairly sure that if you ask to speak to the person in charge, he or she will look like you; (4) knowing that if your day is going badly, it is not because of your race (McIntosh, 2009). Self-examination or group work concerning these privileges can increase White people’s awareness of their unearned social power and may be useful to motivate them to challenge inequities. Similarly, encouraging students to experience empathy and understanding for those of other races through classroom exercises can result in transformative experiences (Rose, 2012).

Becoming an Ally

Members of a dominant group that choose to become an ally of minority groups may become more attractive as a potential friend. An ally is a person who is a member of the dominant or majority group who works as an advocate with and for the oppressed population (Washington & Evans, 1991, p. 95). Katz’s experience, described in the previous section, led her to become an ally. Since 1972, she and colleagues have conducted White-on-White antiracism workshops as a way to address White people’s responsibility in perpetuating racism and developed a book, *White Awareness*, for facilitators working with all-White groups, (Katz, 2003).

Political activism in some cases has motivated White people to seek ways to become allies to people of color. For instance, racial segregation in the lesbian community influenced some White lesbians to engage in self-examination of their own racism as a starting point for the development of friendships with Black lesbians (Segrest, 1994). Black and White lesbian activists interviewed by Hall and Rose (1996) indicated that racial awareness was the most important criterion for forming cross-race friendships. A racially aware person was described as someone who both recognizes and values cultural differences among races, and also is able to identify and challenge the ways White people actively or passively benefit from and participate in racism.

Social organizations also can serve as allies. The proliferation of Gay Straight Alliances (GSAs) has improved the social context for many LGBT youth. The GSAs are student-run clubs in schools that provide LGB youth and heterosexual students a safe place to support one other and socialize. Currently, there are over 4,000 GSA groups in high schools and colleges across the nation (Lambda Legal, n.d.). These GSAs have a positive impact on school climate and have been associated with less hostility toward LGBT youth (Walls, Kane, & Wisneski, 2010).

Friendships Across Race and Ethnicity Over the Life Span

Friends are an important source of social support for youth and provide them with opportunities to develop social skills (Nangle & Erdley, 2001). The availability of data from the National Longitudinal Study of Adolescent to Adult Health (Add Health) has provided a wealth of information about youth friendships (Bearman et al., 1997). Add Health is a large-scale, nationally representative longitudinal database that includes interviews with 20,745 adolescents in grades 7 to 12 in the United States in 1994–1995 and also includes peer network data.

One important finding from the Add Health study was that the development of cross-race/ethnic friendships depended on the level of diversity within schools. For example, Quillian and Campbell (2003) found that cross-race/ethnic friendships were more common in schools whose populations were also more diverse. Cross-race/ethnic friendships were more common between Asian and Hispanic students than between White and Black Students. Hispanic students' choice of friends reflected their racial identification: White Hispanic mostly befriended Whites and other White Hispanic students, while Black Hispanic students befriended Black and Black Hispanics students.

Hamm et al. (2005) found that socioeconomic status, as measured by parental education, was influential in the friendship choices of students from seven racially diverse public high schools. For example, White students with higher socioeconomic status were less likely to have cross-race/ethnic friendships. Way and Chen (2000) studied friendship in a racially mixed urban high school and found that most teens from low-income families reported having same-race/ethnic group friends. Kao and Joyner (2004) concluded that those who crossed race/ethnic boundaries faced more challenges; cross-race/ethnic friends engaged in fewer shared activities than same-race friends.

Very little research has examined the friendship networks of Native American youth. In one notable exception, Rees et al. (2014) used the Add Health dataset to examine school-based friendship networks of Native American adolescents and found that they reported less school connectedness and smaller social networks than White students. White youth also derived greater support and influence

from their friendships and held more socially prestigious positions in schools. Native American youth on average reported higher levels of cross-race friendships than White and Black students did. These findings may reflect the fact that Native American youth frequently did not have access to other Native American students (Rees et al., 2014).

Cross-race friendships among youth tend to occur within the context of same-sex friendships. For example, Lee et al. (2007) reported that 92% of children reported cross-race/ethnic peers and as opposed to only 11% reporting cross-gender peers. Boys tend to have friends from other racial/ethnic groups more so than girls (e.g., Lee et al., 2007). In contrast, girls' cross-race friendships tend to decline. Adolescent girls are more closely bonded with their friends than boys, tend to have fewer friends, and prefer same-race friends. In some cases, friends may reject girls who develop cross-race friendships, perhaps out of a concern that interracial dating will occur (Wilson & Russell, 1996). Hispanics girls especially experience more familial pressure to associate with peers from within their own racial/ethnic groups (Clark-Ibáñez & Felmlee, 2004).

In adulthood, cross-race/ethnic friendships are less frequent, especially among adults over age 30. About 40% of White Americans and about 25% of non-White Americans are surrounded exclusively by friends of their own race, according to an ongoing Reuters/Ipsos poll (Dunsmuir, 2013). Among a broader circle that includes acquaintances and coworkers as well as friends and relatives, the poll showed that 30% of Americans do not mix with others of a different race. Mixing with people of other races and ethnicities is more common among Hispanics, among whom only one-tenth do not have friends of a different race. Hispanics are also more likely to have a spouse or partner that is non-Hispanic. About half of Hispanics are in mixed ethnic relationships, compared with one-tenth of Whites and Blacks (Dunsmuir, 2013).

American young adults appear to be less segregated. About one-third of Americans under the age of 30 who have a partner or spouse are in a relationship with someone of a different race, compared to one-tenth of Americans over 30. And only one in 10 adults under 30 say no one among their families, friends, or coworkers is of a different race, less than half the rate for Americans as a whole (Dunsmuir, 2013).

Gender poses an additional level of complication to adults' cross-race/ethnic friendships, with cross-sex, cross-race friendships being more difficult to establish than same-sex friendships of any type. For example, Black male professionals interviewed by Wingfield (2014) faced a number of challenges to developing critical social networks and friendships in White male-dominated work settings, but were able to succeed at building relationships by bonding with White men around culturally masculinized behaviors, such as shared hobbies and pastimes. The Black men also perceived that male bonding enabled them to establish favorable networks with White men more easily than White women were able to form such networks with

White men. As a result, some Black men took active measures to create interracial, cross-gender networks by befriending and bonding with White women around the parallel challenges they faced in a White male workplace (Wingfield, 2014).

In sum, although cross-race/ethnic contact has substantially increased over time, this has not led to significant increases in cross-race/ethnic friendships (Edmunds & Killen, 2009). The college campus may be the most promising environment for encouraging interracial and interethnic friendships in the future, but this will depend on whether the future demographics of the nation are reflected in the student bodies.

Friendships Across Sexual Orientation

Friendships play a significant role as a source of support for LGBT youth (Savin-Williams, 1998). As previously noted, for many youth who are questioning their sexual orientation or gender identity, parental and familial support is not available. Coming out still has a host of negative consequences for youth, including an increased sense of isolation and elevated rates of suicidality (CDC, 2011). The risk of losing a close friend if one opts to come out often looms heavily over LGBT youth, and they have greater fears about losing friends than do heterosexual youth (Diamond & Lucas, 2004).

Gender also plays a role in LGBT same- and cross-sexual orientation friendships. For adolescent females, passionate intense same-sex friendships are quite common (e.g., Diamond & Lucas, 2004). Friendship among female adolescents often involves characteristics typically associated with heterosexual romantic relationships, including exclusivity, jealousy, companionship, and frequent nonsexual physical affection (Thompson, 2008). Therefore, lesbian and bisexual girls may be able to establish close friendships with heterosexual girls without openly expressing their sexual orientation. In contrast, gender norms for boys emphasize shared activities and are expected to be less intimate and self-disclosing. Teen boys fear being identified as feminine or homosexual if they reveal their emotions (Oransky & Marecek, 2009). Resistance to masculine gender norms (e.g., emotional stoicism) among boys appears to be stronger during the middle school years but decreases as they get older (Way et al., 2014). Thus, gender norms discourage cross-sexual orientation friendships among boys.

The benefits of cross-orientation friendships for LGBT individuals are pronounced. Having friends accept one's coming-out disclosure has a positive impact on LGBT youth. Lesbian and bisexual girls reported increased self-esteem and feelings of acceptance after disclosing their sexual orientation to a supportive heterosexual friend (Galupo & St. John, 2001).

For heterosexual youth, cross-sexual orientation friendships increasingly are associated with more positive attitudes about homosexuality and less tolerance of

unfair treatment of lesbian and gay peers (Heinze & Horn, 2009). Interestingly, Poteat, Espelage, and Koenig (2009) found that heterosexual students who attended more racially diverse schools reported being more open to attending school with lesbian and gay students. Similarly, Gastic (2012) found that although only 13% of a sample of racially diverse urban heterosexual youth reported having a gay or lesbian friend, almost 62% reported that they would stay friends with an openly gay or lesbian peer.

In adulthood, barriers exist to adult cross-sexual orientation friendships that make them more difficult to establish but that also point to their importance as an “intentional family” for LGBT people. Weinstock and Bond (2000) found that each of the young, mostly White women (23 lesbians and 24 heterosexuals) in their sample had at least one close lesbian-heterosexual woman friendship. The challenges they faced included anxiety about sexual attraction to the friend, difficulty understanding the other’s reality, the heterosexual friend’s “privilege,” and mislabeling of the friendships as sexual by others. Benefits included new perspectives that were gained from learning about the other’s life, greater awareness of heterosexism and support for coming out, and the opportunity to examine one’s own sexuality.

Bisexual women’s and lesbians’ friendships with heterosexual women were found by Galupo (2007) to provide support and help when needed. However, bisexual women had more cross-orientation friends than lesbians, the bisexual-heterosexual friends were more integrated into each other’s social lives, and their dynamic tended to shift depending on the sex of the bisexual woman’s partner. Lesbian-heterosexual friendships more often included a feminist or racial political dimension, and the lesbian’s identity was more likely to be explicitly acknowledged (Galupo, 2007).

Research on gay men’s cross-sexual orientation friendships has focused mostly on their friendships with heterosexual women. Russell, DelPriore, Butterfield, and Hill (2013) hypothesized that friendships between gay men and heterosexual women had potential benefits related to the trustworthiness of the mating advice that the friend could offer. Results from research using an experimental design indicated that straight women perceived mating advice from gay men as being more trustworthy than advice from a straight man or woman. Similarly, gay men perceived the mating advice of straight women to be more trustworthy than that of a lesbian or gay man.

Transgender friendships that bridge gender identity and/or sexual orientation have similar benefits to those described earlier for LGBT cross-orientation friendships (Galupo et al., 2014). Benefits included the following: helps me feel normal or “pass” as my identified gender; validation from the privileged/dominant group; larger population provides more opportunities for friendship; offers more perspectives; trans- issues do not dominate the conversation; and gives me the opportunity to educate about transgender experience.

In sum, cross-sexual orientation friendships are being more openly discussed, sought, and studied, and it is likely that they will become more common in the

future, particularly among young people. Nearly 40% of incoming college students at a large state university indicated that they might like to have a lesbian or gay friend, despite expectations of discomfort (Mohr & Sedlacek, 2000).

Future Directions for Research

Several directions for future research are suggested by the current review. Research to identify naturally occurring facilitators of and barriers to cross-identity friendships, such as might occur in schools, on college campuses, and in the workplace, would expand our understanding of how such friendships are formed. Qualitative research may be especially useful to examine the developmental course of such friendships, including forming, maintaining, and ending them. We know little about how barriers impact the development and quality of friendships. Qualitative methodology can offer opportunities to obtain unexpected information and provide a more complex understanding of these important constructs.

Future research overall also needs to be more inclusive of minority groups with regard to race, ethnicity, sexual orientation, and gender identity. There remains a clear need for more nuanced examinations of friendships within and among ethnic minority groups. Future friendship research should move away from broad cross-group comparisons (e.g., comparing Whites and/or heterosexual groups with other nonmajority groups) and the inherent assumptions involved in those types of comparisons (e.g., a focus on deficits among minority groups in comparison with Whites/heterosexuals). The compounding effects of multiple minority status, as well as socioeconomic status, should be central to any future research as well.

More precise measures in future research for self-classifications of race, ethnicity, and sexual orientation would allow differences in racial preferences or prejudices within racial and ethnic groups to be identified. For example, Kao and Joyner (2006) found that, as compared with Hispanics, students of Asian descent were more likely to befriend someone from within their own panethnic group (e.g., Chinese, Korean, Vietnamese, etc.). Understanding such differences is critical in gaining a better understanding of individual realities (Taylor, Lopez, Martinez, & Velasco, 2012). There is also wide variation in how sexual orientation is measured, particularly among youth. Many youth who question their sexual orientation do not identify as lesbian, gay, or bisexual until later in life, or not at all (Savin-Williams, 2005).

Moreover, future research with immigrant samples should also include acculturation-related variables such as ethnic identity, racial identity, biculturalism, generational status, acculturation stress, and language preferences and proficiency. The growing popularity of panethnic terms, while expedient, may mask important intra-group differences that, if explored, could lead to a greater understanding of important cultural dynamics involved in friendship selection.

How college students interact across race and ethnicity is becoming more important to understand in light of current demographic changes and the increasing segregation of K-12 schools (Orfield & Lee, 2006). Young adults spend a significant amount of time in cross-racial interactions and cross-racial friendships during the college years (Saenz, 2010). These interactions provide insights into the dynamics of cross-race friendships as they occur throughout the life course. Current findings suggest that engaging with diversity involves risks and often may be uncomfortable, but that it ultimately proves to be beneficial (Bowman & Brandenburger, 2012).

Lastly, most research on friendship does not typically consider sexual orientation or gender identity (Logan, 2013). The role of friendships is quite influential for at-risk youth and is particularly important when youth have limited resources at home (Vaquera, 2009). Therefore, expanding our understanding of friendships among youth of diverse backgrounds and sexual orientations is critical.

Conclusion

The value of friendships across race, ethnicity, and sexual orientation will continue to grow as the racial and ethnic diversity of the United States changes and as diverse sexual orientations become more acceptable. Hopefully, the positive effects of such relationships will begin to be recognized publicly. Some favorable representations already may be having an effect. Recent television shows have begun to provide more visibility on the topic of cross-race, cross-sexual orientation friendships among youth (e.g., *Glee*, *Faking it*, *Degrassi*, *Skins*, and *Pretty Little Liars*). The television show *Glee* (2009–2015) depicting a racially and sexually diverse high school glee club that became a pop culture phenomenon in the United States. The show was groundbreaking in its positive portrayal of LGBT relations with heterosexual peers within the glee club.

In conclusion, cross-race, ethnic, and sexual orientation friendships are likely to be increasingly important in the United States and internationally as awareness of cultural diversity expands. As Martin Luther King affirmed, “Our loyalties must transcend our race, our tribe, our class and our nation” (King, 1967).

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Friendship and Social Media

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In summer 2014, Kramer, Guillory, and Hancock reported an experiment where, without obtaining explicit informed consent, the researchers manipulated Facebook users' news feeds to suppress status messages with either positive or negative emotional words. Results of the study demonstrated that emotions expressed via Facebook spread contagiously, such that those who viewed more negative status messages posted similarly negative messages, and likewise for those whose news feed contained positive updates. Although obtained effect sizes were small (generally less than 2% across approximately 700,000 participants), reaction in the popular press was not. One writer decried the experiment as “unethical” due to its lack of informed consent, arguing “Facebook intentionally made thousands upon thousands of people sad” (Waldman, 2014). The *New York Times*' conclusion was equally damning: “To Facebook, we are all lab rats” (Goel, 2014).

Although it is far beyond the scope of this chapter to arbitrate research ethics, the Kramer et al. (2014) study demonstrates the visceral emotions attached to social media—emotions arising, in no small part, from the centrality of the technology in initiating and maintaining interpersonal relationships. Although some research has devoted attention to understanding family (Child & Westerman, 2013) and romantic relationship (Fox & Warber, 2013) processes across social media, this chapter reviews research on friendship, which is the most common type of relationship enacted across major social media platforms such as Facebook (Sosik & Bazarova, 2014). In fact, “friend” is often a colloquial term for a social media connection, a fact that I consider in the first portion of this chapter. Then, I review dominant strands of friendship research in the social media literature to date; finally, in light of this recent-but-rich scholarship, the final portion of the chapter considers directions for future research.

Defining Social Media and (Re)defining Friendship

Among published research, boyd and Ellison (2007) have offered the most frequently cited definition of *social networking sites*: “web-based services that allow

individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system” (p. 211). As such, their definition separates social networking sites (or, as they are now commonly called, *social media*) from earlier computer-mediated communication forms such as e-mail (which has no public profile), message forums (which have no articulated list of connections), and instant messaging (which does not allow viewing and traversal of connections). Today, many of these legacy systems incorporate social media features; for example, Google’s e-mail and instant-messaging services possess some degree of integration with the Google+ social media service. Likewise, several social media platforms now permit users to deactivate some or all of boyd and Ellison’s (2007) defining features for the sake of privacy. Whether an individual user employs these features or not, it is the capability for these three features that distinguishes social media.

Ironically, a challenge when examining scholarship on social media friendship is that social media itself has generated ambiguity regarding what the word “friend” means. Facebook, currently the most popular social media platform (Duggan & Smith, 2013), uses the word “friend” to refer to any social connection, and some other social media platforms do likewise. Although boyd and Ellison (2007) used capitalization (“Friends”) to distinguish social media ties from traditional friends, subsequent research generally has not adopted this convention. Consequently, it is sometimes difficult to determine whether a study examines “friends” as traditionally construed or “friends” as denoting any kind of social media tie.

This terminological confusion suggests two recommendations for researchers. First, research reports should clarify explicitly the nature of the interpersonal relationships and technical connections under study. I confess that I have not always done so in my own research (Ledbetter & Mazer, 2014), but after preparing this review chapter, I will do so in future work, and I hope others will do likewise. Second, it is worth considering not only how friendships are enacted via social media but also how social media reconfigures cognitive schema and expectations pertaining to friendship. Perhaps when a social media platform labels connections as “friends,” participants are more likely to attach normative expectations for friendship to the relationship (e.g., frequent contact; Sosik & Bazarova, 2014), even if the relationship is not a friendship as traditionally understood. Such a proposition could be tested by an experiment manipulating the language referring to the social media tie (e.g., “friend” versus “follower” or “connection”), and could clarify whether, as Wang and Wellman (2010) suggested, “having hundreds of ‘friends’ on one’s Facebook profile has become so commonplace that the word friend may have expanded in meaning” (p. 1164).

When considering the types of relationships enacted via social media, much scholarship has drawn on Granovetter’s (1973) description of strong and weak ties. *Strong ties* exhibit frequent contact, a high level of interdependence, and emotional

intimacy, with immediate family, close friends, and romantic partners serving as archetypes of strong ties. In contrast, *weak ties* experience less contact, interdependence, and intimacy. Although they do not provide the same sense of belonging and personal meaning as strong ties, Granovetter contended that weak ties nevertheless serve a vital societal function. Weak ties not only provide a person with access to a more diverse set of resources than those available among strong ties but they also network society together in ways that facilitate collective coordination and action. Much research has devoted attention to understanding the extent to which social media facilitates weak ties (e.g., Ellison, Steinfield, & Lampe, 2007), and evidence indicates social media facilitates strong ties as well (Ledbetter, 2014a; Sosik & Bazarova, 2014).

A related question concerns whether users employ social media to maintain friendships formed offline or to initiate new friendships. Several sources have indicated that the former occurs much more frequently than the latter (e.g., Ellison et al., 2007; Pempek, Yermolayeva, & Calvert, 2009), although prior social media contact may enhance initial face-to-face meetings, such as in the case of incoming college freshmen (DeAndrea, Ellison, LaRose, Steinfield, & Fiore, 2012). Given Facebook's heavy market penetration (Duggan & Smith, 2013), it is perhaps unsurprising that the desire to connect with friends met offline motivates site use (Quan-Haase & Young, 2010), as might the desire to rekindle lapsed friendships (Wang & Wellman, 2010). Thus, an emerging body of scholarship considers friendship processes facilitated by social media. In the subsequent section, I review research on four such processes that have received substantial attention in the extant literature.

Social Media and Friendship Processes

Considering social media friendship raises a fundamental and more general theoretical question: How, exactly, does a communication medium alter the messages and meanings communicated via that medium (Ledbetter, 2014b)? Although answering that question lies beyond the scope of this chapter, it is worth noting that, for some friendship processes, the answer may be that the medium does not meaningfully change messages or their interpretation at all. That a friendship process occurs online does not mean the online context most strongly characterizes the interaction; rather, the act of self-disclosure, uncertainty reduction, relational affirmation, and so forth may be of greater theoretical importance and practical consequence. In other words, we ought not discard the other chapters of this book simply because friends take their conversation to social media, unless theoretically grounded research demonstrates that the communication medium is a difference that makes a difference.

Toward that end, the most productive and heuristic lines of research on social media friendship have elaborated theoretical mechanisms by which online channels

alter friendship processes. Here, I briefly review four prominent lines of research, including scholarship on (1) warranting and impression formation, (2) relational maintenance and media multiplexity, (3) social capital and social support, and (4) psychosocial well-being outcomes. This list of topics is offered as a description of the literature to date versus an exhaustive list of what could be studied. Toward that end, the chapter concludes with specific calls for theoretically and practically relevant future research.

Warranting and Impression Formation

Social media affords people the opportunity to surreptitiously discover information about others (Westerman, Van Der Heide, Klein, & Walther, 2008), a phenomenon popularly known as “creeping” (or, more pejoratively, “stalking”) a person’s social media profile. Concomitantly, a burgeoning body of scholarship has considered processes of impression formation via social media. Toward this end, and building from previous work in the social information processing theory tradition (Walther, 1996), Walther, Van Der Heide, Kim, Westerman, and Tong (2008) considered the *warranting value* of information on social media, or the extent to which a profile viewer trusts that information presented on the profile is accurate. In contrast to earlier forms of online communication such as e-mail, which contain only information included by the message sender, social media profiles often contain information from a mixture of sources. For example, a typical Facebook profile contains identity markers chosen by the profile owner, such as their hometown, political beliefs, profile picture, and current status message; other information originates from other users, such as tagged photos or posts to the timeline (previously known as the “wall”). Although the profile owner can manage information from others (e.g., deleting unwanted timeline posts or untagging photos), it is generally less manipulable than information presented directly by the owner, and in some cases the user cannot manipulate it at all (as in the case of Facebook photos on another person’s account that are not tagged). Thus, profile viewers place greater trust in information from others, although the extent of such trust may depend on the specific type of impression sought; for example, Walther, Van Der Heide, Hamel, and Shulman (2009) found more robust support for the warranting hypothesis regarding judgments of physical attractiveness than for judgments of extraversion. Additionally, sex of the profile owner may alter judgments of warranting value, as participants in Walther et al.’s (2008) study evaluated statements of dubious moral character positively for men but negatively for women.

In addition to the explicit statements of friends, more latent characteristics of friends and profile owners may also influence processes of impression formation. Some evidence indicates that the physical attractiveness of a person’s friends, as portrayed in their profile pictures, influences evaluation of the physical attractiveness of the profile owner (Walther et al., 2008). Likewise, Van Der Heide, D’Angelo, and

Schumaker (2012) demonstrated the importance attached to visual information on social media, with visual cues weighing more heavily than textual cues when assessing a profile owner's extraversion. Beyond visual cues, people may consider number of friends when evaluating others on social media, with Tong, Van Der Heide, Langwell, and Walther (2008) finding a curvilinear effect, such that participants judged those with a moderate number of friends as more socially attractive than those with few or many friends.

Whereas the foregoing research has investigated the response of the profile viewer, other research has considered the self-presentation of the profile owner. One challenge to effective self-presentation across social media is *context collapse*, or the broadcasting of a message across multiple friendship groups with differing social norms (Vitak, Lampe, Gray, & Ellison, 2012). An appropriate disclosure among intimate friends may not be appropriate among coworkers; emotional disclosures may be particularly volatile, as some people are averse to public emotional displays on social media (Bazarova, 2012). Accordingly, then, those with high concern for self-presentation may choose to convey positive versus negative emotions in public social media posts (Bazarova, Taft, Choi, & Cosley, 2013). However, the response to emotional information communicated by social media may also depend on the characteristics of the viewer; for example, High, Oeldorf-Hirsch, and Bellur (2014) found emotional disclosures on social media were perceived more positively by women, those who prefer online social interaction, and those who feel a sense of community on the social media platform.

Relational Maintenance and Media Multiplexity

In contrast to research on impression formation, which has devoted central attention to early stages of relating, relational maintenance addresses behaviors intended to keep a relationship alive over time (Stafford & Canary, 1991). Research in this domain has focused on two aspects of social media: (1) identifying forms of social media relational maintenance that differ from offline maintenance, and (2) elaborating how social media, as a communication channel, functions together with other communication media to maintain relationships. This section addresses each in turn.

Building from previous work identifying offline maintenance behaviors (Stafford & Canary, 1991) and social media friendship rules (Bryant & Marmo, 2012), McEwan, Fletcher, Eden, and Sumner (2014) identified two additional dimensions of relational maintenance specific to social media: (1) *social contact*, or behaviors designed to initiate interaction with a friend (e.g., "I like my friend's status updates"), and (2) *response-seeking*, or public messages intended to elicit a response from a friend (e.g., "I seek support by posting emotional news in hopes that s/he responds"). Notably, both behaviors address the extent to which dyad-specific messages intersect with the public affordances of social media, and both

behaviors exhibited positive associations with measures of friendship quality. Previously, McEwan (2013) referred to these behaviors as *caring* and *sharing* respectively, alongside *surveilling*, or passively observing another's social media profile. Dyadic data analysis revealed positive relational outcomes associated with caring (i.e., social contact) and surveilling, but negative outcomes associated with sharing (i.e., response seeking); although much interpersonal literature has identified positive associations between self-disclosure and relational outcomes, perhaps people perceive broadcast-style self-disclosures as self-promoting, narcissistic, or annoying (McEwan, 2013).

In a separate yet related line of work, Vitak (2012) identified four dimensions of Facebook relational maintenance: (1) supportive communication (e.g., "When I see [person's name] sharing good news on Facebook, I'll like his/her update"), (2) *shared interests* (e.g., "[Person's name] and I use Facebook to talk about a shared interest, sport, and/or hobby"), (3) *passive browsing* (e.g., "I browse photo albums posted in [person's name]'s profile"), and (4) *social information seeking* (e.g., "I keep up to date on [person's name]'s day-to-day activities through Facebook"). All dimensions positively predicted friendship satisfaction except for the social information seeking dimension, which served as a negative predictor. Taken together with McEwan's (2013) results, it appears that communication specifically directed toward friends may produce positive relational consequences, whereas more public forms of interaction may predict negative outcomes. Although these studies represent theoretically grounded and methodologically sophisticated attempts to understand maintenance processes, understanding of social media relational maintenance remains in its infancy. Only future work can ascertain the proper number of dimensions necessary to assess social media relational maintenance, as well as the theoretical contours differentiating among factors and between maintenance conducted via other media. Although the work of Vitak (2012) and McEwan (2013) differ somewhat on these points, both commend level of intimacy and degree of publicness as potential contours for future typological development.

An alternate but complementary approach has considered the extent to which social media itself functions as a means of friendship maintenance alongside other communication media. Much of this research has employed *media multiplexity theory* (Haythornthwaite, 2005) as a theoretical framework. Originally developed in studies of organizational and educational relationships, the theory recognizes that relational characteristics drive media use choices (Haythornthwaite, 2002), such that more interdependent friends (i.e., strong ties) employ more communication media to maintain their friendship than do less interdependent friends (i.e., weak ties); Haythornthwaite (2005) referred to this positive association between interdependence and media use as *media multiplexity*. A number of studies have confirmed this association regarding social media communication, including on Facebook (Ledbetter et al., 2011), the music-based site Last.fm (Baym & Ledbetter, 2009), and the *Xbox LIVE* gaming service (Ledbetter & Kuznekoff, 2012). Although such

studies have conducted correlational analysis on cross-sectional data and thus do not demonstrate clear evidence of causation, they indicate that frequency of social media communication predicts relational closeness above and beyond that explained by frequency of offline communication. Additionally, this line of work has extended media multiplexity theory in two ways. First, media multiplexity may observe a law of diminishing returns, such that the positive contribution of social media communication may weaken as face-to-face communication frequency increases (Ledbetter & Keating, 2015; Ledbetter & Kuznekoff, 2012). Second, Ledbetter and Mazer (2014) found that Facebook use only predicted interdependence when the participant enjoyed communicating via Facebook. Thus, although social media use may stimulate other kinds of communication (Vitak & Ellison, 2013) and more frequent communication is generally associated with friendship closeness, friends may not grow closer if they do not enjoy using the medium; even more generally, difficulties transitioning across communication media may impede relational satisfaction (Caughlin & Sharabi, 2013).

Whether examining specific maintenance behaviors or media multiplexity, a weakness of the extant research on social media friendship maintenance is its reliance on cross-sectional survey measures. Sosik and Bazarova (2014) are a notable exception, as they supplemented survey data with linguistic analyses of Facebook messages between friends. Confirming the basic tenet of media multiplexity theory (Haythornthwaite, 2005), the number of different Facebook channels used (timeline posts, private messages, etc.) predicted relational escalation, as did the frequency and recency of Facebook contact. In contrast, linguistic measures of relational maintenance behaviors (Stafford & Canary, 1991) did not predict relational escalation. However, their results do not necessarily indicate that the content of friendship maintenance is not worth studying; indeed, following the inverse associations for public communication identified by Vitak (2012) and McEwan (2013), perhaps the public versus private nature of messages moderates the relational outcomes they produce. Additionally, relational escalation is not an outcome studied in traditional relational maintenance research, and perhaps outcomes such as commitment, control mutuality, or closeness (Stafford & Canary, 1991) would yield more significant effects.

Social Capital and Social Support

Whereas research on impression formation and relational maintenance has tended to focus on specific friendship dyads, studies of *social capital* focus attention on the composition of friendship networks overall (Brooks, Hogan, Ellison, Lampe, & Vitak, 2014); a closely related concern is *social support*, or the exchange of helpful resources. Such research long predates social media, and has traditionally distinguished between *bonding capital* (i.e., strong ties that provide emotional support and a sense of belonging) versus *bridging capital* (i.e., weaker ties focused on more

instrumental exchanges). To this typology, Ellison et al. (2007) added *maintained capital*, or ties maintained by social media across life transitions (e.g., continued contact with high school friends while at college). Ellison et al. (2007) found Facebook use was positively associated with all three forms of social capital, with a particularly robust association with bridging capital. In a follow-up to this early study, Ellison, Steinfield, and Lampe (2011) differentiated between the total of number of friends on Facebook and “actual” friends (i.e., those with whom the user believes they hold a bona fide friendship as traditionally construed). The number of “actual” friends positively predicted bridging and bonding capital, yet total number of friends did not; behaviors designed to seek social information about friends also positively predicted social capital. Thus, Ellison et al. (2011) concluded social media like Facebook may function as a “social lubricant” that facilitates weak tie formation and support exchange (p. 15).

Self-disclosure represents one strategy for gaining social support from a social media friendship network (Manago, Taylor, & Greenfield, 2012), yet context collapse may mitigate against willingness to engage in disclosure (Vitak et al., 2012). Those with greater size and diversity in their social media network therefore use more privacy controls to segment their disclosures, and use of such features makes people more aware of their disclosures without decreasing disclosure frequency; despite this, network size and diversity appears to promote rather than inhibit the formation of bridging capital (Vitak, 2012). Frampton and Child (2013) also considered context collapse and privacy, examining the extent to which people form social media connections with coworkers. Although most of their participants were willing to form social media connections with coworkers, organizational norms and personal privacy concerns also influenced the decision to “friend” work colleagues.

Overall, research in this domain highlights social media as a technology that connects not only specific friends but also broader friendship networks. Indeed, some recent evidence suggests the overall configuration of an individual’s friendship network may facilitate or inhibit social capital formation (Brooks et al., 2014). For example, given the homophily (i.e., similarity) typical among a person’s social media contacts (Aiello et al., 2012), purposefully introducing diversity to the network may facilitate access to bridging social capital. Although research on social capital and relational maintenance has proceeded separately, both invoke media multiplexity theory (Haythornthwaite, 2005), which may serve as a point of reference for developing theory that addresses how social media use develops both friendship closeness and network cohesion.

Social Media Friendship and Psychosocial Outcomes

In addition to the infamous Kramer et al. (2014) study demonstrating emotional contagion via Facebook, other research considers the extent to which social media relationships produce beneficial or deleterious psychosocial outcomes. Such

research builds from a longer tradition of investigating psychosocial well-being and Internet use more generally. Broadly, such research exhibits two opposing theoretical stances. First, the *time displacement approach* takes a pessimistic view, contending that online communication detracts time from more meaningful face-to-face interaction (Kraut et al., 1998; Williams, 2006). In contrast, the *rich-get-richer* approach argues that social Internet use augments the benefits of offline interaction, especially for those who are socially adept (Kraut et al., 2002). This section considers both approaches and their implications for the study of social media, although the limited extant research provides more robust support for the latter (Valkenburg & Peter, 2007).

The time displacement approach reasons that time is a zero-sum resource, and thus time devoted to online communication must occur at the expense of time devoted to offline communication or nonsocial activities (Putnam, 1995). Although the studies reviewed in the previous section demonstrate a positive association between social capital and social media use (e.g., Ellison et al., 2011), some studies have observed nonsignificant (Pollet, Roberts, & Dunbar, 2011) or inverse associations (Pea et al., 2012) with well-being outcomes, and even when beneficial, expansion of offline networks to social media may generate concerns about privacy and other matters (Madsen, Grevet, Grinter, Gilbert, & Edwards, 2014). Thus, some scholars believe it remains an open question whether benefits obtained from social media friendship are worth the effort; for example, Vallor (2012) suggested that social media may train users to commodify friendships and dismiss them when they become inconvenient. Beyond time displacement, other scholarship echoes concerns expressed by parents and the popular press, including cyberbullying (O’Keeffe & Clarke-Pearson, 2011) and exposure to harmful content (e.g., pro-anorexia or prosuicide websites; Slavtcheva-Petkova, Nash, & Bulger, 2015). Aside from a handful of studies investigating cyberbullying’s association with offline bullying (Kwan & Skoric, 2013) and intervention strategies (Freis & Gurung, 2013), these topics await programmatic empirical research.

The majority of the limited body of research on social media and well-being has identified positive psychosocial outcomes associated with use. For example, social media may particularly aid users during times of transition between friendship networks, such as the beginning of a person’s college career. Support obtained via social media may not only facilitate new relational ties (Ellison et al., 2011) but also help students achieve academic success prior to college (Khan, Wohn, & Ellison, 2014), navigate the college application process (Wohn, Ellison, Khan, Fewins-Bliss, & Gray, 2013), adjust to college life (DeAndrea et al., 2012), and remain in college when times get tough (Gray, Vitak, Ellison, & Easton, 2013). In a general sense, these results highlight beneficial outcomes accruing from maintained social capital (Ellison et al., 2007), and future research might examine such outcomes across other life transitions (e.g., beginning a career, having a child, or entering retirement).

Regarding studies of social media use and general psychological health, self-esteem has served as the most frequent outcome investigated to date. One early study found most adolescents (78%) received generally positive responses from their social media friends, with only a minority (7%) reporting generally negative responses; positive responses, in turn, predicted heightened self-esteem (Valkenburg, Peter, & Schouten, 2006). Toma and Hancock (2013) further contended that people use Facebook because the site is self-affirming, and research has demonstrated that time spent viewing one's own Facebook profile benefits self-esteem (Gonzales & Hancock, 2011) more than viewing the profile of a stranger (Toma, 2013); however, in turn, self-esteem may not be associated with the number of friends maintained via social media (Krämer & Winter, 2008).

Future Directions for Research

Although both social media platforms and their attendant research are relatively new, scholarship has covered an impressive range of topics relevant to friendship across them. However, this diversity of topical focus also highlights the limited selection of technological and relational contexts investigated thus far. Case in point, even a cursory glance at the literature reveals an almost singular focus on Facebook; more systematically, Rains and Brunner's (2015) survey discovered that 80% of studies on single social media platforms addressed only that site. Research on friendship (and indeed, interpersonal relationships generally) may be even more lopsided. Despite Twitter's roughly similar level of popular recognition, almost no research addresses friendship across the platform, instead investigating Twitter use for political/informational purposes (e.g., Larsson & Moe, 2012); likewise, no or few studies meaningfully address friendship processes across visually oriented sites like Pinterest, discussion-oriented sites like Reddit, or mobile-focused platforms like Instagram or SnapChat. That teenagers and young adults may prefer such venues to Facebook (Madden et al., 2013) only heightens the importance of understanding them. Although Facebook's relative age and global popularity (Duggan & Smith, 2013) render it an appropriate starting point for social media scholarship, it is not the only relevant form of social media when considering friendship.

As for any field of scholarly inquiry, research comparing Facebook with other social media platforms will be most valuable if it proceeds theoretically. As Sawhney (2007) noted, much research has treated new technologies atheoretically, as though they bear little relation to technologies that have come before, and thus has produced descriptive studies possessing little heuristic value. Toward redressing this persistent and pernicious problem, some scholars have articulated theoretical contours of different forms of communication media. For example, Papacharissi (2009) identified four factors distinguishing social media site design and architecture: (1) public/

private balance, (2) styles of self-presentation and face management, (3) inclusion and exclusion based on shared interests, and (4) level of formality regarding social norms. Of course, this list of factors is not the only theoretical vocabulary for comparing social media, and the typology may benefit from an update (e.g., having been published early in the smartphone era, the list does not include mobility). Whether using Papacharissi's criteria or another categorization scheme for technological affordances, only deliberately theoretical comparisons can ensure reliability, validity, and comparability of findings across social media platforms (Williams, 2010).

In addition to technological context, future studies should broaden the context of friendship under investigation. As per usual for the social sciences, most initial research has focused on adolescents and young adults. However, previous research has indicated, for instance, significant differences in the meaning and experience of friendship across the life course (Erdley & Day; Wrzus, Zimmerman, Mund, & Neyer; Adams, Hahmann, & Blieszner, this volume), the sexes (Monsour, this volume), and cultural groups (Rose & Hospital, this volume). Again, such work will proceed most effectively if scholars theoretically connect knowledge of friendship processes across groups to the specific technological affordances of social media.

Research on social media and friendship also would benefit from greater methodological breadth and sophistication. The research to date has generally employed quantitative methods; however, rigorous qualitative scholarship may be necessary to inductively derive the theoretical insights necessary to meaningfully expand understanding along the lines noted previously. Within the quantitative research published thus far, most studies rely on cross-sectional data collected from only one member of the friendship dyad. Although researchers often malign cross-sectional studies—perhaps unfairly, as such scholarship may in some cases represent the most efficient or ethical way to address causation, however weakly (Hayes, 2013)—friendship is inherently dyadic, and thus the object of inquiry itself encourages analysis of dyadic data (Kenny, Kashy, & Cook, 2006). Toward this end, McEwan (2013) serves as an exemplar, as her dyadic data collection permitted identification of actor and partner effects associated with different dimensions of friendship maintenance. Given that social media call attention to the network structure containing dyads, social network analyses also hold much promise for extending theory and practice (Brooks et al., 2014).

Scholars researching social media friendship must avoid the old trap of treating online communication as a sphere of relating separate from other communication media (Baym, 2009). Caughlin and Sharabi (2013) are to be commended for resisting that temptation, instead calling attention to the multimodal nature of relationships by examining difficulty transitioning between media. As I have contended elsewhere, elaborating this line of thought requires more explicitly theorizing the association between communication medium and relational messages (Ledbetter, 2014b). Specifically, medium and message may be associated in at least three ways: (1) a medium may modify the meaning of the message, (2) use of a medium

may carry inherent meaning regardless of the message, and (3) a medium may serve as a component of a causal chain of relational antecedents and outcomes. Or, stated in terms of research on friendship relational maintenance, the first approach might consider how a message communicating support to a friend might produce a different psychosocial outcome on Facebook than that same message communicated face-to-face; the second approach might consider how the act of sending a supportive message to a friend signals the continuation of the relational tie, regardless of the content of the message; and the third approach might examine how supportive messages on social media foster further communication across other media in a causal chain.

Finally, research in social media friendship will perhaps demand even greater interdisciplinary acumen than customary for scholars of close relationships. That is not to say close relationships research is not interdisciplinary; to the contrary, the field includes scholars across disciplines such as psychology, sociology, communication, and demography. Although diverse, what has united these disciplines, in part, is an assumption that friendships (and other personal relationships) generally take place in the private sphere. Social media problematizes this assumption by disrupting traditional boundaries between public and private (Frampton & Child, 2013; Vitak et al., 2012). Case in point, user reaction to the Kramer et al. (2014) social contagion research stemmed from the sense that a large corporation (and publicly reported study) were intruding into the private world of their interpersonal relationships. To fully account for the increasingly public nature of friendships, close relationships scholars would benefit from consulting disciplines with more robust theories and vocabularies for considering the public sphere, such as mass communication, journalism, public relations, political science, and information technology. As such, social media not only presents an intriguing site for expanding traditional lines of friendship research but also calls close relationships scholars to consider how friendship intersects with other domains of scholarly inquiry.

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Friendship and Romance

A Need-Fulfillment Perspective

LAURA E. VANDERDRIFT, CHRISTOPHER R. AGNEW, AND EZGI BESIKCI

Love is a friendship that has caught fire.

—Landers (1982)

In this quote, the advice columnist Ann Landers summarizes her response to a reader's query. The reader stated that she and her partner used to be involved in the "love affair of the century," but it then fizzled and she was wondering how to move forward. Landers was not surprised by this query, as she explained to the reader, because the friendship core of a romance carries more weight in the overall romantic relationship evaluation than does the sexual aspect of the relationship (here, we paraphrase). Building a romantic relationship on the foundation of passion, rather than friendship, was destined to be problematic. We use this example to open this chapter on friendship and romance to immediately highlight the importance and centrality of friendship within romantic relationships. Individuals have diverse needs that they seek to fulfill through involvement in close relationships with others, from the friendly (e.g., companionship) to the passionate (e.g., sexual gratification) to the independent (e.g., goal-striving support), among others. Which needs individuals turn to their romantic partner for fulfillment may have profound implications for the success of that romance over time. In this chapter, we review the role of friendship in the context of romance, taking an interdependence theory-based need-fulfillment perspective. The overall message we extend corroborates Landers's advice to her reader: Friendship is vitally, uniquely important in the context of romance, and fostering it reaps myriad benefits.

Need Fulfillment in Close Relationships

Individuals have a diverse set of needs that provide the motivational basis for human life. Many of these needs supply motivation to form and maintain close, intimate

relationships with others. At the most basic level, individuals have a fundamental need to belong, whose fulfillment is associated with numerous positive health, adjustment, and well-being outcomes (Baumeister & Leary, 1995). Given the primacy of this need, many general theories of motivation and need fulfillment (nearly all) include relational need fulfillment for optimal well-being. For example, self-determination theory (SDT) holds that it is individuals' needs for autonomy, competence, and, importantly, relatedness that motivate all of human behavior (Deci & Ryan, 2000). Likewise, attachment theory (AT) holds that relational needs are paramount for individual success, specifying in particular that the needs for caregiving, felt security, and sexual gratification are fundamental for individuals' security (Hazan & Shaver, 1987; Mikulincer & Shaver, 2003). Indeed, evidence gathered based on both theories indicates that the fulfillment of relational needs (i.e., relatedness from SDT, and all three of the needs from AT) is associated not only with higher-quality relationships (Simpson, 1990; Patrick, Knee, Canevello, & Lonsbary, 2007) but also with greater individual-level outcomes, such as overall psychological health (Knee, Hadden, Porter, & Rodriguez, 2013).

Interdependence theory (IT) provides an account of need fulfillment that speaks less to which needs individuals have that motivate their actions and more to the role of need fulfillment in individuals' lives (Rusbult & Van Lange, 2003). An inherently dyadic theory, IT characterizes how relationship partners of all kinds can help each other fulfill needs, and subsequently attain positive relationship and life outcomes (Drigotas & Rusbult, 1992). From this perspective, it is assumed that individuals have diverse sets of needs, some of which are pervasive, others of which are specific to particular situations. Regardless of the exact needs, when a close other fulfills, or helps to fulfill, needs, individuals are able to obtain the most important outcomes derived from close relationships (Le & Agnew, 2001). Some of these outcomes are concrete: the direct experience of pleasure and pain (Rusbult, 1980). Other outcomes are symbolic: positive expectations regarding the trustworthiness and dependability of the partner that arise from situations in which a partner's pro-relationship motivation can be discerned (i.e., diagnostic situations; Rusbult, 1980). Both contribute positively to relationship outcomes, including satisfaction and commitment within the relationship (VanderDrift & Agnew, 2012) and the experience of positive emotions (Le & Agnew, 2001).

From an interdependence point of view, then, many different relationship partners can provide fulfillment of important relational needs. Friends, family, and romantic partners, assuming the situation favors interdependence, can all be asked to meet any of the needs individuals hold (with the exception of sexual needs being fulfilled nearly exclusively within romantic relationships). This perspective is in line with SDT, but stands in contrast to an attachment approach, in which a pair-bond is uniquely suited for the fulfillment of attachment-relevant needs. We propose to reconcile this discrepancy by suggesting that both AT and IT allow that certain situations are better suited for particular needs, but absent that situation, individuals will still find venues

in which to fulfill their needs. For instance, a romantic relationship is typically tasked with the needs for companionship and sexual contact, but absent such a situation, individuals may turn to a friendship for the fulfillment of these needs (i.e., friends with benefits relationships; VanderDrift, Lehmler, & Kelly, 2012). The typical sub-optimal outcomes in such relationships relative to romantic relationships suggests that they are ill-equipped to meet these needs long-term (Lehmler, VanderDrift, & Kelly, 2014), but from an interdependence perspective, the fact that they can meet the needs at all is informative as to the fundamental nature of the needs and individuals' selection into situations that have the potential to fulfill them.

The Impact of Friendship External to the Romantic Dyad

Prior to discussing the importance of friendship need fulfillment between romantic partners, it is important to discuss the fact that many individuals meet their friendship needs in nonromantic friendships. The majority of this volume characterizes the myriad positive outcomes of nonromantic friendships on individuals, and provides rich detail as to how those relationships form and are maintained over time, so we opt not to review those in any more depth here. However, the importance of nonromantic friends extends to romantic outcomes, as well. Throughout the duration of a romance, traces of friends' influence can be found (Agnew, 2014). In the formation stage of the romantic union through maintenance stages of the romantic bond between the partners (Sprecher, Felmlee, Orbuch, & Willetts, 2002), friends external to the romance, knowingly or not, exert great influence on the romance. In this section, we review that influence, for the purpose of establishing the centrality and importance of friendship needs, regardless of their source of fulfillment, on romantic relationship outcomes.

When two individuals have overlapping friendship networks (i.e., they have friends in common), the chances that they will meet increases (e.g., Parks & Eggert, 1991). Additionally, involvement in each other's networks leads to greater access to information about each other (e.g., Parks & Adelman, 1983), and support from friends for the idea that the two should "couple" (e.g., Parks, Stan, & Eggert, 1983). Each of these are advantageous in terms of the development of a romantic relationship, and together greatly increase the odds a romance will begin. These advantages highlight how important friendship is as a foundation for romance, but also suggest that friends are highly influential in individuals' choices regarding their romances. More overtly, friends exert their influence on romantic partners via subjective norms. Subjective norms, referring to our beliefs about whether our friends approve of our romance (i.e., normative beliefs) weighted by how motivated we are to comply with these beliefs, have been shown to predict relationship commitment and stability (Etcheverry & Agnew, 2004). The more approval individuals perceive from their friends' regarding their romance, the more motivation they experience regarding their romance, and commitment to the romance increases.

Friends can also directly impact romances, regardless of the involved individuals' perceptions of approval or disapproval. The opinions of the romance held by the involved individuals' network of friends, specifically the friends of female partner, are robust predictors of whether the couple remains together or not 6 months later (Agnew, Loving, & Drigotas, 2001). Friends' perceptions remained a significant predictor of romantic outcomes even after controlling for couple members' own perceptions, corroborating the importance of individuals who meet friendship needs to romantic outcomes. Additionally, friends can engage in influential behaviors at the critical stages of the romance that then can contribute to how involved individuals think about their relationships (Keneski & Loving, 2014). When asked to recall a relationship about which they either approved or disapproved, the majority of college students recalled a friend's relationship, rather than the relationships of other members of their networks (Sprecher, 2010). Further, the participants reported showing the strongest reactions and engaging in influential behaviors in serious stages of the relationship (i.e., when partners decided to get serious about the relationship).

Overall, these findings suggest that friends external to a romance are influential in romantic outcomes. Presumably, friends are important for these outcomes because they have a history of meeting the involved individuals' friendship needs, and have built an important relationship with the involved individual. Therefore, one interesting question these findings raise is whether the influence of friends ever fades away as the romantic partner begins to take over the fulfillment of friendship needs. Indirect evidence for the change in influence of friends' opinions comes from a study by Sprecher and Felmlee (2000), in which they examined how romantic couples' perceptions of network approval for the relationship change over the course of time and relationship transitions. Their findings demonstrated that people who stayed together throughout the longitudinal study tended to perceive more network approval for their romance, particularly from male partners' friendship network. Moreover, people reported increases in perceptions of network approval during transitions to more serious stages of the relationship, such as engagement and marriage. These findings can be interpreted to suggest that the influence of our social networks escalates at critical points and transitions in the course of a relationship, and it gradually becomes stabilized after the relationship reaches an established stage.

Friendship Between Members of a Romantic Dyad

"I think . . . if it is true that there are as many minds as there are heads, then there are as many kinds of love as there are hearts."

—*Anna Karenina* (Leo Tolstoy)

This famous quote, spoken by Anna Karenina to her love interest, Vronsky, in the novel for which she is the namesake, illustrates the uniqueness of romantic

relationships. Despite falling under the same label, no two romantic relationships are constructed in the same way, but instead are guided by the involved individuals' overarching needs and goals (Sanderson, Keiter, Miles, & Yopyk, 2007). It is possible to equally value all aspects of one's romantic relationship (i.e., all of the needs that the relationship could fulfill); nevertheless, often individuals value some of the needs that a romance can fulfill to a greater extent than others (VanderDrift & Agnew, 2012). Some individuals may prefer to task their romance with the fulfillment of primarily sexual needs, for instance, whereas others focus more on friendship aspects. Further differentiating romances from each other are the needs a relationship is able to suitably fulfill, regardless of what the individuals involved choose to task it with. Some romances, and indeed romantic partners, are more or less suited to fulfill friendship needs, whereas others are better able to fulfill sexual needs (VanderDrift & Agnew, 2012). Perhaps due to this variability, both in preference and actual fulfillment of needs, the outcomes of romantic relationships differ greatly as a result of the exact constellation of needs the relationship fulfills.

In this section, we review the importance of friendship-relevant needs to romantic outcomes. To summarize the literature on friendship in romance, certain synonyms of friendship must be considered. Definitions of friendship abound, but most agree that it is characterized by the importance of affection, intimacy, reliable alliance, and instrumental and emotional support (Berndt, 2002). As such, terms including "intimacy" and "companionship" are considered synonymously with "friendship" in this chapter. This definition also suggests particular needs that should be considered under the umbrella of "friendship needs." There is a tradition of differentiating friendship needs from sexual needs in the literature. This distinction, however, combines many aspects of nonsexual relationships together. Autonomy and security, for instance, would be categorized as nonsexual and, thus, classified as friendship needs. We argue that these needs differ from the definition of friendship, and may more reasonably be considered personal and attachment needs, respectively. We specifically focus on those needs that fit closely with the definition of friendship: companionate needs, belonging needs, and affiliative needs.

The needs that align with the definition of friendship originate from separate theoretical traditions, but share enough commonalities to be considered together. Companionate needs originate in the literatures concerned with the experience of love and emotion. Companionate love is a mild emotion, compared with the more intense passionate love, and is felt as a combination of attachment, commitment, and intimacy (Hatfield & Rapson, 1993). Companionate needs, then, are those whose fulfillment provides the affection and intimacy that are only possible when lives are entwined. Close friendships feature such interdependence. Belonging needs are predominately discussed in the literature concerned with broader human motivations. Within this perspective, humans have a fundamental need to form meaningful connections with others, and this need drives much of human behavior. Belonging needs, then, are those that originate from fundamental human tendencies

and whose fulfillment satiates the need to feel connected to others (Baumeister & Leary, 1995). Finally, affiliative needs are discussed in the positive psychology literature, and focus on the biologically driven needs humans have to form bonds and attachments to others like themselves (Hill, 1991). In sum, all of the needs considered in this chapter on friendship in romance are those that describe connection and interdependence between individuals.

Romances are very flexible in the make-up of the needs that the involved partners value and hold important. Despite their flexibility, evidence suggests that romances most typically involve at least a moderate amount of friendship. Evidence can be seen from prototype analyses of romantic constructs, in which the everyday use of language is examined for insight as to what the natural definition of constructs are (Rosch, 1973). In a prototype analysis of love and commitment, for instance, participants identified both companionate features and passionate features as components of love, but the companionate features were judged as more central to the definition of love (Fehr, 1989). Further stressing the centrality of friendship to romantic constructs, the analysis also indicated that the features that connect the constructs of love and commitment are exclusively companionate in nature (Fehr, 1989). Aron and Westbay (1996) further corroborated this notion, finding that intimacy features (e.g., understanding, honesty) were core to the meaning of love.

Given the centrality of friendship within a romantic relationship, it stands to reason that individuals who place a high value on having a strong friendship with their romantic partner are more likely to thrive. Those individuals who conceptualize friendship components as central to romantic love experience greater friendship with their partner (Aron & Westbay, 1996), and better overall relationship quality (Fletcher, Rosanowski, & Fitness, 1994). More directly, individuals who view friendship needs as important needs to be fulfilled within their romantic relationships reap more positive relational outcomes both concurrently and over time (VanderDrift, Wilson, & Agnew, 2013). Concurrently, the amount of importance placed on friendship needs is positively associated with relationship commitment, experienced love, and sexual need fulfillment. Over time, these benefits translate into increased commitment, love, sexual need fulfillment, and arguably most impressively, relationship persistence.

Beyond valuing friendship in a romance, however, actually receiving the fulfillment of friendship needs is also associated with relationship quality. When a sample of spouses who had been married at least 15 years were questioned as to what they attributed the success of their marriage, the most common answer elucidated the importance of friendship: "My partner is my best friend" (Lauer & Lauer, 1985). Indeed, the actual experience of friendship within a romance is positively associated with experiencing greater passion in the romance (Grote & Frieze, 1994) and satisfaction with the romance and life generally (Fehr, 1996; Kim & Hatfield, 2004). Investing time, energy, and resources into the friendship aspect of the relationship is associated with commitment, love, sexual need fulfillment, and relationship

persistence over time (VanderDrift et al., 2013). Similarly, those couples in which both members report they feel companionate love for their partner (i.e., “friendship love”; Kim & Hatfield, 2004), have higher relationship quality relative to those who report different types of love, including “intuitive” or “secure” love (Hecht, Marston, & Larkey, 1994).

Prior to making firm conclusions that friendship is vitally important to romantic health, evidence that it is *uniquely* associated with these relationship outcomes is necessary. That is, would valuing and achieving *any* aspect of the relationship (e.g., the sexual aspect) yield the same benefits seen in studies of friendship? The answer, simply, is no—friendship has unique effects. Results from prototype analyses support that the friendship aspect of a relationship is rated as more central to the definition of a romantic relationship and romantic love than are the sexual aspects (Aron & Westbay, 1996; Regan, Kocan, & Whitlock, 1998). Additionally, and interestingly, those individuals who place greater importance on passion do not report a greater experience of passion than those who place a lesser importance on it (Aron & Westbay, 1996). Further, a belief that passion is important is unassociated with romantic relationship quality (Fletcher & Kininmonth, 1992). Finally, when examining how valuing different aspects of the relationship impact relationship persistence, one study found that 11% of those individuals in nonmarital romances who say that their affiliative needs are the most important in their romance are involved in a breakup over the subsequent 4 months, compared with greater than 20% of individuals who say other needs are more important (e.g., sexual, personal; VanderDrift et al., 2013). In sum, a friendship between romantic partners is robustly, uniquely associated with positive romantic outcomes.

Why Is Friendship Particularly Beneficial to Romantic Dyads?

Throughout this chapter, we have highlighted many of the advantages of friendship in the context of romance. After nearly three decades of scientific research on this topic, it is noncontroversial to say that a good friendship shared between two individuals makes a solid basis for a romantic relationship, and that good friends’ opinions help individuals make choices regarding their romance that yield positive outcomes. But why does friendship provide such distinct benefits, over other important needs that individuals have fulfilled in their interpersonal relationships? One reason has to do with the nature of interdependence itself. In interdependent situations, individuals’ thoughts, feelings, and behaviors are impacted by another’s and vice versa. In such cases, individuals are vulnerable, and as such, they seek information about their interaction partners that tell them whether or not they are safe in interdependence. This information is called *symbolic outcomes* (Rusbult & Van Lange, 2003). Resting on the broader implications of interaction, symbolic outcomes provide information regarding a partner’s dependability, willingness to sacrifice on behalf of the individual, and readiness to be relied on for the fulfillment

of important needs in the future (Rusbult & Van Lange, 2003). These outcomes, in contrast to concrete outcomes (i.e., the direct experience of pleasure or pain), emerge from situations in which an interaction partner has acted altruistically, out of line with their own best interest and instead in line with the individual's (Agnew & Le, 2015).

Symbolic outcomes are crucial for interdependence processes to unfold, as they provide the impetus to engage in transformation of motivation, a key concept from IT (Rusbult & Van Lange, 2003). What is transformation of motivation? In simple interactions, in which no broader considerations are relevant, individuals often act in line with their self-interested, immediate best interest (Rusbult & Van Lange, 2003). This occurs when people are under time pressure or heavy cognitive capacity, suggesting that reacting to the immediate situation in this way is an effortless process (Baumeister, Bradlavsky, Muraven, & Tice, 1998; Yovetich & Rusbult, 1994). In some situations, however, individuals override this "gut level" response and engage in what is known as transformation of motivation (Kelley, 1991). In doing so, they act in line with broader considerations: the desire to maintain a satisfying relationship, to show altruism for one's interaction partner, or to collect favors for later, among others (Rusbult & Van Lange, 2003). Doing so allows individuals to make choices and act in ways to ensure their desired future state is obtained, but is effortful and often requires a departure from immediate self-interest. As such, an individual must have sufficient motivation to engage in such transformation. The structure of the situation itself can, at times, promote transformation, such as in interaction patterns that will necessarily extend over time. More often the choice to transform is due to relationship-specific motivations (e.g., trust, commitment; Balliet & Van Lange, 2013; Rusbult & Van Lange, 2003).

During the course of relationships (friendship and romantic), partners share many interaction situations in which they can ascertain each other's orientation toward the relationship. As defined earlier in this chapter, friendship is characterized by the importance of affection, intimacy, reliable alliance, and instrumental and emotional support (Berndt, 2002). Especially relevant to the discussion of symbolic outcomes is the notion of support, which often occurs in situations with conflicting outcomes. The support provider has to balance their desire to spend time and energy on themselves, with the needs of their partner in that moment. When they opt to provide support, thus meeting a friendship need and acting out of line with their immediate self-interest, they are providing not only concrete outcomes, but also symbolic outcomes (Balliet & Van Lange, 2013). Insofar as a partner consistently provides fulfillment of friendship needs, we argue, the individual will come to feel safe in the relationship, obtain sufficient symbolic outcomes to be secure in interdependence, and will engage in ample transformation of motivation to establish a mutually satisfying, trusting relationship over time. Individuals are likely to trust the advice from friends regarding their romance, and are likely to trust their romantic partner to deepen the bond.

Why does friendship offer such distinct relationship benefits that other important needs simply do not? Sexual, passionate needs are met in simultaneous, mutual situations, most often characterized by little to no conflict of interest (VanderDrift & Agnew, 2012). As such, when partners fulfill each other's sexual needs, no symbolic outcomes obtain, and transformation of motivation is not more likely to occur than it had been. On the other hand, when a partner provides emotional support, or presents that the dyad members are in alliance, they are more likely to be acting in a way that goes against their own self-interest (i.e., time and energy that could go toward the self is going toward the other in the case of support). As such, in these instances, people infer their partner's prorelationship orientation and act accordingly. Thus, one plausible theoretical reason friendship is so central to positive romantic outcomes (relative to other needs a relationship could be tasked with) is because it signifies safety in interdependence in a way that few (if any) other needs can.

Future Directions

Romantic relationships are, at their core, friendships.

The above sentence, one my colleagues and I crafted to open the abstract to a 2013 paper on the role of valuing friendship in romances (VanderDrift et al., 2013), was seemingly so noncontroversial that it required neither citation nor defense. Had we written the paper in the 1960s, rather than 2013, this sentence would have been very controversial, if not outright inaccurate. This change reflects the evolving primary purpose of romantic relationships in the lives of participants. Whereas in previous eras relationships primarily served to facilitate the satiety of basic functions (e.g., financial security, child-rearing structure), in the current era relationships are more often taxed with the fulfillment of higher-order, self-relevant needs (e.g., esteem, goal attainment; Finkel, Hui, Carswell, & Larson, 2014). Whether this shift leads modern relationships to be "suffocated" (Finkel et al., 2014) or is "a boon for humanity, as profound and beneficial as the invention of the lightbulb" (Karney, 2014, p. 84) is open for debate. Regardless of perspective, most theorists agree that tasking relationships with higher-order needs requires a greater level of investment in the relationship (Finkel et al., 2014). This shift impacts nearly every aspect of romantic relationships, but its impact on the role of friendship in the context of romance is potentially profound.

The higher-order needs individuals have (e.g., esteem), to be fulfilled within a romance, require that partners have a deeper, more understanding connection with one another, which, put simply, requires their friendship to be a more solid, salient component of their romance than in previous eras. Providing social support to a partner, and thus helping to meet their higher-order needs, is thought by some theorists to be a relatively easy task (e.g., Feeney & Collins, 2014) and by others to be more difficult (e.g., Finkel et al., 2014). The difference, we argue, comes down to

whether the couple in question has a strong history of meeting each other's friendship needs or not. If they do have such a history, then transformation of motivation should be a relatively effortless choice, as routine as a gut-level impulse (Baumeister et al., 1998). For couple members who do not share such a history, however, transformation of motivation may be a more effortful process, requiring valuable resources and running a higher risk of failing. Future research is needed, but from our theoretical perspective, we believe that any shift in which partners rely on each other for higher-order needs places a greater import on friendship between partners.

Another avenue for future research that should be considered has to do with individual differences, or differences in ways in which people tend to act across situations. As stated previously, there is great variability in the needs individuals choose to task their relationship with (VanderDrift & Agnew, 2012). We know that tasking the relationship with friendship needs reaps many positive downstream consequences, but less is known about which individuals are more likely to make the choice to particularly value friendship need fulfillment within their romance. There is intuitive appeal to consider that perhaps culture or gender impacts this choice. However, the empirical literature fails to support striking cultural or gender differences with regard to interpersonal relationships. The needs involving friendship are fundamental human needs (Baumeister & Leary, 1995). As such, any cultural or gender differences in the importance of friendship to romance are likely to be in degree, rather than in category (see Reis & Carothers, 2014, for a discussion of the structure of gender differences). Indeed, in almost all cultures, the existence of a distinction between passion and companionship exists (Fehr, 1989; Fischer, Shaver, & Carnochan, 1990), suggesting that friendship is an important element in romances across the world. With regard to gender, the literature suggests that the notion that men and women place different importance on friendships, both within and outside of their romance, is misguided. Men and women place the same amount of value on intimate friendships (Caldwell & Peplau, 1982). Together, the literature fails to support the idea that examining broad demographic categories (e.g., culture, gender) will adequately explain who opts to task their romance with the fulfillment of friendship needs. Nevertheless, individual differences in this choice may exist.

We believe that attachment style or orientation is worth considering in this domain. We introduced AT earlier in the chapter as a theory that specified particular needs that the pair bond enables individuals to fulfill. However, work from an IT perspective has considered whether interdependent structure affords different opportunities for need fulfillment, depending on an individuals' attachment style (Arriaga, Kumashiro, Finkel, VanderDrift, & Luchies, 2014). In this work, individuals with differing attachment styles chose different foci in their current relationships: Avoidant individuals focused on personal goal fulfillment, whereas anxious individuals focused on trust-related needs. Perhaps friendship needs, like the needs examined by Arriaga and colleagues (2014), are differentially attractive targets of focus for individuals depending on their attachment style. Hypothetically, we can

imagine secure individuals focusing quite heavily on friendship needs, relative to their avoidant or anxious counterparts. Future research aimed at understanding how people with differing attachment styles plan and approach need fulfillment within their relationships would be beneficial to understanding the processes through which individuals with different attachment styles obtain different levels of outcomes from their relationship, as well as why some individuals choose to fulfill particular needs with their relationships.

One final area for future research to explore related to the importance and value of friendship within a romance is the issue of reverse-causality. Whereas it is true that sharing friendship with a partner leads to positive relationship outcomes, it may also be the case that having a high-quality romance leads to viewing one's partner as a friend. Even if this is the case, such a caveat does not diminish the import of friendship to romance, but instead highlights the centrality of friendship to romantic outcomes. Nevertheless, it is worth examining this potential pattern of mutual cyclical growth (i.e., investing in the friendship leads to a high-quality relationship, which in turn leads to investing more in the friendship; e.g., Wieselquist, Rusbult, Foster, & Agnew, 1999).

Conclusion

The subjective experience of a relationship reflects how well the involved partners fulfill each other's needs, including companionate needs, sexual needs, needs for security and caregiving, and self-focused needs such as self-improvement and self-expansion (Rusbult & Van Lange, 2003; VanderDrift & Agnew, 2012). Which needs individuals choose to fulfill via their romantic relationship, coupled with their romantic partner's ability and willingness to meet those needs, have considerable implications for relationship outcomes (Drigotas & Rusbult, 1992; Le & Agnew, 2001). In this chapter, we summarized research suggesting that there are strong positive outcomes uniquely associated with romantic partners meeting friendship needs (VanderDrift et al., 2013). There are beneficial outcomes for both the individual and the relationship when partners meet each other's friendship needs, as well as deleterious consequences of lacking friendship in romance. Taken together, the research summarized here suggests that friendship is indeed at the core of a successful, satisfying romantic relationship. As the nature of close relationships continues to evolve, we look forward to future research in this important area.

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Friendship Among Coworkers

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Why Are Coworker Friendships Important in Organizations?

Coworker friendships refer to the informal and voluntary relationships among employees in a workplace (Berman, West, & Richter, 2002). They are distinguished from other types of relationships at work by two aspects: that they are voluntary and holistic. Taking the first of these, friendships develop between coworkers because these individuals willingly put time and effort into the relationship, regardless of whether there is any formal requirement to interact to complete work (Sias, Smith, & Avdeyeva, 2003). Second, they are holistic, or what Sias and colleagues (2003) call *personalistic*. That is, in work friendships, coworkers recognize each other as a whole individual with an existence that encompasses activities outside of work, and not just as occupants of a work role.

Friendships between coworkers have been a focus of work psychology and management research in the past decade for two key reasons. First, from a humanistic perspective, workplaces offer a fascinating microcosm of society more broadly; albeit one where employees may have less choice in the relationships available to them. Second, taking a rational perspective, researchers are interested in the positive association that friendships have with desired employee attitudes such as job satisfaction and also organizational outcomes such as lower turnover (for example, Mao, 2006; Markiewicz, Devine, & Kausilas, 2000; Morrison, 2004, 2006, 2009b; Morrison & Cooper-Thomas, 2013; Nielsen, Jex, & Adams, 2000). According to Gallup research canvassing approximately 15 million employees the world over, approximately one-third of employees have a “best friend” at work (Rath & Harter, 2010). Employees with a best friend at work are seven times as likely to be engaged in their jobs; in addition they serve customers better, have higher well-being, are more productive, and are less likely to get injured on the job. On the other hand, just 8% of those who report not having close work friends are engaged in their jobs, with concomitantly poorer outcomes (Rath & Harter, 2010).

In line with these positive effects of friendship, other research reveals that workplace friendship is positively related to employees' job satisfaction, creativity, job performance, job involvement, team cohesion, and organizational commitment; and is negatively associated with employees' turnover intentions and negative emotions (Berman et al., 2002; Chiaburu & Harrison, 2008; Fliaster & Schloderer, 2010; Nielsen et al., 2000; Riordan & Griffeth, 1995; Winstead, 1986).

Although these findings are important for the advancement of research on workplace friendship in relation to employee outcomes, other researchers have noted that there is still a long way to go before we fully understand the factors that influence workplace friendships forming in the first place (Nielsen et al., 2000; Sias & Cahill, 1998). Cross-sectional research suggests that structural factors, for example seniority, are important; with higher-ranking employees reporting lower levels of friendship (Mao, 2006; Wright, 2009). Broader social aspects of the workplace (such as leadership, group affective climate, and opportunities for interaction) may also influence friendship formation (Korte & Lin, 2012; Tse, Dasborough, & Ashkanasy, 2008).

Taxonomy, Definition, and Description

Below we outline current thinking into what coworker friendships are, and how they differ from other types of relationships, both inside and outside of organisations.

Distinguishing Friendships From Other Relationships

Friendships are voluntary relationships that exist primarily for enjoyment and satisfaction rather than for the fulfillment of a particular function or role (Sapadin, 1988; Sias et al., 2003). Unlike many other relationships we have in our lives, friendships are uniquely voluntary (Adams & Blieszner, 1994). In fact, out of all of our relationships, we select only our friends and our partners. This compares with blood, legal, geographic, and task ties, which designate relatives, neighbors, and colleagues. Friendships generally develop incrementally because there is no formal boundary or ceremony to mark the beginning or end of a friendship, as there is for other relationships such as a marriage or a new job. Friendship relationships are voluntary, reciprocal relationships, which are seen as unique and special by the participants, and which usually enhance their lives.

Friendship Versus Acquaintanceship

Interpersonal relationship literature, both empirical and theoretical, suggests that people distinguish between friendship and acquaintance relationships, and that

different rules govern people's interactions in these two relationships. There are many different definitions of friendship, but almost all include facets of voluntariness (free choice), liking (affection), and reciprocity (mutuality). Acquaintances, on the other hand, are characterized primarily by social interactions and lack the intimacy, sense of uniqueness, degree of affection, and obligations associated with personal friendship (Bridge & Baxter, 1992). Wright (1988) distinguishes friendship from acquaintance relationships by the additional behaviors that friends engage in with one another, including shared voluntary activities and intimacy such as self-disclosure and emotional support.

In earlier work, Wright (1974) was perhaps the first to incorporate the context in which friendships occur, but positioning it in the background. Specifically, he defines a friendship as a relationship involving voluntary interaction, in which "the commitment of the individuals to one another usually takes precedence over their commitment to the contexts in which the interaction takes place" (p. 94). Thus, when conceptualizing workplace friendships, Wright's definition implies that the boundaries of genuine friendships supersede the work-role boundaries that may exist in a particular context. We discuss this idea in the next section.

Workplace Friendship Versus Other Workplace Relationships

Some people believe that work is not the place to make friends. For others there are expectations that some (if not all) of their social needs will be met at work. Notwithstanding these different beliefs, within any workplace most employees will have numerous types of relationships. These will include relationships with supervisors, subordinates, mentors, protégés, other employees, and even ongoing relationships with customers or clients. Unlike friendships, coworker relations are more likely to be exchange-based (i.e., instrumental rather than intrinsically rewarding), are subject to both the written and unwritten "rules" of the organization in which they exist, and are usually organized around explicit work-related objectives and responsibilities.

Friendships are also distinguished from other relationships at work by their development. Most workers have little or no input into the selection of coworkers; as opposed to friendships, which are voluntary and freely chosen (Sias & Cahill, 1998). Moreover, many organizational relationships are formally defined, such as superior-subordinate or mentor-protégé, and therefore lack the distinguishing features of workplace friendships: they are not voluntary or reciprocal (Morrison, 2004). Finally, workplace relationships are instrumental; when employee A interacts with employee B to complete a task, employee A only cares about employee B insofar as employee B contributes to completing the task. Employee A would not be bothered if employee B were replaced by an equally proficient colleague. This contrasts with workplace friendships, where there is genuine concern and caring, with friends perceiving each other as unique and irreplaceable.

Transition From Colleague to a Friend, and Back Again

Within developmental and social psychology there are numerous explanations as to why and how two people develop a close relationship. Theories of interpersonal attraction often focus on why individuals select any one person to become friendly with, over the many others they have contact with. According to Rodin (1982), people will make relatively rapid assessments as to whether or not an acquaintance, or in this case a colleague, is a potential friend, and whether or not to “waste” energy on someone who is unsuitable for some reason (Rodin’s “dislike criteria”). Sometimes people will be excluded due to factors such as age, appearance, or gender—what Rodin called “disregard criteria,” which would put the coworker out of contention as a friend prior to even getting to know them at all. If a coworker is not excluded by either dislike or disregard criteria, then they can be considered a potential friend. However, unlike new acquaintances outside of the workplace, coworkers have a preexisting or concurrent relationship (that of colleague). This may motivate coworkers to initiate, or at least be responsive to, a new friendship for work-related reasons, such as making their work more enjoyable or easier. Equally, it may motivate coworkers to avoid friendship attempts in order to maintain the work relationship as it is and avoid potential damage or costs that may stem from a closer relationship.

There are various reasons why individuals form friendships at work, and some of these may be simultaneous (Dotan, 2007, 2009). Motives can include (1) similarity—as a function of the dyad, where those with similar interests or values are more likely to become friends; (2) proximity, for example working closely on the same project, with proximity providing an opportunity to identify similarities, which then leads to attraction (McPherson, Smith-Lovin, & Cook, 2001); (3) instrumentality, in that individuals may seek out a relationship that will confer career advantages such as promotion or advancement; (4) seeking work safety and trust, for example having someone at work who will provide support and protection in difficult times; (5) seeking others who fulfill a “missing role,” such as having a mother or father figure at work; and (6) as a sanity check, to gain validation or confirmation in the way they are thinking or behaving (Weick, 1995).

These criteria may be used equally for choosing friends in work as in other contexts. However, the criteria may be enacted differently due to the dual nature of workplace friendships (i.e., the relationship is one where participants are both coworkers and friends). Proximity is facilitated by the work context, and therefore this is a key driver for coworker friendship, since we are “forced” to see our colleagues on most (if not all) work days. Similarity is also highly relevant, with opportunities to witness coworkers’ behaviors enabling the identification of similarities (McPherson et al., 2001). Perhaps more importantly, we often work with others

similar to ourselves: Organizations tend to select similar kinds of people, and in turn people who feel that they match well to the organization tend to stay (Schneider, 1987). Beyond working for the same organization, coworkers are likely to be in the same profession and have a similar educational background. Mutual attraction is also essential in the formation of friendships, that is, we like those who like us (Hays, 1985; Johnson, 1989) and this no doubt holds true in a workplace context. In a work context we are often in a position to work with, help, or be helped by, our colleagues (Halbesleben & Wheeler, 2011); instrumentality, reciprocity, and cooperation are all factors that can lead to friendships developing. Finally, trust is a key factor in genuine friendship (Fehr, 1996). It is possible that colleagues who have built trust in the preexisting collegial relationship will be relatively more likely to trust one another if and when their relationship develops into a friendship (Lewicki & Bunker, 1996; Sias & Cahill, 1998). The process of friendship evolution from peer to friend, then from friend to close friend, and finally from close friend to almost-best-friend was examined by Sias and Cahill (1998). They found each of these transitions to be associated with different types of communication; with intimacy, trust, and self-disclosure becoming more frequent as the relationships deepened.

As well as the individual, communication, and dyadic factors that influence if and how coworker friendships evolve, the workplace itself can either facilitate or hinder friendships simply through varying proximity. There has been a great deal of research indicating that people who work closely with each other are more likely to become friends (e.g., Athanasiou & Yoshioka, 1973; McPherson et al., 2001; Schutte & Light, 1978). Aspects of the workplace such as the physical layout, schedules, job routines, and task interdependence influence how frequently people interact, and thus play a part in the formation of friendships. In addition, the culture or climate of an organization, and the behavioral norms of other employees will have a profound influence on whether or not employees have the opportunity to make friends (Nielsen et al., 2000). Organizations that enable physical proximity offer opportunities to identify similarities and build trust, and this in turn enhances friendships among coworkers. This can be facilitated by organizing social and team-building events or having a communal lunch room or relaxation areas and games rooms (Tse et al., 2008). This contrasts with organizations that provide no structures to support informal interaction, such as having policies that prohibit chatting informally with others during work time, or on off-work topics; those where employees eat off-site or at their desks, and that do not organize social events.

Types of Organizational Relationships

Early research on organizational peer relationships identified three types, distinguishable by their degree of closeness (Kram & Isabella, 1985): information peer, collegial peer, and special peer. Most organizational relationships will be one of these peer types, with research showing them to be both discriminable and

conceptually meaningful (Fritz, 1997). Of the organizational peer types, the *special peer* relates most closely to the definitions of friendship given in the section “Taxonomy, Definition, and Description.” A *special peer* would be what the Gallup studies refer to as a “best friend at work.” Special peer relationships take longer to develop than either collegial or information peer relationships and are relatively scarce in organizations, with many people having none, or only one, special peer at work (Fritz, 1997). The special peer is the most intimate of peer relationships and, within them, formal workplace roles are ignored or downplayed in favor of high levels of self-disclosure and self-expression (Kram & Isabella, 1985; Sias & Cahill, 1998). For many, this prioritizing of one’s friendship relationship over the work aspect of the relationship is what defines it as a genuine friendship. For example, a workplace “best friend” might disclose an upcoming restructure in spite of organizational requirements for secrecy. According to Sias and Cahill (1998), genuine friendships that may have been initiated in the workplace will, over time, grow out of that context, until eventually the members no longer see each other as workmates at all. Having to select *which* aspect of the dual relationship to honor is at the heart of the “dual role tension” (Bridge & Baxter, 1992) inherent in many coworker friendships. This is the focus of the next section.

Coworker Friendship as a Dual Relationship

Much prior research (and indeed the definitions given earlier) tends to treat a friendship as a single relationship, independent of other relationships the friends may have. The notion that a work friend is, by definition, a “dual” relationship is fundamental in the study of coworker friendship. At the very least, a coworker friendship is one that comprises both a collegial relationship and a friendship; it *may* also include aspects of hierarchy (e.g., being friends with your boss, for example), aspects of family obligation (e.g., being friends with your coworker who is also your sister-in-law), or aspects of your neighborhood (e.g., being friends with a coworker who lives nearby). As well as the importance of context (i.e., the workplace) this “multiplex” (Methot, LePine, Podsakoff, & Christian, 2015) aspect of a workplace friendship is a key defining feature. It is crucial because it implies the need to simultaneously manage a professional, collegial relationship and an informal, personal one. For example, as a colleague, you may need to pass a completed task to your workplace friend on a certain day. If you are late to work that day due to family issues and do not get the work handed over on time, as a colleague, your friend may be frustrated that your late arrival has negatively affected them. However, as a friend, they may either understand, show concern and overlook this, or they may feel that in the friendship role you have an even greater responsibility to meet your obligation to them and hence they may feel doubly angry and betrayed by you.

There are several characteristics of dual- (or multi-) role relationships, such as workplace friendships, that distinguish them from single-role relationships, such as

friendships. People in dual-role relationships have, in effect, to manage two relationships simultaneously that may have conflicting demands, as in the example above. Hence there is a need to balance the tensions arising from the dual-role relationship. Bridge and Baxter (1992) conducted a study examining the extent to which employees experience dilemmas or contradictions posed by the concurrent friendship and work-association components of their relationships at work. They identified five potentially incompatible demands associated with both the role of “friend” and of “work associate,” which are outlined here. These demands potentially create risks and tensions in coworker relationships.

Instrumentality versus affection: Friendship can enhance feelings of trust, believability, and acceptance of feedback. On the other hand, utilitarian support may create feelings of indebtedness, exploitation, or suspicion of another’s motives, thereby undermining the friendship. Reciprocity has been shown to be an important aspect of friendship, with a lack of reciprocity associated with negative affect (Buunk, Doosje, Jans, & Hopstaken, 1993). A situation where one member of the dyad receives more benefits, (as in a relationship with an organizational superior, where one or the other in the relationship may provide more support, help, or assistance than the other) will create a lack of reciprocity and may cause tension for the dyad.

Impartiality versus favoritism: Organizational practices usually aim to provide equitable treatment for everyone with no personal bias. However, people usually expect their friends to display special treatment and favoritism, thereby indicating that they regard each other as unique and special. For example, an organizational friend may expect to learn first about upcoming new resources or opportunities before other work colleagues.

Openness versus closedness: Friends are expected to be fully open and honest with one another, trusting and displaying trustworthiness. However, professional confidentiality practices may mean that close friends refrain from full disclosure. Similarly, disclosing work-related information from a friend may violate that friend’s expectation of confidentiality.

Judgment versus acceptance: Friendship is built on an expectation of mutual affirmation and acceptance. Indeed coworkers may be ideal sources of empathy regarding work-related angst. However work associates may find themselves in conflict because of competing interests associated with their work roles, for example disagreeing on the best process for a task or competing over a resource such as a training opportunity, or because of a performance evaluation process.

Autonomy versus connection: The sheer proximity afforded by the workplace facilitates interpersonal attraction between people. Hiring practices are generally biased toward hiring similar kinds of people to those already in place (Schneider, 1987). Thus, it is likely that employees perceive themselves

as similar to others, which in turn facilitates friendship development and maintenance. However, daily contact with the other person may provide too little autonomy or separation, thereby jeopardizing the friendship (Bridge & Baxter, 1992).

Each facet—colleague, friend, mentor, and so on—in a dual-role friendship has potential consequences for the other. Because of this, employees will often need to prioritize one relationship over the other, either in a particular situation or continually. For example, an employee with a coworker friend may cancel on the friend to catch up with work, which might have negative consequences on the friendship. Alternatively, the employee may stop working entirely for the afternoon in order to comfort their distressed colleague, which would have an obvious impact on their work.

Thus, although close friendships at work have predominantly positive consequences, such as increased commitment and satisfaction with work (Morrison, 2004; Nielsen et al., 2000; Winstead, Derlega, Montgomery, & Pilkington, 1995), and improved communication and information sharing (Kram & Isabella, 1985; Sias & Cahill, 1998), there is the ever-present possibility that the dual tensions of maintaining friendships with colleagues will result in stress and conflict.

A final way that the dual nature of workplace friendships relates to the experiences of coworker friends is what can happen when and if the relationship turns “sour.” Indeed, the added tension and demands inherent in the dual relationships experienced by workplace friends might make these types of friendship more likely to break down compared with others. Coworker friendship breakdowns are discussed in the following section.

Friendship Deterioration

Given that the complexity in managing coworker relationships means that they are, at times, comparatively more difficult to manage and maintain, these relationships can and do occasionally turn sour. It is important to consider workplace friendship deterioration because, as discussed previously, friends have been shown to enhance and enrich employees’ experience of work through things like social support (Kram & Isabella, 1985; Sias & Cahill, 1998) and engagement (Rath & Harter, 2010). Thus, losing a friend means also losing this source of support and enjoyment (Sias, Heath, Perry, Silva, & Fix, 2004). The consequence of terminating a friendship at work is potentially greater than outside the workplace context, however, as the friendship breakdown is likely to negatively impact on any ongoing, professional relationship between the former friends. Unlike a friendship relationship outside of work (where the participants may seldom need to see one another again), employees may be “forced” to continue to work together after a relationship breakdown. Alternatively the impact may be that one or both parties leave the organization because they feel compelled to do so, which may hinder their careers.

In addition to the dialectical tensions outlined already, research on workplace friendship deterioration (Sias, 2006; Sias et al., 2004) suggests that many of the same factors that lead to friendships being initiated (e.g., proximity, trust, mutual liking, and similarity) can also be the reasons that the friendship deteriorates. For example, the loss of proximity (perhaps being transferred to another department within the organization) can lead to the deterioration of a friendship (Rawlins, 1994, cited in Sias et al., 2004). In addition, as the friends get to know one another better, they may discover personality traits, attitudes, and behaviors that are too dissimilar to their own, which will decrease the closeness of the relationship (Duck, 1982). Finally, just as trust is the foundation of close relationships, feeling betrayed or being lied to has destroyed many friendships (Fehr, 1996), and may have the same effect in the workplace.

Gender and Organizational Relationships

Gender has a potential impact on almost all experiences of work, from position in the organizational hierarchy, to work values and behaviors, to salary and role (Winstead & Morganson, 2009). In many cases however, workplace friendships have been studied with little or no attention paid to the impact that the gender of the participants may have. In fact, when gender is included in research, it is often as a covariate; something to be statistically controlled for rather than explored (Winstead & Streets, 2013).

Before outlining gender differences, it is worth noting that friendship relationships for men and women are similar in many respects (Wright, 1988), and there are large variations *within* the genders in terms of their behavior in friendships (Walker, 1994). Notwithstanding these similarities, there have been consistent findings in both the social psychology and organizational psychology literatures of gender differences in friendships. Women's friendships have been described as communal, and tend to involve more self-disclosure, supportiveness, and complexity than do friendships between men (Markiewicz et al., 2000; Winstead, 1986; Wright, 1991). Men's friendships can be described as instrumental; they tend to be organized around shared interests and activities and the exchange of tangible rewards and favors, and to be action-oriented rather than person-oriented (Markiewicz et al., 2000; Messner, 1992; Winstead, 1986; Wright, 1988, 1991).

Moreover, research indicates that while men achieve and define closeness through the sharing of activities, such as being on a committee or playing a sport together, women tend to define and achieve closeness through the sharing of feelings and emotions (Odden & Sias, 1997; Wood & Inman, 1993). Indeed, the provision of social and emotional support is significantly more likely to be a function of women's relationships at work, with women both receiving and providing more emotional social support than men in times of unhappiness or distress (Flaherty & Richman, 1989; Morrison,

2009a). Moreover, when stressed or anxious, men are generally less likely than women to seek emotional support (Ashton & Fuerhrer, 1993). Hence there are gender differences in what motivates men and women to seek out friends in the workplace.

As in other contexts, women in organizations have been found to place more importance on their friendships than do men. Further, it is possible that the organizational commitment of women may be more affected by affiliation opportunities than that of men. Evidence that friendships have more salience for women can be seen in a study examining work attitudes of dentists, which found that friendship opportunities, such as a highly cohesive work environment, was related positively to commitment among female (but not male) dentists (Kaldenberg, Becker, & Zvonkovic, 1995). The authors state, "affective commitment was related to proportion of friends in the workplace for female dentists" (p. 1371). This may point to a gender difference in the commitment process, which relates to generalizations that males seek independence while women seek intimacy (Kaldenberg et al., 1995).

Looking specifically at work friendships, Sapadin (1988) investigated same-sex and cross-sex friendships of 156 professional men and women using a self-report questionnaire consisting of a rating scale and open-ended questions. Sapadin's results were largely consistent with research from nonwork contexts, finding for example that women's same-sex friendships were rated higher for overall quality, intimacy, enjoyment, and nurturance. Men, on the other hand, rated their cross-sex friendships higher in these areas. This research can be interpreted as suggesting that women's participation in professional roles has not resulted in noticeable changes to friendship patterns. Gender differences in friendship remain evident despite ever-changing career roles for women. As in the nonwork context, findings regarding friendships in the workplace generally indicate that both men and women report friendships with women as more enjoyable, nurturing, and of an overall higher quality (Morrison, 2009a; Sapadin, 1988).

In contrast to Sapadin's (1988) findings, Markiewicz et al. (2000) found that some gender differences in friendships are *not* consistently carried over into a workplace context. While research generally suggests that friendships with women are evaluated as more satisfying than those involving men, Markiewicz et al. found this not to be the case within many organizational settings. Instead they found that friendships with women at work were not as satisfying as those with men, and often provided fewer rewards. One reason for this finding may be women's relatively lower status in many professions (Winstead & Streets, 2013), making them less able to provide instrumental rewards to friends. In addition there may be sex-role stereotypes leading to unfavorable assumptions about women's work-related capabilities. Finally, the relative proportion of women in a given occupation can give them "token" status, and may mean that they are less able to provide work-related advantages, as token individuals tend to have less influence (Ibarra, 1993; Morrison, 2009a). While more research is needed, it is clear that the work context influences the nature of friendships between coworkers.

Another explanation for these conflicting findings is the notion that gender is socially constructed. Organizations may differ in the meanings ascribed to being “male” or “female” such that being female is linked to different expectations and behaviors in one organization versus another, or in a workplace versus other facets of society. A woman and man engaging in the same behavior are not necessarily perceived or evaluated similarly by others (Winstead & Streets, 2013). As an example of this, women are generally expected to display more nurturing, prosocial behaviors. Hence, if a woman is in a demanding senior management role and behaves in a stereotypically masculine way, for example acting assertively, she may be judged more harshly than a man in the same context. If assertive behavior is the most effective option in that instance, the female manager is in an unfortunate double bind: Should she be a “good manager” or a “good woman”?

Benefits and Challenges of Coworker Friendship

Individual-Level Benefits, Challenges, and Recommendations

Relationships with colleagues are critical to understanding how to do work in acceptable ways in any given organizational context (Korte & Lin, 2012). However, beyond this, each individual can decide the extent to which they wish to go beyond mere acquaintanceships and engage in friendships at work. Generally the evidence shows that if you develop one or more friendships with colleagues at work, you are more likely to be satisfied in your work, perform well, and wish to stay in your organization (Berman et al., 2002; Nielsen et al., 2000; Rath & Harter, 2010; Riordan & Griffeth, 1995; Winstead, 1986). However, it may be stressful to manage the dual relationships implied by being both a friend and a work colleague to another person (Bridge & Baxter, 1992). Issues such as favoritism and openness can come to the fore when deciding where your allegiances lie.

There may also be interesting demographic and structural nuances in these decisions. For example, with regard to gender, because men tend to view friendships in more instrumental ways, decisions about whether or not to develop and maintain coworker friendships can have significant career consequences. Men who avoid workplace friendships may miss out on critical information that enhances their own performance, such as not being informed by work friends about upcoming changes or opportunities. In contrast, women tend to use coworker friendships for support and affiliation; women who eschew coworker friendships miss out on positive emotions, assistance, and encouragement, and will tend to feel less loyal to the organization. Demographic factors may support or hinder coworker friendships. For example, because surface-level similarities have been found to promote relationships among colleagues (Kammeyer-Mueller, Livingston, & Liao, 2011), coworkers who differ from the predominant demography of the organization, such as being the

only older person among mostly younger employees, may find it harder to identify coworkers who are sufficiently similar to them to consider developing friendships.

Structural factors may also facilitate or hinder coworker friendships. At more senior levels, there are fewer same-level peers to choose from, and peers may be competing more fiercely for resources or promotion. Moreover, senior workers may be privy to more sensitive information that can affect the careers of others. This may exacerbate dual tensions if one opts for the role of friend alongside that of colleague. Related to proximity—a key factor in friendship formation—those who are out of the office for long periods (e.g., salespeople) or who work remotely (e.g., teleworkers) may find it harder to develop friendships at work. This may be especially the case because, at a distance, there are fewer opportunities to identify the similarities that provide an initial basis for friendship formation.

While structural- and personal-level factors may help or hinder the development of workplace friendships, these factors can be facilitated to promote friendships. For example, one study found that age dissimilarity relative to coworkers stimulated more proactive behavior from new employees (Kammeyer-Mueller et al., 2011), with proactive behavior associated with better adjustment into a new organization (Cooper-Thomas & Burke, 2012). Therefore, friendships may be developed even when individual factors do not appear favorable.

Organization-Level Benefits, Challenges and Recommendations

In spite of the inherent tensions of workplace friendships, the benefits seem to more than offset these challenges. It is unsurprising then that the majority of senior managers approve of coworker friendships and view them as improving communication and performance (Berman et al., 2002; see also chapter 9, this volume). What then can organizations do to facilitate friendships?

First, given the importance of proximity to friendship formation, it is useful to consider the physical layout of work. Research shows that increasing chance encounters allows social interaction, which fosters friendship formation (Easterbrook & Vignoles, 2014). Shared facilities can promote this, whether these are task-focused, for example a printing and photocopying area where staff can bump into each other, or instead social or needs-focused, such as social hubs for informal meetings, lunch rooms, or on-site cafés and recreational areas.

Second, work tasks themselves may be tailored to encourage friendships. Where tasks are more interdependent, requiring colleagues to coordinate their efforts to complete a task, this is associated with greater levels of job satisfaction and lower intentions of leaving (Regts & Molleman, 2013). Perceptions of interdependence between colleagues can be fostered from the outset. Research shows the importance of the early period of organizational entry for new employees (Cooper-Thomas & Anderson, 2006), with the organizations' initial treatment of newcomers having

lasting effects (van der Werff & Buckley, 2014). New employees will perceive tasks as more interdependent when they are given social support and appropriate role models (Lu & Tjosvold, 2012), especially if role models display cooperative behaviors. By providing appropriate norms from the start for cooperation on tasks, and structuring tasks to require interaction, organizations can facilitate friendship formation.

In line with the importance of role models, leaders set the tone for friendship formation. In instances where leaders have more positive relationships with their direct subordinates and display mutual respect and trust, both reciprocity and the formation of friendships is encouraged (Tse et al., 2008). Similarly, the positive mood of leaders results in more positive affect among subordinates, as well as greater work coordination (Sy, Côté, & Saavedra, 2005). This matches with results showing contagion effects of positive, motivated states between colleagues, in turn, influencing performance (Bakker & Xanthopoulou, 2009), and also the positive, facilitating effects of positive group affective tone (Tse et al., 2008). Overall, positive emotions at work—from leaders and colleagues—may facilitate friendship formation. In turn, friendships may complete a virtuous circle and, by leading to more frequently daily interactions, facilitate the development and cross-over of positive mood states (McGrath, Cooper-Thomas, & Garrosa-Hernández, 2015).

Finally, friendships are closely linked with positive emotion, proximity, and opportunity for social interaction. Organizations can purposefully create opportunities for staff to establish or strengthen coworker relationships and to transform relationships into friendships. Organizations can provide team-building days, work picnics, lunch-time or after-work sports activities, or drinks and food. It is also important to set norms for social interactions—if those higher up in the organization are seen going for coffee or lunch with colleagues, or stopping by people's desks to have conversations, this shows it is acceptable and sets an appropriate norm that others are likely to mimic. In contrast, where senior people do not participate in informal social interactions and eat lunch at their desk, this may set an implicit behavioral norm that social behaviors are frivolous, hence discouraging such behaviors at work and limiting workplace friendships.

Conclusion

Coworker friendships are voluntary relationships between colleagues, where each values the other for who they are as a person. Among other benefits, having coworkers as friends is associated with positive attitudes and better performance. There are some risks to coworker friends, in particular managing the tensions inherent in having dual and possibly multiple roles, when coworkers are both colleagues and friends. However, for most workers and most organizations, these tensions are worth the trade-off: Working life is richer and more stimulating with coworker friends.

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Mentors as Friends

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Our chief want in life is somebody who will make us do what we can.
That is the service of a friend. How he flings wide the doors of existence!
—Ralph Waldo Emerson in *Conduct of Life* (2001, p. 92)

Introduction

Emerson might be describing a mentor in the opening quote of the chapter. Are mentors also friends? The premise of this chapter is that mentorship and friendship can and do overlap. Mentoring comprises some aspects of friendship, such as trust and reciprocity. Yet, most scholars consider mentoring relationships to be different from friendships. Mentoring relationships involve friendship, but are also characterized by instrumental support that enlarges horizons or, as Emerson writes, “fling(s) wide the doors of existence.” Another distinguishing feature is that scholars usually consider mentors to be in a more powerful position than their protégés. This chapter (1) examines the lines demarcating mentorship and friendship and (2) presents a conceptual model to explain how mentors become friends and how friends become mentors. The term “protégé” is used in this chapter but is interchangeable with the term “mentee.”

The chapter proceeds in three parts. First, the chapter defines friendship and mentorship before proceeding to highlight where these constructs overlap. Recent scholarship on mentoring is presented as it relates to friendships. For example, work on developmental networks expands the definition of mentoring in ways that include aspects of friendships. Further, there is a place for peer relationships and friendships in developmental networks. Scholarship on mentoring interactions provides a lens to examine how friends engage in mentor-like behaviors. This section of the chapter considers research on natural and informal mentors. A discussion about how friendship may enhance and limit mentorship concludes this section, along with thoughts about the role of gender on these important relationships.

Second, the chapter draws on research to present a conceptual model to explain when mentors become friends and vice versa. This model highlights the defining characteristics that move friendship to mentorship and mentorship to friendship.

Finally, the chapter analyzes future directions for mentoring researchers and practitioners. Two trends are likely to influence mentoring. Flatter organizational hierarchies, with more job and career changes, suggest the role of friends as mentors may become increasingly important. Second, technology is making it easier to connect with individuals around the world and develop friendships and mentorships that were previously impossible because of geographical constraints. How might these trends be taken into account as people develop their personal network or oversee a mentoring program?

Mentorship and Friendship

There is an opportunity to examine more closely the intersection between mentorship and friendship. Mentoring scholars rarely consider friends as mentors or protégés. Yet, there is consensus that some friendship behaviors (referred to as psychosocial support) constitute an important function of mentoring. Similarly, scholars of friendship rarely examine mentorship. This section first briefly reviews both constructs and then explores the areas where friendship and mentorship overlap. An examination of how friendship may contribute to and detract from mentoring relationships concludes this section.

Friendship

Researchers have called for us to define better both friendship (Hartup & Stevens, 1997; Reis, Collins, & Berscheid, 2000) and mentorship (Crisp & Cruz, 2009). Friendships have been studied for over a century, but most of this scholarly attention has focused on friendships during childhood and adolescence. Hartup and Stevens call for a life span approach to studying friendship because they find that “friendships are developmentally significant throughout the life course” (p. 366). Studies of friendship have focused on five factors that make up this relationship: companionship, intimacy, commitment, affective tone, instrumental help, and conflict (Hartup & Stevens, 1997). Most people have friendships in childhood (75%–80%) and during midlife (90%). The benefits of friendships are more easily visible in the face of life’s challenges. Individuals with high-quality friendships do better than individuals with no friends or low-quality friendships when faced with life events like the loss of a spouse or illness (Hartup & Stevens, 1997). An increasing number of studies have documented the benefits of friendships for adults (e.g., Adams & Blieszner, 1995) that protect individuals when they encounter life

difficulties. However, friendships can also have negative effects, such as increased stress (Reis et al., 2000), when they are filled with strife and discord.

Researchers have characterized friendship as having both a deep and surface structure (Hartup & Stevens, 1997). Deep structure refers to the social meaning of relationships. Surface structure characterizes the social exchanges at any moment. Reciprocity is an important dimension of friendship. Friendships differ in their content, constructiveness, closeness, symmetry, and effective character (Hartup & Stevens, 1997).

Mentorship

Mentoring was first described in the *Iliad* over 2,500 years ago. The English word “mentor” comes from Greek and refers to the man’s name who served in this role when he looked after and guided Odysseus’s son. Scholarly attention is much more recent. The organizational and psychological literature on mentoring began in the late 1970s and mid-1980s from Levinson’s (1978) and Valliant’s (1977) work on adult development. A commonly accepted definition of mentoring refers to the behaviors involved in mentoring, which is said to occur when a more experienced, usually older, person provides support and career advice to a junior, less experienced person (Eby et al., 2013).

However, an examination of the literature suggests mentoring researchers also define mentoring through roles (e.g., Clark, 2000), behaviors (Ghosh, 2013), and relational processes (Waterman & He, 2011). Scholars who define mentoring through roles ask individuals about their official titles or job duties. An example of this would be to assume mentoring is occurring if a person serves in a role such as a doctoral advisor (e.g., Lunsford, 2011) or to assume mentoring is occurring based on a person indicating he or she had a mentor or a protégé (Clark, Harden, & Johnson, 2000).

There is more agreement on the behaviors of mentoring, which have been classified into functions: instrumental support and psychosocial support (Allen, Eby, Poteet, Lentz, & Lima, 2004; Crisp & Cruz, 2009; Kram, 1985). Instrumental support, also known as career support, includes behaviors such as sponsorship, providing challenging assignments, visibility, coaching, and protection. Psychosocial support involves listening, confidence building, and empathy. The psychosocial function of mentoring is similar to support that friends provide. Some researchers advocate for role modeling to be a separate function (Crisp & Cruz, 2009). Role modeling involves providing behaviors that the protégé may emulate. However, even in a functional perspective the behaviors mentors exhibit may vary according to the context. Ghosh (2013) compared the functions of mentoring in the educational versus business work settings. His review of the literature suggested that mentors in education value critical reflection while mentors in business focus on challenging assignments. Note that the functional perspective implies that

both instrumental and psychosocial support are required for mentoring to have taken place.

More recently, researchers have acknowledged that mentoring relationships develop over time and that there are relational processes involved. These researchers study how mentoring relationships unfold. Mentoring relationships develop over time through what researchers call mentoring episodes (Allen & Poteet, 2011). Mentoring episodes refer to specific, one-time behavioral interactions between individuals. For example, a junior employee might reach out to a senior colleague when she encounters a challenge at work. The pair goes to lunch to discuss the challenge and how the junior person might address it. Both individuals find their interaction to be enjoyable and agree to meet again in a few weeks. This first lunch meeting would be the first mentoring episode. After a series of mentoring episodes, their relationship may be said to be a mentoring one. The voluntary engagement and participation of both the mentor and protégé, that is, reciprocity, is an important feature of mentoring relationships (Huwe & Johnson, 2003).

Mentoring processes have also been found to be “non-linear and complex” (Waterman & He, 2011, p. 151). The reciprocal nature of the relationship makes it difficult to assess the flow of information. Further, these relationships are self-organizing and often part of organizational efforts, in the case of formal mentoring programs. Thus, the level of analysis is difficult to ascertain. This complexity gives rise to questions such as (1) Should researchers focus on individual or organizational benefits, (2) When should outcomes be expected, and (3) For whom?

The extent to which people participate in mentoring relationships is less clear than it is for friendships, perhaps because of definitional or methodological differences. Researchers who use a case study approach to understand mentoring find it to be a rare relationship (Levinson, 1978; Levinson & Levinson, 1996; Vaillant, 1977). Investigators who used surveys to study mentoring find it to occur more frequently. The organizational context is also important. Professions and educational organizations appear to have mentorship built into their educational, professional development, and advancement activities. For example, research on military settings finds 45% of individuals have mentors (Baker et al., 2003), while two-thirds of talented undergraduates (Lunsford, 2011), three-quarters of scientists (Lunsford, 2014), and almost all doctoral students reported having a mentor (Lunsford, 2012).

In summary, an examination of the definitions of friendship and mentorship suggests three areas of similarity. First, the psychosocial function provided by mentors is similar to friendship. Listening, confidence building, and providing emotional support are activities that mentors and friends engage in with their relational partner. Second, both relationships develop over time. This is not unique to friendships or mentorships but rather is perhaps a condition of any human relationship. Third, both relationships involve reciprocity. Mentors and protégés, just like friends, must engage in some exchange of ideas, time, and feedback to maintain their relationship status.

Overlapping Scholarly Constructs

The shared constructs in the definitions of mentoring and friendship provide guideposts to explore when mentors are friends. This section reviews more closely the functions of instrumental and psychosocial support as they relate to peer mentors, developmental networks, and natural mentors.

Instrumental and Psychosocial Support

As described earlier, psychosocial support is an important element in both friendship and mentorship. Providing emotional support and listening are important characteristics of friendships. There also must be a certain amount of trust before protégés will interact and ask for or act on advice from a mentor. Thus, friendships appear to be characterized by strong ties and exchange of psychosocial support, whereas mentorships rely on certain elements of psychosocial support. For example, protégés need to trust their mentors' professional competence, but they may not disclose deeply personal information with their mentors.

Instrumental support differentiates mentorships from friendships. Friends may provide general advice about career challenges, but these conversations are a small part of the intercourse in friendships. Professional guidance is the *raison d'être* for mentorships. The question is when does providing psychosocial support lead to the provision of instrumental support, that is friends also become mentors, and when does an increase in psychosocial support lead mentorships to become friendships?

Peer Mentors

Individuals who have similar status or hierarchy are said to be peers (Ensher & Murphy, 2011; McManus & Russell, 2007). Thus, in organizations, employees who have similar job titles or salaries would be peers. In educational institutions, individuals at the same grade level or degree status would be peers. Peer mentoring relationships evolve when they are characterized by "increasing amounts of intimacy, vulnerability, and authenticity that span[ned] both work and personal domains" (McManus & Russell, 2007, p. 280). Scholars suggest that there is a continuum of peer relationships characterized by distant or close ties. Information peers anchor one end of this continuum with distant ties, while special peers, at the other end of the continuum, would have close ties. Collegial peers would be in the middle of the continuum (McManus & Russell, 2007). Informational peers share information about their organization. Collegial peers swap career advice and provide one another job-related feedback and friendship. Special peers engage in more friendship-like behaviors such as confirmation, emotional support, and feedback. McManus and Russell (2007) assert that peer relationships become "broader and deeper" as they move from informational to special peers.

The focus on career development differentiates peer mentoring from friendships. Sharing organizational knowledge is how some researchers characterize peer mentoring (Bryant & Terborg, 2008). The difference between peer and traditional mentoring is “the level of experience and power that the mentors have” (Bryant & Terborg, 2008, p. 12). It appears that individuals who are peer mentors face fewer relational challenges than individuals in traditional mentoring relationships (Ensher & Murphy, 2011). Peer mentors typically provide more psychosocial support than instrumental support and may be less likely to pose relational challenges (Bolton, 2005). This line of work suggests that peer relationships that evolve into *special peer relationships*, where peers then look to one another for career support, may be an example of friends as mentors.

Data from a formal, college-student peer-mentoring program at a large, research institution in the southeastern part of the United States illustrates how peer mentors may also become friends (Lunsford, 2015a). The author examined archival evaluation records after the completion of the mentoring program as part of a program review. During the 2014 fall semester, 25 returning college students were paired with one or two incoming first-year students ($N = 51$) for a 6-week, peer mentoring program. The mentors and protégés were surveyed at the mid- and end point of the program. About 40% of the 24 mentors, who responded to the midpoint survey, wrote about friendship when they described their “points of pride” about the relationship. For example, one mentor wrote, “There’s been at least one major connection with each mentee that allowed the relationship to evolve to more than just the typical mentor-mentee relationship.” Another mentor wrote, “I have been able to form two friendships with both of my mentees.” Mentors were invited to share additional thoughts, which revealed that some mentors considered their peer relationships to be developing friendships. One mentor wrote, “I can’t wait to see what they’ll do, and hope to keep them both as friends.” Even at the end of the program mentors expressed an interest in remaining friends. For example, when reporting on points of pride in the relationship, one wrote, “I feel like our relationship has grown so much over these six weeks and that it will be a relationship that continues.” Another mentor wrote, “Both of my mentees and I formed strong relationships and continue to meet even though the official program is over.”

What about the protégé perspective? They were given the same survey as the mentors, and 36 of the 51 protégés shared information about their “points of pride” in the relationship. Almost half (44%) of these respondents considered their mentor to be a friend, even 3 weeks (midpoint) into the program. These students wrote warmly about their relationships with comments such as, “I definitely gained a great friend from the mentor program.” And “I feel like she would simply encourage me even more, instead of highlighting my failures. I could honestly talk to her about my doubts, fears, uncertainties, and anything else really!” Even the formal nature and assignment of peer mentors did not change the fact that some students developed genuine friendships, as expressed by one protégé: “I imagined the mentor/mentee

relationship to be forced by the nature of the program, but it was very natural and genuine.”

Thus, what started out as peer mentoring turned into friendship for many of these students. The peer mentors provided instrumental support. However, the peers who also formed close ties, shared personal information—that is, provided a lot of psychosocial support—also appeared to be developing friendships. In many instances the new students described how their mentor had become a friend, with whom they could share their hopes and worries about college. The peer mentors wrote about their hopes of redefining their peer relationship as a friendship or how they hoped to continue to meet. Thus, as the ties became closer the students seemed to move from peer mentoring to friendship.

Developmental Networks

The traditional, one-on-one intense relationship describes what most individuals think of when asked to describe a mentor–protégé relationship. Yet, we now know that individuals may form different kinds of mentoring relationships. Over the last decade, mentoring researchers have expanded the definition of mentoring to include all relationships that involve career support, also called a *developmental network* (Baker & Lattuca, 2010; Higgins & Kram, 2001).

The term “developmental network” refers to a continuum of mentoring support from a variety of individuals. The networks are characterized by their density, range, and relationship strength (Higgins & Kram, 2001). Density refers to the extent to which network members are connected to one another. Range refers to how much information is duplicated by network members. Strength refers to the closeness of the relationship. Developmental networks have four essential characteristics (Dobrow et al., 2012). First, mentors are focused on advancing the protégé’s career. Second, there are multiple individuals in the network (usually four or five). Third, these networks include people from a range of social circles and include peers and family members. Fourth, individuals provide varying amounts and types of psychosocial and career support. Some individuals in a developmental network may also provide friendship.

The overlap of developmental networks and friendship is illustrated by a study of 477 advanced doctoral students in a variety of disciplines (Lunsford, 2012). The majority (97%) of the doctoral students had at least one mentor, and most of the students (85%) had more than one mentor. One-third of the students had four or more mentors, including their advisor. Many students reported receiving emotional, career, and networking support from family, friends in their program, and friends outside their program. Doctoral students who reported having several faculty mentors in the same department had a low-range network because their mentors were from the same social system. In addition, these faculty members would know one another, therefore the student would have a high-density developmental network. In contrast, students who had mentors from different social spheres, for

example faculty and friends outside of the program, would have a high-range but low-density developmental network.

The relationship strength or intensity refers to the amount of support provided by the mentor. Individuals with close ties to one another would have greater intensity. Only 16 of the students reported having no mentor, which would characterize them as having a low-intensity developmental network. One-third of the students had three or more mentors, in addition to their advisor. It is likely that they did not have strong ties with all of these mentors—given limits on psychic strength that anyone can invest in a relationship. Thus, these students had a lower intensity developmental network. Two-thirds of the students reported having a second faculty mentor; if the students also strongly agreed that their advisor was a mentor to them, then they may be said to have a greater intensity developmental network.

Interestingly, scholars have clarified that a developmental network perspective includes friends (Dobrow et al., 2012). Indeed, in the study just described, many students reported receiving emotional, career, and networking support from family and from friends in the program and outside their program. Furthermore, those students who reported such a network of supporters were significantly more likely to also report receiving instrumental support from their doctoral advisor ($r = .22$) and more likely to consider their advisor to be a mentor to them ($r = .16$) (Lunsford, 2007).

Thus, developmental networks reflect the reality of the relationships that the emerging professionals develop to navigate their careers. Further, some researchers suggest these relationships are increasingly important for individuals in the 21st century. Organizations have become flatter, people change jobs more frequently, and successful individuals often have a well-developed network to provide support and guidance (Allen & McManus, 1999; Dobrow et al., 2012).

Informal Mentoring and Natural Mentors

Mentoring relationships have been characterized as formal or informal. Formal relationships occur when a third party recruits participants to engage in mentoring when these individuals might not have otherwise connected, such as the peer mentoring program described earlier. Formal mentoring relationships have expectations and goals for the participants and may involve “programming” in the form of certain activities or a prescribed number of times to meet, what might be discussed, and so forth. Informal relationships develop naturally between two individuals, without assistance from another individual. There are fewer studies of informal mentoring for adults (Allen et al., 2004). Scholars use the term “informal mentoring” when studying adult relationships and often use “natural mentoring” when studying youth populations. How might informal mentorships overlap with friendship?

When natural mentors occur for adults, it is typically in the context of work settings and studied under the construct of peer mentors or informal mentoring. There

are numerous professional settings where informal mentoring occurs. A study comparing formal and informal mentoring for novice teachers reported that teachers interacted more with their informal mentor than their formal mentor, and rated their informal mentors more highly on knowledge of teaching and mentoring abilities than their formal mentors (DeSimone et al., 2014). However, similar to the findings about peer mentoring described earlier, the researchers found that formal mentors were more likely to initiate conversations and to focus on work performance. Thus, informal mentors provided more psychosocial support and less career support—which places these relationships close to friendships. Universities are another context where professional mentoring is expected. Junior faculty in a Canadian medical school reported that they preferred mentors who were similar to them in age (Steele et al., 2012). A study of informal and formal mentoring in high tech firms and educational settings found that informal mentors provided more psychosocial support to their protégés than did formal mentors (Sosik & Bouquillon, 2005). Taken together, these studies suggest that informal mentors in work settings provide more “friendship” behaviors, and in some cases, less instrumental support.

Can mentorships involving youth also involve friendship? Youth report having natural mentors with some frequency. At least half of the young people in the United States report having a relationship with a “natural mentor” (Zimmerman, Bingenheimer, & Notaro, 2002). These natural mentors are nonparental adults who provide close, caring support in a young person’s social network (Goldner & Maysseless, 2009). At least for youth, a sense of closeness appears to be responsible for positive changes in protégés (Rhodes & DuBois, 2006). We also know that these relationships need to endure at least a year or more to provide benefits (Goldner & Maysseless, 2009). Early termination of youth mentoring relationships (3 months or less) has been associated with declines in self-worth and academic competence (Golder & Maysseless, 2009). The positive outcomes of youth mentoring include grades, emotional well-being, and behavioral measures such as school attendance. Participants in mentoring relationships are more likely to experience benefits when these relationships are “close, enduring, and consistent” (Rhodes & DuBois, 2006, p. 1).

For youth, mentors provide important sources of psychosocial support that appears to be a lot like friendship from the young person’s perspective. The instrumental support provided in these relationships is focused on school as the “work” of childhood and adolescence (Erikson, 1980). Thus, researchers who study these relationships often examine outcomes such as school behaviors and attitudes, grades, school attendance, and aspirations for future education (Dubois, Portillo, Rhodes, Silverthorn, & Valentine, 2011; Zimmerman et al., 2002).

However, a complicating factor with any informal mentoring relationship is the extent to which both individuals perceive the relationship similarly or even believe they are in a mentoring relationship. Ensher and Murphy (1997) provided insight into how mentors and protégés perceive their relationships quite differently. They

found a significant but modest correlation between mentors' and protégés' perception of the amount of instrumental support provided in the relationship. There was no correlation between mentors' and protégés' perception of amount of psychosocial support provided. Only a few of the mentors and protégés were in agreement on the likelihood that the relationship would continue. Further, the mentors and protégés rarely agreed on how much time they spent meeting. Mentors may also experience the relationship differently as a protégé and as a mentor. Lunsford (2014) found that senior scientists reported instrumental support as important to their success. Yet, when these same scientists described the type of support they provided to their protégés, they were more likely to describe psychosocial support. If instrumental support was so important to them, why did they emphasize psychosocial support for their protégés? Finally, individuals do not have high agreement that they are in a mentoring relationship. A team of researchers reported that protégés identified individuals as mentors (who had also agreed with this designation) only 43 percent of the time, and that mentors were only somewhat better at identifying their protégés (who had also agreed with this designation)—54 percent of the time (Welsh, Bhave, & Kim, 2012).

Thus, for adults, mentorship and friendship may co-occur when the relationship is characterized by more psychosocial support with some instrumental support. For youth, it is unlikely that an adult mentor would consider their protégé to be a friend because of the inequalities on reciprocity. Many adult "friend-like" conversations might constitute inappropriate disclosure if shared with a protégé who was a child or teenager. A child might share challenges over conflict in relationships with their parents or friends. However, an adult mentor would not ask their young protégé for advice about their deteriorating marriage. Thus, there needs to be equality of exchange for informal mentorships to also be friendships.

Benefits and Costs of Friendship

Friendship may both enhance and limit mentorship. Rapport is developed in the first stage of mentoring relationships and is related to relationship quality (Cherniss, 2007). Thus, trusting, high-quality friendships may provide a strong base for a mentoring relationship that fast-tracks these relationships through the initial stage of developing rapport. High-quality mentorships may be characterized by the ability of the relational partners to express negative and positive emotions and to bounce back from challenging interchanges (Dutton & Heaphy, 2003; Lunsford, 2015b). Individuals who are friends may have an increased ability to share their success and failures in a mentorship. In addition, these relationships have a history that may enable them to be more resilient after difficult interactions.

Friendship may also limit mentorship in at least three ways. First, friends may be less likely to provide instrumental support. The work described earlier on peer

mentoring suggests that peers are more likely to provide psychosocial support than instrumental support. Friends have an even closer relationship than do peers and may also be more likely to provide psychosocial support. Yet, we know that it is the instrumental support of mentoring that seems responsible for many of the benefits of mentoring (Lunsford, 2014). Second, friends, who become mentors, may be less willing to engage in critical reflection out of a concern of hurting their friendship. Third, others may view these relationships with some suspicion. Employees may feel a protégé is receiving special treatment because of their previous friend status with the mentor. Or the relationship may be viewed as providing unfair advantages because of the friendship, rather than seeing the relationship as a mentorship.

Demographic Characteristics

We tend to have friends who are similar to us. Yet, being inclusive and recognizing diversity is an aspect of mentoring that does not affect friendships. Demographic characteristics such as ethnicity or gender may influence mentorships in important ways. Mentoring relationships provide information and knowledge to a protégé. Such information and knowledge adds to an individual's social capital, power, and influence. Yet, we know that women face greater barriers to finding mentors than do men (Ragins & Cotton, 1991). There are also concerns about "the accessibility of mentoring relationships for people of color" (O'Neill, 2002, p. 3). Women and minorities remain underrepresented at the top organizational levels, thus there are insufficient numbers for most protégés to even select a mentor of the same gender or ethnicity. Women who seek cross-gender mentors may face challenges related to perceptions about the sexual nature of the relationship (McKeen & Bujaki, 2007). Further, there is some evidence that female mentors are less likely to provide career support than male mentors (O'Brien, Biga, Kessler, & Allen, 2008). Thus, these demographic characteristics display power differences in terms of access to mentors and the information, influence, and networks they can provide.

A Conceptual Model of Mentors as Friends

I propose a conceptual model for mentors as friends that draws on mentoring functions and power distance. Power distance is another way to conceptualize inequalities in relationships, cultures, and organizations (Hofstede, 1983). The research presented earlier on peers indicates that as peers provide one another more instrumental support, their relationship moves from friendship to peer mentorship. Close ties in mentorships, characterized by strong psychosocial support, may develop into or emerge from friendships, especially if these relationships are formed early in the protégé's career trajectory (Lunsford, 2014).

A Venn diagram is used to propose a model when mentors are friends (see Figure 9.1). Consider the left circle of the model—friendship. The addition of instrumental support to the relationship moves friends toward the center of the model—*mentors as friends*. For example, friends who provide one another reciprocal instrumental support move from friendship into a peer mentorship. It may also be the case that one individual in a friendship provides, at the other individual’s request, more instrumental support. In this example, the friendship may move through mentors as friends into a more traditional mentor-protégé relationship for a period of time. Second, consider movement from the right circle, mentorship. Over time, mentorships may become close relationships where both individuals provide psychosocial support. As the need for instrumental support decreases these close mentorships may evolve into friendships. The model also asserts that both relational partners need to influence one another in relatively similar amounts for the relationship to be both a mentorship and a friendship. This is an important point that excludes certain relationships from the mentors-as-friends category, even though the protégé may feel it is both a friendship and a mentorship. For example, an advanced doctoral student may view their doctoral mentor as a friend. The protégé may socialize with their mentor, may visit their home frequently for dinners or look after their house or children, and may feel comfortable sharing their views with their mentor. However, the mentor has considerable power over their protégé in the form of approving their dissertation and awarding their protégé the designation of a PhD. The protégé may think of their mentor as a friend, but the power difference means there is not equality in the relationship. Thus, a third essential defining characteristic is *power distance*.

Power distance is often thought of as a cultural characteristic, but it can also be applied to individual and organizational contexts. High power distance refers to

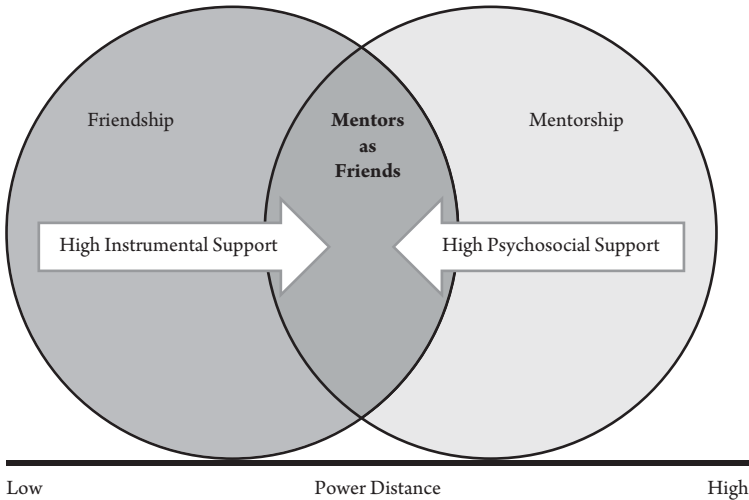


Figure 9.1 Conceptual model of mentors as friends.

greater inequality in the relationship, where one individual has greater status and superiority relative to another person (Hofstede, 1983). In an autocratic mentoring relationship, the mentor provides sponsorship and guidance that is possible because of their greater status in the organization, in hopes of conferring this status on their protégé. Friendship is possible only to the extent that the protégé increases their status and power to be equal to their mentor.

Power distance explains why mentors are not friends in youth mentoring relationships with adult mentors, even though the young person may look to their mentor as a friend. Youth mentorships, with adult mentors, have greater power distance than youth peer mentorships. Although the protégé may influence the mentor in some ways, it is unlikely that he or she has great influence on the adult mentor's ideas and behaviors. Thus, if there is great power distance between the relational partners, then they cannot be friends.

Protégés in youth mentoring programs often report that their mentor is a friend because the young person is able to share confidences and feels close to their mentor. However, the mentor would not consider their young protégé to be a friend because of the boundaries on what an adult should share about personal situations with a vulnerable youth. Thus, the protégé may consider their mentor to be a friend, while the mentor may feel he or she is in a mentorship, not a friendship.

Future Considerations

There is limited research on mentors as friends. However, an examination of the extant scholarship suggests that there is a space where friends become mentors and mentors become friends. This phenomenon is most likely to occur for adults, rather than youth, because of the lesser power distance possible in adult mentorships versus youth–adult mentorships. The chapter presented a model to explain how the three characteristics (instrumental support, psychosocial support, and power distance) may explain when mentors are friends. The model may be useful to organizations to consider how to support these important developmental relationships.

Two trends make it more likely that mentors who are also friends will become an important relationship type in the mentoring landscape. The trends are: flatter organizational hierarchies and advances in communication technology. First, the increase in organizations with flatter hierarchies—which also come with more job and career changes—suggests the role of friends as mentors may become increasingly important. Processes, not hierarchy, will characterize the organizations of the future (Aghina, 2014). In this case, processes refer to how people come together to learn. An example would be an interdisciplinary team that is formed to learn about a problem that needs to be solved. As teams form, dissolve, and reform there will be more need and opportunities for peer mentorship. Thus, peer networks will become increasingly important. As peers strengthen their peer relationships, they

will be more likely to become mentors and friends. Organizations need to consider how to promote and support these important, developmental learning relationships to promote organizational learning and a culture of mentoring.

Second, technology is making it easier to connect with individuals around the world. Physical proximity is no longer a requirement for mentoring relationships to grow and flourish. Individuals can now connect with others (for example through LinkedIn, Facebook), as well as talk and see one another through a variety of new technologies, for example Skype, Google Hangouts, and JoinMe. Thus, mentoring relationships can form across organizational and geographical boundaries that were impossible even a decade ago (Chandler, Kram, & Yip, 2011). Researchers have yet to catch up to the ways that these technologies may influence the form and content of mentoring relationships. In the near future, it may become much easier to move between mentorship and friendship, based on individual needs and career stages.

Technology enables people, who would not have otherwise met, to connect face-to-face in mentorship and friendships. Sheryl Sandberg's *Lean In Circles* (<http://leanincircles.org>) is a good example of this point. The website enables individuals to start mentor-like relationships in their region or organization and empowers women to achieve more. Even a cursory review of the website testimonials suggests that participants are engaged in both mentorship and friendship. MentorNet is another successful example of how technology has connected underrepresented protégés in science, technology, engineering, and mathematics with mentors from around the world (<http://mentornet.org>). As more mentoring relationships are supported, it is likely that some of these relationships will be characterized by the close, interpersonal support and longtime relationships that evolve into mentorships as friendships. It is time for researchers to study what makes for successful elements of these technology-assisted mentorships and friendships. In addition, perhaps scholars should focus less on excluding friends as sources of mentoring support and more on theories, such as the developmental network, that include friends as mentors.

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Animals as Friends

Social Psychological Implications of Human–Pet Relationships

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People talk to them, include them in family portraits, spend time picking out the perfect outfit for them, hunt with them, jog with them, send them to school, forgive them quickly even after they are hurt by them, turn to them on bad days for a lift, spend thousands of dollars on them, choose places to live that are best for them, post videos of them on the Internet, include them in their wills, confide in them, and feel torn apart inside when they die. Although these descriptions could easily apply to one's family members or close friends, they are also descriptive of many people's relationships with animals. In our chapter, we explore the social connections people experience with pets and outline some of the social psychological implications of human–animal relationships.

Approximately 68% of US households have a pet (American Pet Products Association, 2014), and people spend more than \$60 billion annually on their pets for food, medical care, supplies, and pet services (Henderson, 2013). Yet these animals are more than just ubiquitous and economically consequential, they are meaningful in people's lives. For example, in a study conducted in our lab involving 349 college students, 244 of them reported having at least one dog (70% of the sample, with an average of 1.43 dogs in those households) and 111 of them reported having at least one cat (32% of the sample, with an average of 1.36 cats in those households). We also asked those people with pets to report the number of those animals that they considered to be "family." The vast majority of these dogs (76%) and cats (78%) were considered to be family members.

These findings, however, are not unique to college students. Past research in our lab on self-concepts revealed that people spontaneously mention "pet owner" as an important aspect of their self-identity (McConnell, 2011), suggesting a strong linkage between one's pets and sense of self. We followed up on this observation in another study, asking a community sample of 167 pet owners about how integrated their pets were in their sense of self in comparison with other meaningful

entities in their lives, such as their best friends, parents, and siblings (McConnell, Brown, Shoda, Stayton, & Martin, 2011). Although people reported feeling closest to their best friends and parents, they reported feeling just as close to their pets as they did to their siblings. Further, when asked to indicate how much overall support they experience from these entities, these community members reported that they received as much support from their pets as they did from their parents or siblings (only best friends provided more support than pets). These findings clearly demonstrate that people feel a meaningful connection with their pets and that they experience support from pets comparable to even some of their closest blood relations.

When thinking about the friendship bonds that people form with animals, it is surprising how little we know about this important type of social relationship. In our view, social psychology researchers have not devoted much work to understanding many forms of social relationships beyond romantic dyads, which is surprising because friends undoubtedly serve many key functions ranging from social support to self-concept development to social identification. In domains beyond mainstream social psychology (e.g., family studies, clinical and developmental psychology), there are programs of research that address issues of friendship more directly (e.g., Campo et al., 2009; Fingerma, Hay, & Birditt, 2004). Yet, we believe there are important insights that social psychology can offer for understanding human-pet relationships, and our chapter focuses on some of these connections.

Can Animals Be Friends?

In formal terms, friendship is defined as a consensual participation in a close, mutual, dyadic relationship between peers (Nangle, Erdley, Newman, Mason, & Carpenter, 2003). Friendship can also be construed by how it is assessed, with common measures including reciprocal friendship nominations between two people (i.e., do both individuals identify the other as a friend; Berndt, 1984) or the presence of friendship-related qualities between people (i.e., companionship, conflict, help and aid, security, and closeness; Bukowski, Hoza, & Boivin, 1992). Overall, several positive features of good friendships have been identified, including prosocial behavior, self-esteem support, intimacy, and loyalty (Berndt & Keefe, 1995). After romantic partners, young adults report friends as their top companions and confidants, and friends are among their primary sources of social support (Carbery & Buhrmester, 1998). Although friendships may vary, they all involve some level of mutual knowledge and affection, and are likely to be characterized by a relatively high level of intimacy or mutual disclosure and support (Reis & Shaver, 1988).

When thinking about pets as friends, these well-established definitions of friendship pose interesting challenges. The inability of animals to communicate their endorsement that a person is “their friend too” or “to engage in mutual disclosure” means that, based on traditional definitions, determining that one’s pet is a friend is

an inferential leap. Moreover, people often ascribe qualities and abilities to pets in ways incompatible with their true capabilities, such as viewing “doggie kisses” as a sign of affection rather than being an artifact of canine evolution (Horowitz, 2009). To be clear, we are not arguing that people who view pets as friends, buddies, or family members are wrong or crazy. Our point is that in so doing, they are engaging in some degree of psychological projection (e.g., anthropomorphism, theory of mind) in order to make friendship with an animal possible. In fact, we would further argue that part of the intrigue of studying human–pet relationships is that the same “projection processes” involved with bestowing friendship on an animal (e.g., divining intentions from behaviors, drawing inferences about intimacy and connectedness in situations filled with inherent ambiguity, trying to ascertain the rationale underlying others’ actions) also operate for people with their human relationships as well. For example, critical relationship forces like love and trust are inferred about people too. This is why we believe there is an important role for social psychologists in understanding constructed relationships such as “my cat is my friend” or “our dog is a family member.” Processes involving expectations, anthropomorphism, theory of mind, and integrating others into one’s sense of self are studied extensively by social psychologists. Accordingly, understanding human–pet relationships not only speaks to important issues such as seeing pets as friends but also informs researchers about how we construct close relationships with people as well.

If human–animal relationships are psychologically constructed, what is the glue? We believe one important element is anthropomorphism, or the degree to which people ascribe human-like qualities to nonhuman agents, ranging from household objects to deities to pets. Several factors increase people’s likelihood of engaging in anthropomorphism, including having beliefs about how an agent could be viewed as possessing human qualities, the need to explain complex events in the environment, and people’s desire to seek out social connection in general (Epley, Waytz, & Cacioppo, 2007). For example, dog owners are more likely to say that their dog “loves them” (an anthropomorphism) when they have relevant beliefs (e.g., I believe that pets experience love toward their owners), are explaining complex events (e.g., my dog always seeks me out when I cry), and desire social connection (e.g., my partner broke up with me, and I felt lonely, and my dog cheered me up). For instance, in one experiment (Epley, Akalis, Waytz, & Cacioppo, 2008), participants were either induced to feel lonely or to feel socially connected through an initial writing exercise. Next, they were asked to describe qualities that dogs possess, with some of them being anthropomorphic traits associated with social connection (e.g., being considerate, sympathetic). Those who were made to feel lonely (rather than socially connected) reported that dogs possess more of these human-like, social connection qualities. In other words, when lonely, people seek out sources of affiliation and are more likely to imbue animals with the qualities necessary to foster social connection. Obviously, many owners anthropomorphize their pets even in circumstances where they do not feel socially isolated (in part because our need for belongingness

is considerable; Baumeister & Leary, 1995), but they are even more likely to do so when they feel socially disconnected.

Some research in our lab has examined factors related to people anthropomorphizing their pets (McConnell et al., 2011). For example, when people feel that their pets are more integrated into their sense of self (i.e., greater overlap between their pet and their self-concept on the inclusion of other in self scale) and when they report that their pets provide them with more support, they anthropomorphize their pets more (i.e., describe their pet as being more sympathetic, thoughtful, and considerate). Moreover, consistent with Epley et al. (2008), we have also found that people anthropomorphize their pets more when they are more depressed and when they tend to be less happy in general (McConnell et al., 2011). Overall, we observed large amounts of anthropomorphism among our pet owners, but these people ascribe human-like traits to their pets more strongly when their need to be socially connected is greater or when they feel more negative emotions.

Another factor related to seeing animals as entities capable of being friends involves people's theory of mind about them. When someone says things like, "my dog knows when something is wrong with me and tries to make me feel better," that person presumes a relatively sophisticated theory of mind about dogs. One way to think about the question of "what entities have minds?" is to consider any given entity (a person, a dog, a robot) in two-dimensional space, where one dimension is experience (has the ability to *feel* pain, joy, embarrassment, etc.) and the other is agency (has the *capacity* to engage in self-control, planning, communication, etc.). For example, adults may be high on both dimensions (feel a lot and have great capacity), whereas children may be high on experience but expected to only exhibit moderate amounts of agency (e.g., challenges with delaying gratification, poor planning). A study conducted by Gray, Gray, and Wegner (2007) found that people have a theory of mind for dogs comparable to babies and chimpanzees (i.e., high experience but lower amounts of agency). This finding is interesting, because although dogs were ascribed less agency than adult humans, seeing dogs as relatively indistinguishable from chimpanzees in theory of mind (primate brains are, in terms of evolution, considerably more advanced than are canine brains) suggests that people's theory of mind for dogs may exaggerate their actual capacities (cats and other common pets were not assessed by Gray et al.). Because of these lay theories of mind about dogs (and probably other highly anthropomorphized pets), people may be well equipped to extend friendship to their pets.

Friendship and Social Support Promote Health and Well-Being

Many positive outcomes result from a sense of interconnectedness, shared experience, unconditional support, and altruism (e.g., Buhrmester, 1996; Buhrmester

& Furman, 1986, 1987; Sullivan, 1953). For example, the close bonds that adolescents experience with their friendships are central to having supportive relationships (Buhrmester, 1996; Chow, Roelse, Buhrmester, & Underwood, 2011; Furman & Buhrmester, 1985), which in turn promote healthy mental and social development (Hartup, 1993). More broadly, social connectedness and support provide benefits ranging from greater self-esteem to longer lives. In terms of physical and mental health, research consistently shows that quality and quantity of social relationships are related to important outcomes such as increased enjoyment of life, reduced cardiovascular disease, lower blood pressure, reduced cancer rates, and lower mortality (Ertel, Glymour, & Berkman, 2009; Everson-Rose & Lewis, 2005; House, Landis, & Umberson, 1988; Rook, 1987). Similarly, feelings of loneliness predict many negative health outcomes such as hypertension (Hawkey, Masi, Berry, & Cacioppo, 2006), poor sleep (Cacioppo, Hawkey, Berntson, et al., 2002), diminished immune functioning (Cacioppo, Hawkey, Crawford, et al., 2002), suicidal behavior (Goldsmith, Pellmar, Kleinman, & Bunney, 2002), and depression (Russell, Cutrona, Rose, & Yurko, 1984). Even temporary periods of social exclusion harm people's sense of belongingness, meaningful existence, perceived control, and self-worth (Williams, 2007).

And when thinking about the role of friends in particular, there is considerable evidence that the social connection and support provided by friendships have meaningful downstream consequences. Research on adolescents finds that social inclusion and greater intimacy (i.e., mutual disclosure and support) in friendships improves well-being and emotional health (Almquist, Ostberg, Rostila, Edling, & Rydgren, 2014; Kenny, Dooley, & Fitzgerald, 2013). Further, friendship attachment security (i.e., feeling that one's friends are positive and dependable) predicts social and emotional benefits (e.g., less distress, greater self-esteem) above and beyond the contributions of parent-child and romantic relationship attachments (e.g., Bartholomew & Horowitz, 1991; Goh & Wilkinson, 2007; Trinke & Bartholomew, 1997).

Animals Provide Benefits for People

Having now described how pets are perceived as meaningful entities possessing the characteristics necessary for social connectedness and outlining how social support generally benefits people, is there evidence that pets provide mental and physical benefits for their owners? The answer to this question is a resounding yes. We now summarize some of the literature showing how owner-pet relationships are beneficial for people and even for their pets. These benefits have been revealed for many individuals, including children, adults, and people facing stigma and serious health challenges.

For example, children growing up with an animal companion experience a range of social and developmental advantages, including greater self-confidence,

self-esteem, and autonomy, compared with children without pets (Van Houtte & Jarvis, 1995). Also, pets can serve the role of a “security blanket” for children, encouraging exploration and confidence while simultaneously decreasing anxiety and fearfulness (Passman, 1977; Passman & Weisberg, 1975). Relatedly, children with a newly adopted dog showed greater confidence and improved behavior (e.g., less arguing, fewer tears) than children in non-pet-owning households (Paul & Serpell, 1996).

Similar to children, adults also experience social support benefits from their pets, with research indicating that pets combat feelings of stress, insecurity, loneliness, and depression (Crawford, Worsham, & Swinehart, 2006; Garrity, Stallones, Marx, & Johnson, 1989; Siegel, 1990). For example, college-aged pet owners revealed greater empathy and greater interpersonal trust than non-pet owners (Hyde, Kurdek, & Larson, 1983). Similarly, research in our own lab found that pet owners, compared with nonowners, had greater self-esteem, reported greater physical fitness and exercise activity, and tended to be less lonely (McConnell et al., 2011). Further, we observed that pet owners had healthier personality characteristics, such as being more conscientious, being more extraverted, and having healthier attachment styles (i.e., less fearful, less preoccupied) compared with nonowners. Moreover, we found that people derived more well-being benefits from their pet relationships as the quality of their human social support was *better*, not worse. In other words, the “crazy cat woman hypothesis” (i.e., the people who get the most benefits from pets are those with poorer human social support) was not observed—indeed, the opposite was found (i.e., people with more healthy human social support enjoyed better social connection experiences with their pets). This is not to say that people with poor human social support (compared with those with better human relations) do not benefit from having animals in their lives (they most certainly do), but these findings indicate that such individuals do not receive qualitatively better benefits from their pets. Overall, among normal adult populations, there is considerable evidence that pet ownership is associated with a variety of positive outcomes and personality attributes that not only help maintain beneficial human–pet relationships but also serve these owners well in having more healthy social connections with their fellow human beings.

In another study conducted in our lab, we tracked 29 community members who visited an animal shelter with an interest in adopting a pet. Ultimately, 15 of them adopted a pet (11 dogs, 4 cats), whereas the remaining 14 people did not. We assessed these community members on a variety of measures (e.g., well-being, personality) at the time they visited the animal shelter, and we followed-up with the adopters approximately 2 months later to assess changes in well-being and their pet adoption experiences (e.g., pet satisfaction, degree to which they anthropomorphized their new pet). There were few factors that distinguished those who adopted pets from those who did not (though admittedly, the sample size was small and all of our participants elected to visit an animal shelter on their own accord and

thus were relatively motivated to consider adopting a new animal), however, we observed several interesting effects among those who adopted pets. For example, pet adopters showed lower depression (comparing their levels of depressed affect at the time they visited the shelter to the follow-up session 2 months later) as they anthropomorphized their pet more ($r = .73, p < .04$) and as they reported greater satisfaction with their pet ($r = .77, p < .03$). Also, pet adopters who reported that their pet was more included in their sense of self (i.e., their pet was more integrated into their self-concept) showed improved happiness following adoption over that 2-month period ($r = .69, p < .05$) and greater satisfaction with their pet ($r = .84, p < .01$), and they anthropomorphized their pet to a greater degree ($r = .71, p < .05$). These findings indicate that the psychological glue that makes human–animal relationships powerful (i.e., anthropomorphism) and allows one to experience a greater social integration of the pet into one’s self-concept was related to better outcomes (e.g., less depression, greater pet satisfaction).

Beyond positive pets-related experiences for children and adults, research has investigated the benefits of pet ownership for populations who are susceptible to feelings of loneliness or isolation. For example, among the elderly, strong pet attachment is related to less depression (Garrity et al., 1989) and in some cases to greater happiness (Ory & Goldberg, 1983). Also, elderly people visited by volunteers with dogs showed a dramatic increase in positive mood after only 2 weeks of these visits, whereas the control group (visited by volunteers without a canine companion) experienced only a small increase in positive mood. With mounting evidence that pets and animal companions reduce stress and improve mood, facilities that may house people with chronic stress or loneliness (e.g., prisons, hospitals) have begun using animals to provide social support (Kaminski, Pellino, & Wish, 2002; Strimple, 2003).

Not only are pets a form of social support in their own right but also they promote socialization with people, increasing owners’ avenues for social support. For example, Wells (2004) found that a female experimenter was more likely to receive positive glances or engage in positive conversations when accompanied by a Labrador Retriever than when she was alone or had another object such as a teddy bear. Interestingly, even when using a highly trained dog to ensure that the dog itself does not solicit attention from passers-by, the mere presence of a dog increases positive interactions between its owner and strangers (McNicholas, & Collis, 2000).

Beyond soliciting friendly glances and conversations, findings from our lab indicate that having a pet can also increase romantic attraction. In one study, 49 female undergraduates were presented with a series of different manipulated photographic images of a man who was, or was not, accompanied by a dog (see Figure 10.1). Participants read innocuous descriptions about each man (e.g., “Ted spends most weekends working on projects around the house”), and image manipulation software allowed us to vary whether any given scene contained a dog with each man shown. After viewing each image and reading the short description, these women rated the man

on dimensions pretested to be associated with romantic attraction (e.g., affectionate, kind) and with nonromantic attributes (e.g., creative, happy) on 9-point scales. As the interaction illustrated in Figure 10.1 shows, women's evaluations of man's romantic attributes, but not his nonromantic attributes, were greater when he was accompanied by a dog than when he was presented without a dog, $F(1,47) = 10.45, p < .01$.

In addition to increasing social interaction and romantic attraction, the social lubricating effect of animals has also been observed for disabled or physically handicapped individuals. For example, an observational study examined the number of friendly glances and conversations children in wheelchairs received as a function of whether or not a service dog was present. The children received more friendly gazes, smiles, and conversations when service dogs were present than when the children were alone (Mader, Hart, & Bergin, 1989), which clearly could have positive implications for people facing stigma because of medical conditions or pejorative societal stereotypes.

Perhaps some of the best-known research investigating the benefits of pet ownership focuses on how pets can produce concrete and meaningful health benefits. For instance, Allen, Blascovich, Tomaka, and Kelsey (1991) asked female undergraduates to complete a stressful task (i.e., difficult mental arithmetic) in the laboratory to obtain a baseline of their performance, and later, these women completed the same task for a second time at home. During this follow-up session, these women were either accompanied by a friend, by their dog, or by no one (control condition). Participants who completed the second stress task with their dogs displayed less physiological reactivity (e.g., lower heart rate and blood pressure) than participants

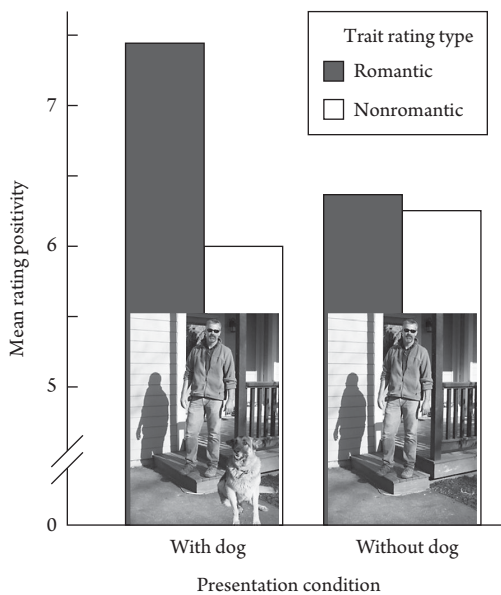


Figure 10.1 Interaction between presentation condition and rating type, revealing that women's ratings of a man's romantic attractiveness is greater when he is accompanied by a dog.

in the other two conditions (friends or control). Critically, pets did not impede their performance. This research suggests pets may be especially useful in times of stress (i.e., providing support without worries of being evaluated by people), producing measurable effects on physiological measures. Relatedly, Shiloh, Sorek, and Terkel (2003) demonstrated that petting an animal decreases people's anxiety in stressful situations (i.e., being in close proximity to a tarantula spider).

Similar stress reduction effects have been observed in naturally occurring stressful life events (e.g., Havener et al., 2001; Nagengast, Baun, Megel, & Leibowitz, 1997). For instance, healthy children undergoing a physical examination exhibited reductions in systolic arterial pressure, heart rate, and behavioral indicators of distress when a dog was present (Friedmann, Katcher, Thomas, Lynch, & Messent, 1983). Havener et al. (2001) reported similar findings involving children undergoing dental procedures, observing that children waiting for the dentist to arrive in the presence of a dog revealed warmer skin temperatures (an indicator of relaxation), whereas children in the control condition had colder skin temperatures (indicative of stress).

It is worth noting that the positive effects of pets on stress management and physiological responses are not limited to healthy individuals. In fact, the advantages of pet ownership may be more pronounced for individuals who are at greater risk for illness or experiencing stressful life events. For example, men diagnosed with AIDS who owned a pet reported less depression than similar men without pets (Siegel, Angulo, Detels, Wesch, & Mullen, 1999). Further, research on elderly Medicare patients found that seniors who owned a pet had fewer physician visits than did patients without pets (Siegel, 1990). Moreover, dog ownership moderated the effect of stress on physician visits. In other words, patients without dogs showed a connection between having more stressful life events and more physician visits, whereas patients who were dog owners did not show this stress-physician visit correlation.

Other research indicates that pets offer value and benefits for those who are at greater risk for cardiovascular disease or heart attack. For example, Allen (2003) randomly assigned stockbrokers with preexisting histories of high blood pressure to either an experimental condition where they adopted a pet (cat or dog) or to the control condition where they did not adopt a pet. In this study, stockbrokers who adopted a pet experienced lower blood pressure levels when under stress than their counterparts who did not adopt a pet. Thus, for people who habitually face stress, the benefits of pet ownership may be especially pronounced. Similarly, research has shown that following heart attacks, pet owners are less likely to die within 1 year compared with those who do not own pets (1% vs. 7%, respectively; Friedmann & Thomas, 1995). Thus, in the most important outcome of all, pet ownership predicted survival.

In addition to observing the benefits of pets for people facing stress and health-related challenges, pets help people through therapy or can even serve as a source of

therapy in their own right. For example, animals sometimes serve as guides for visually impaired people, and research indicates that guide dog owners report increased self-esteem, independence, and socialization compared with similar others without such pets (Sanders, 2000). In addition to the visually impaired, people with hearing impairments who have guide dogs show lower anxiety, depression, isolation, and dependence on others (Guest, Collins, & McNicholas, 2006). Dogs have also been used to improve the lives of individuals with severe ambulatory disabilities (e.g., spinal cord injuries, traumatic brain injury). In an experimental study, Allen and Blascovich (1996) found that patients with ambulatory disabilities who were given a service dog showed well-being improvements (e.g., self-esteem, locus of control) within 6 months, relative to wait-listed control patients. The benefits of these animals can be financial as well as medical. Specifically, Allen and Blascovich estimated that despite the expense of purchasing and training such a dog, the patients in their study would save approximately \$60,000 over an 8-year period as a result of greater personal independence and less paid assistance.

Pet therapy has also become popular with children. For hospitalized children, pet therapy is as effective as traditional forms of play therapy, as it increases positive affect, serves as a distraction, and reduces boredom (Kaminski et al., 2002). Another study involving postoperative children found that these young patients reported less physical and emotional pain after receiving canine therapy (Sobo, Eng, & Kassity-Krich, 2006). Moreover, pet therapy has also been used as a therapeutic technique for autistic children, revealing that incorporating animals into therapy improves language and socialization skills in autistic children better than more standard forms of therapy (Sams, Fortney, & Willenbring, 2006).

Human–Animal Relationships: Everyday Benefits for People and for Pets

Consider the following scenario: After experiencing a horrible day at work, you return home to find a cheerful cat or a playful puppy waiting at the door. Within minutes, all of the stress and negativity of your day seem to melt away and your mood seems markedly improved. Are such experiences genuine or fiction? Research from our lab confirms that such experiences are real (McConnell et al., 2011). In one study, college students who were pet owners came to the laboratory and completed an initial measure of social needs fulfillment (e.g., self-esteem, sense of meaningful existence). Next, based on random assignment to conditions, half of them were asked to recall a time when “they felt excluded or rejected” to induce a social rejection experience or they were asked to recall events from the previous day (control condition). Afterward, all participants completed a second activity where some were asked to write about their favorite pet (pet condition), to write about their favorite friend (friend condition), or to draw a map of campus

(control condition). Finally, they completed the social needs measure again, and a difference score between the two was computed, allowing us to determine how their well-being improved by the end of the study compared with the beginning. As Figure 10.2 shows, participants in the control condition (white bars, who wrote about yesterday) showed no meaningful changes in well-being as a function of the second activity condition. On the other hand, participants who experienced rejection but then drew a campus map (black bar, far right) felt significantly worse at the end of the study, revealing the negative effect on their well-being of recalling a time in their lives when they were excluded. However, those who also experienced rejection but then got to reflect on their pet showed no drop in well-being (black bar, far left), and thinking about their pet was just as effective at warding off feelings of rejection as thinking about their best friend (black bar, middle). This study provides an experimental analog to the example noted earlier about coming home to one's pet after a bad day—indeed, people's pets can improve one's well-being in the wake of negative, self-relevant experiences.

Although we have focused primarily on the benefits for pet owners from human–animal interactions, it is reasonable that pets themselves may benefit from their relationships with people too. Clearly, pets experience material benefits from their relationships with people too. Clearly, pets experience material benefits from their owners, such as food, water, shelter, and medical care. However, just as petting a dog can soothe people's stress, can pets enjoy similar perks too? Indeed, research by Coppola, Grandin, and Enns (2006) found evidence of this bidirectional benefit. Specifically, they examined stray dogs that were brought into animal shelters, which can be stressful environments for these animals. They assayed cortisol (a hormone released in response to stress) from the saliva of dogs, half of which were provided with human contact for approximately 45 minutes (e.g., walking, grooming, tactile

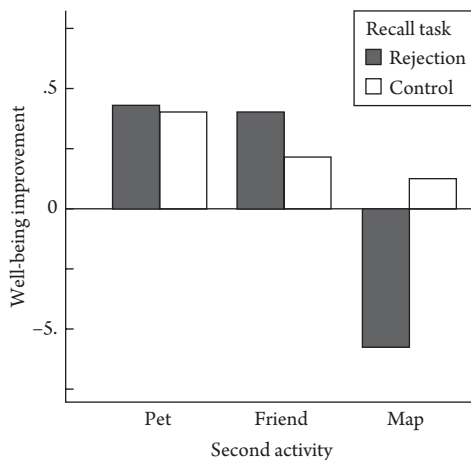


Figure 10.2 Following a social rejection experience (black bars), thinking about one's pet offsets negativity as effectively as thinking about one's best friend.

touch), while the other half of the dogs did not receive human contact. Coppola et al. found that cortisol levels were lower in the dogs provided with human contact than in the dogs without human contact, demonstrating that interactions with people reduced stress in these dogs within 3 days of arriving at the shelter. In a similar fashion, other research has demonstrated that stress reactions in dogs triggered by electric shocks can be eliminated simply by having people pet the dogs after the shocks are administered (Lynch & McCarthy, 1967). Overall, these findings indicate that pets, as well as owners, can benefit from pet–human interactions.

Broader Insights for Our Understanding of Human Nature

In this chapter, we have discussed some of the implications of animal–human interactions, and in particular, considered the social psychological aspects of viewing pets as friends. It is clear that animals play a very meaningful role in people’s lives, however, the fact that a person can characterize an animal from an entirely different species as a family member or as a friend raises a number of interesting questions both with respect to our understanding of friends and family in the psychological literature and to the functions that pets serve for their owners.

Most people anthropomorphize animals and perceive them as having a relatively evolved mind, thereby allowing them to project their own social needs, identity motivations, and societal expectations on these creatures. In particular, people anthropomorphize animals to a greater degree when feeling socially rejected (Epley et al., 2008), reflecting the power of belongingness needs. Moreover, people often project abstract qualities (e.g., love, guilt, sympathy) on their pets even though many such capacities are beyond animals’ capabilities (Horowitz, 2009). Although viewing pets as friends is a social construction, our position is that such relationships are no less real because of it. Other socially constructed relationships, such as people’s perceptions of their own family and their basic properties, are idiosyncratic as well (McConnell, Shoda, Lloyd, & Skulborstad, 2015). Thus, the qualities that people ascribe to their human friendships and relationships, such as love, support, and trust, are inferential leaps too.

We believe that imbuing animals with relatively sophisticated capabilities (e.g., anthropomorphizing them) starts with critical assumptions regarding their mental and emotional capacities. Work on theory of mind (e.g., Gray et al., 2007) has shown that a variety of species (e.g., people, dogs, chimpanzees, frogs) vary with respect to experience (i.e., their ability to feel) and agency (i.e., their ability to plan). In our view, the potential of animals to provide empathy for people (i.e., qualities associated with social anthropomorphism; e.g., Epley et al., 2008; McConnell et al., 2011) requires viewing them as possessing a relatively strong degree of experience relative to agency (though greater agency may equip animals with the ability to anticipate people’s

needs better). Thus, we would anticipate that animals viewed as greater in experience (theory of mind) will be better candidates for being viewed as possessing empathy and concern (anthropomorphism). This is not to say, however, that perceptions of animal agency are irrelevant. For example, people who assume service animals possess considerable agency may view support animals as more effective. Thus, we believe that understanding how service animals are perceived to assist people (e.g., emotional support, helping physically challenged people navigate their environments) may start with more basic assumptions about the capabilities that people presume that these animals possess, and this is an area that awaits future research.

In addition to understanding the implications of the basic mental and emotional capacities that people assume animals possess, additional work is needed to understand how human–animal interactions improve lives. In reviewing the literature, we described a number of ways that pets enhance people’s mental and physical health. These effects have been documented with children, with adults, and with people facing significant health challenges. The latter findings are especially noteworthy in that pets may very well play a role in reducing depression among people with AIDS or in decreasing mortality among people who suffer heart attacks (Friedmann & Thomas, 1995; Siegel et al., 1999). Although some of this evidence is correlational in nature, there is also a compelling collection of creative experimental studies that help establish the causal role of pets in benefiting people (e.g., Allen, 2003; Allen & Blascovich, 1996; Epley et al., 2008; McConnell et al., 2011). For example, work from our lab has shown that pets have implications ranging from increasing the romantic attractiveness of potential mates (Figure 10.1) to neutralizing the negativity that results from social rejection experiences (McConnell et al., 2011). Further, not only do human–animal relationships appear to benefit pet owners but also even simple human–pet interactions produce positive consequences for animals as well (e.g., Coppola et al., 2006).

Although the benefits of animals for children, the elderly, the emotionally distraught, and the physically impaired are well documented, other populations might benefit from interactions with animals as well. For example, it seems likely that socially anxious people may enjoy benefits from pet ownership in ways that help them negotiate their anxieties. Specifically, people with social anxiety often are fearful of interactions with other people, and they are particularly fearful of negative evaluation or rejection (American Psychiatric Association, 2013). For socially anxious people, animals may provide a source of affiliation that is nonevaluative and nonthreatening, allowing them to reduce their sense of loneliness in circumstances that do not evoke concerns about being judged. In other words, people who view pets as sources of unconditional love may find a social companion that does not trigger concerns about being evaluated or about being socially rejected. As noted earlier, people enjoy many physiological and psychological benefits from pets that help them deal with anxiety, and having a friend who is perceived to be nonjudgmental and wholly accepting may be especially valuable to people struggling with social anxiety. Indeed, returning to

our theorizing about how anthropomorphism and theory of mind underlie many of the positive consequences produced by human–animal interactions, having a service animal such as a dog may offer anxious people a companion with the presumed capacity to feel empathy (i.e., relatively greater experience) that at the same time seems relatively incapable of judging them (i.e., relatively little agency). Although there have not yet been systematic investigations involving the benefits of pet ownership for people who are socially anxious, the Americans with Disabilities Act includes animals that calm a person during an anxiety attack or anxiety-provoking event as “service animals” (United States Department of Justice, 2011). We believe that additional work with populations who find social interactions challenging (e.g., socially anxious people, stigmatized individuals) is needed to explore how pets can help supplement (though certainly not replace) social support for people who may find human interactions more taxing or limited.

In sum, the socially constructed nature of human–pet relationships underscores the power of expectation, beliefs about theory of mind, and social belongingness needs in determining people’s happiness, health, and well-being. Animals can serve as important resources for people in roles including friend, assistant, therapist, and family member. It is clear that when we project capabilities on animals such as theory of mind and anthropomorphism, we empower them to provide us with significant social support and meaning. As social resources, animals are associated with an impressive range of positive health and well-being benefits. Reflecting on the nature of human–pet relationships encourages psychologists to reexamine fundamental questions such as “What is a friend?” or “What is family?” After all, if a member of a different species can be considered a member of one’s family, perhaps the classic attributes in many definitions of family (e.g., blood relations) fail to adequately capture the key elements of what truly defines such a powerful in-group. In studying human–animal interactions, we not only understand more about the ways that animals impact and improve our lives but also discover more fundamental truths about important elements of our own humanity, including the building blocks of friendship, family, and love. Thus, it is no wonder that people confide in their pets, take them on family vacations, and are devastated by their deaths. When animals become friends, people’s connections with them can be as deep and as meaningful as any other relationship in their lives.

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PART III

FRIENDSHIP AND CONFLICT

The Aftermath

Friendship After Romantic Relationship Termination

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Introduction

Consider two scenarios based on true stories (with names changed). In the first scenario, Ann and Andy have been dating for several weeks. Eventually Ann begins to have romantic feelings for one of their mutual friends, so she ends her romantic relationship with Andy but states that she still cares for him and wants to remain friends. Andy is so distressed by the breakup that it interferes with his academic performance. He avoids Ann and tells her to stay away from him even though they both attend the same university and have many mutual friends. Their friends do not take sides in the conflict. After several months, Andy feels more comfortable around Ann, although their relationship is awkward and they never form a close ex-partner friendship. In the second scenario, Barbara and Bart have been married for several years. They realize that the marriage is not working and decide to divorce. They discuss the divorce amicably and decide, without the help of lawyers, how their possessions will be divided and the custody arrangements for their children. They remain close friends even years after the divorce, and each one is always available if the other needs help. Their families are very supportive of their friendship.

These scenarios are a sampling of the wide range of possible outcomes in the friendships between ex-romantic partners and the potential importance of intrapersonal (e.g., partners' positive and negative affect), dyadic (e.g., disengagement processes, transitions), and social network (e.g., influence of family and friends, new partner) factors. Although many partners claim to desire friendship with their ex-partners, ex-partner friendship is a fairly rare phenomenon, only occurring approximately 10% of the time (Buunk & Mutsaers, 1999; R. S. Weiss, 1975). Despite being uncommon, however, some ex-partners become very good or even

best friends (Ahrons & Rodgers, 1987). In this chapter we review the intrapersonal, dyadic, and social network factors involved in the development (or lack thereof) of ex-partner friendships.

Intrapersonal Factors

Intrapersonal factors include sets of cognitive and affective within-person variables such as individual differences, expectations, motivations for remaining friends after a romantic relationship breakup, and hope for romantic reconciliation. These factors may be examined in one or both ex-partners and might influence the effects of dyadic and social network factors on the ex-partner relationship outcomes.

Individual Differences

Staying friends can be difficult because many people lack a mental model, or script, for the expected behaviors in ex-partners' interactions. Even though individuals may need to develop their own relationship scripts for their ex-partner friendship (Foley & Fraser, 1998; O'Meara, 1989), there are a few common elements that can lead to successful postrelationship friendships. First, partners must overcome any unresolved feelings of loss and grief, including any anger and bitterness experienced during the course of the romantic relationship (Langhinrichsen-Rohling, Huss, & Ramsey, 2000; Wallerstein & Kelly, 1980). Relinquishing negative feelings and forgiving the former partner may lead to stronger levels of satisfaction, commitment, and closeness that are vital to the success of any friendship (McCullough et al., 1998). In reality, many former partners are not able to overcome their negative feelings once the romantic relationship is dissolved, and these persons join the majority of former partners who do not have any type of postdissolution friendship. There are inconclusive findings about gender, initiation of breakup, and future friendship, and some of those findings may be related to negative feelings after the breakup. Some researchers claim that it is better for the friendship when men are the initiators (Hill, Rubin, & Peplau, 1976) but others report that it makes no difference (Wilmot, Carbaugh, & Baxter, 1985). Hill et al. (1976) found that men suffered more negative emotions than women after a breakup, but Wilmot et al. (1985) found that gender was not related to differing emotional reactions.

Second, the individual difference of goodwill has been found to predict postdissolution communication satisfaction (Lambert & Hughes, 2010) and is composed of understanding the other's feelings, needs, ideas, empathy, and the responsiveness to the other's communication efforts (McCroskey, 1992; McCroskey & Teven, 1999). Ex-partners who need to communicate with one another (e.g., because of shared investments such as children) may be more likely to stay friends if they express higher levels of goodwill toward their ex-partner.

Expectations

Expectations about the future of a relationship have an impact on attention, encoding, memory, thoughts, and affect related to that relationship (Olson, Roese, & Zanna, 1996). For couples who mutually agree on a future friendship, expectations about the new relationship can be important. These expectations not only include the belief that they can be friends after the romance has ended but also the expectation of how the relationship may progress before and during the breakup. Postrelationship friendship is less likely to occur if individuals expected a difficult and painful breakup from their romantic partners. However, if they believed that the adjustment period would be easier, then they anticipated maintaining contact with their ex-partners (Boon, Griffith, & Nairn, 2004).

Motivations for Remaining Friends After Dissolution

Ex-partners may have different motivations for remaining friends after breakup. Such motivations may include hope for romantic reconciliation and developing a harmonious ex-partner relationship. Past research suggests that former romantic partners may maintain interdependence for functional reasons such as having a shared workplace or coparenting responsibilities (Adamsons & Pasley, 2006). This research was expanded in 2009, when Bullock, Hackathorn, Clark, Mattingly, and Dawkins identified five broad categories that explained motivations to remain friends following a breakup, including the categories of relational interdependence (i.e., still feel a connection to the ex-partner), shared tangible interests (e.g., shared finances, property, furniture, etc.), shared social networks (e.g., share friends, fond of ex-partner's family), ease of remaining friends (i.e., remaining friends makes breakup easier), and personal agenda (e.g., romantic reconciliation, revenge). Agenda (e.g., romantic reconciliation) is an especially interesting motivation to remain friends and additional research is reviewed in the following sections.

Hope for Romantic Reconciliation

Some ex-partners maintain a friendship in the hope of renewing the romantic relationship. In fact, many individuals reconcile with their ex-partners and become involved in "on-again-off-again relationships," in which ex-partners decide to rekindle a past relationship (Dailey, Pfister, Jin, Beck, & Clark, 2009). A friendship is one way that individuals can maintain contact with and stay relevant to an ex-partner with whom they still desire a romantic relationship. Ex-partners who remain friends, compared with those who do not, are more likely to desire their ex-partner and think that their ex-partner still desires him/her (Schneider & Kenny, 2000). Desirability of the former partner or relationship facilitates the likelihood of ex-partner friendships, and the perception of desirable personality traits of the

ex-partner increases the strength of the friendship (Banks, Altendorf, Greene, & Cody, 1987; Schneider & Kenny, 2000). Ultimately, if ex-partners remain friends because they still desire each other, those lingering feelings and missing the ex-partner will generally lead them to reconcile (Dailey, Jin, Pfiester, & Beck, 2011).

The partner who chooses to end the relationship employs certain dissolution strategies that are associated with both maintaining a friendship and reconciling the romance. When individuals break up with their partners in a way that implies there may again be a future romantic relationship, they are more likely to remain friends, especially if the ex-partner was perceived as desirable (Banks et al., 1987). The dissolution strategies employed by individuals who want to remain friends mirror those used by individuals who also eventually reconcile (Dailey et al., 2011). These individuals tend to leave the possibility of reconciling the relationship open and justify the reasons for the dissolution (Dailey et al., 2011). Therefore, the intentional ambiguity of the dissolution and redefining the relationship as a friendship leaves greater uncertainty about the future status of the relationship, allowing for the possibility of reconciliation. Interestingly, post-dissolution friendships are also more likely if the ex-partners are still attracted to each other, perhaps because they still want to engage in activities such as having a sexual relationship without a long-term commitment (Banks et al., 1987). Thus, the possibility of romantic reconciliation may increase the likelihood of ex-partners being friends after breakup.

Despite a desire to renew the relationship, not all aspects of reconciliation are positive. Some individuals desire to romantically reconcile with their partners because they perceive a lack of alternatives and do not want to be alone (Dailey et al., 2011). These reasons may not eliminate the problems within their romantic relationships that contributed to the dissolution in the first place. The more times individuals romantically renew and reconcile their relationships, the lower the positive aspects in their relationships (e.g., satisfaction, commitment) and the higher the negative aspects (e.g., aggression, ineffective conflict, relational uncertainty), contributing to an overall more negative perception of the relationship (Dailey et al., 2009). Therefore, even though ex-couples may become friends as a means to eventually reconcile, this continued attachment might lead to greater emotional maladjustment (Fagundes, 2012). The various intrapersonal factors that can lead to friendships between ex-partners demonstrate the complex interplay between individual differences, the expectations surrounding the relationship (romantic or friendship), and the motivations that drive the desire to remain friends.

Dyadic Factors

In addition to each ex-romantic partner's approach to the dissolution and friendship, certain aspects of the relationship itself are also important in determining whether a friendship will persist. Dyadic factors are those variables relevant to ex-partners

as a (former) couple. Prior research has explored pre-romance satisfaction and friendship, romantic relationship disengagement strategies, post-dissolution contact, communication, interdependence, trajectories/transitions, boundaries, and rules in ex-partner relationships. It is important to keep in mind that the effects of these factors on ex-partner friendship outcomes might be mediated or moderated by intrapersonal factors or social network factors.

Preromance Friendship and Satisfaction in the Dissolved Romantic Relationship

One dyadic predictor of postdissolution friendship is whether there was a friendship prior to the formation of a romantic relationship. Ex-partners are more likely to be friends after romantic relationship dissolution if they were friends before the romance evolved than if they were not friends before the romance developed (Metts, Cupach, & Bejlovec, 1989; Schneider & Kenny, 2000). These ex-partners can refer to their friendship scripts prior to being romantically involved, which can facilitate the transition from a romance back to a friendship (Schneider & Kenny, 2000). As already noted, partners may lack friendship scripts and therefore must develop one as the ex-partner friendship progresses.

One barrier to postdissolution friendship is disagreement on the desired definition of the new relationship (Monsour, Harris, Kurzweil, & Beard 1994; O'Meara, 1989). As men's same-sex friendships seem to be less emotionally intimate (Pleck, 1975; Rubin, 1985) and women's same-sex friendships tend to emphasize the emotional bond of love as a significant aspect of their relationships (Barth & Kinder, 1988; Caldwell & Peplau, 1982), it is not surprising that heterosexual couples trying to redefine a previously romantic relationship into a friendship may face obstacles, especially when the existing norms for cross-sex friendships are already ambiguous (Lauer & Handel, 1977; O'Meara, 1989).

Satisfaction in the dissolved romantic relationship is another predictor of postdissolution friendship satisfaction. Bullock, Hackathorn, Clark, and Mattingly (2011) found that the more satisfied individuals were during the dissolved romance, the more likely they were to be friends and engage in friendship maintenance behaviors (positivity, supportiveness, openness, interaction) with their ex-partner. In addition, they found that friendship maintenance behaviors mediated the association between past romantic satisfaction and friendship satisfaction, suggesting that if the romantic relationship is satisfying, then it is more likely that the couple will engage in friendship maintenance behaviors, which makes the postdissolution friendship more satisfying (Bullock et al., 2011).

Romantic Relationship Disengagement

Disengagement strategies employed during romantic breakup may impact perceptions of relational partners (Krahl & Wheelless, 1997). The research findings on the

disengagement strategy of positive tone (attending to the feelings of the partner to avoid ending the relationship unpleasantly; Lambert & Hughes, 2010) are inconsistent. Some research finds that couples who used positive tone throughout the dissolution conversations were more likely to remain friends after breakup compared with those who used less positive communication strategies, such as avoidance or withdrawal. In contrast, Banks et al. (1987) found that positive tone was unrelated to remaining friends; although the strategy of using positive tone is perceived as more emotionally empathetic, it does not leave open the possibility of a future relationship. Interestingly, Lambert and Hughes (2010) found that positive tone predicted less postdissolution relationship communication satisfaction. Positively toned disengagement strategies may sound insincere to someone who is also being told that he/she is no longer a desirable romantic partner and such perceptions of insincerity may negatively impact future interactions with a former romantic partner (Lambert & Hughes, 2010). Such mixed findings illustrate the need for additional research to better understand the effect of positive tone on postdissolution relationships. Taken together, the results indicate that the use of particular disengagement strategies can influence how individuals perceive communication with their partner after the relationship has been terminated (Lambert & Hughes, 2010).

Banks et al. (1987) also examined the role of disengagement strategy selection and whether the strategies contributed to the postdissolution friendship. Results revealed that individuals were more likely to remain friends with ex-partners if they communicated their emotions while leaving the possibility of a future relationship open and were less likely to remain friends if they used the justification (providing reasons or rationalizations for the breakup) or avoidance (avoiding without explanation) tactics. Lambert and Hughes (2010) found that neither justification usage nor communicating the advantages of changing the relationship but alluding to the possibility of resuming the relationship in the future was significantly correlated with postdissolution communication satisfaction. However, they found that avoidance without explanation was related to higher postdissolution communication satisfaction. The differences in the results of Banks et al. (1987) and Lambert and Hughes (2010) may be due to the difference in outcome variables—staying friends as compared with postdissolution communication satisfaction, respectively. As noted earlier, Bullock et al. (2009) also suggest that friendship is more likely when there is a possibility of rekindling the romantic relationship. These results illustrate that how people choose to communicate intentions to disengage from a romantic relationship can affect the likelihood of postdissolution friendship.

Negative disengagement strategies—for example, withdrawal—may lower the quality of the friendship following a breakup (Banks et al., 1987; Metts et al., 1989). Further research supports these findings by showing that the disengagement strategy of neglect (behavior that is passive but destructive to the relationship, such as avoiding interaction) negatively impacts friendship, and the use of exit (behavior that is active and destructive to the relationship such as abuse or leaving the relationship)

as a disengagement strategy predicts poor friendship quality (Busboom, Collins, Givertz, & Levin, 2002).

Mutual desire for disengagement also influences postdissolution relationships. If both partners mutually decide to breakup, the likelihood of being friends increases (Hackathorn, Clark, Mattingly, Bullock, & Weaver, 2008). This outcome may be related to the feelings partners have for one another at the time of breakup. For example, if both partners believe that the breakup was for the best and neither partner feels particularly disparaged, then the feelings between them may be more positive. However, if only one partner desired the breakup, then the other may experience hostility and anger that can negatively impact future reconciliation, whether as friends or romantic partners.

Postdissolution Dyadic Contact and Communication

Former partners' communication styles and exchanges also influence postdissolution relationships. Ex-partners who use a disputing communication style (for example, when couples argue about, rather than discuss, important issues within the relationship) often view each other as more hostile and obstructed, thus making any kind of friendship difficult (Issacs & Leon, 1988). In contrast, former partners who have exchanges involving self-disclosure consider each other more reliable and trustworthy (Lambert & Hughes, 2010), which may be beneficial to a postdissolution friendship. Additionally, when ex-partners communicate in a way that generates feelings of understanding, empathy, and responsiveness, they report increased satisfaction in their communication. Therefore, interactions between ex-partners can greatly affect perceptions of one another and the possibility of a friendship.

The level of dyadic contact can vary depending on the sexual orientation of the couples. For example, Lannutti and Cameron (2002) found that homosexuals indicated a moderate amount of interpersonal contact in their postdissolution relationships while heterosexuals reported low amounts of interpersonal contact in their postdissolution relationships. For homosexual couples, the less time since the breakup, the more the ex-partners shared a social network, the higher the perceived uniqueness of the relationship (e.g., perceiving the ex-partner as unlike most people in their life), and the more the person liked the ex-partner, all positively predicted the amount of interpersonal contact in the postdissolution relationship. For heterosexual couples, the extent to which the participant had personal norms for break-ups (e.g., prior experience staying friends with ex-partners, feeling it is important to stay friends), hoped for romantic renewal, and liked the ex-partner, predicted more interpersonal contact. These results highlight the influence of personal variables on dyadic contact in postdissolution relationships in both homosexual and heterosexual samples. It has been suggested that such personal variables are extensions of the aspects that initially attracted the couple to the romance and that these personal

variables continue to be predictors of dyadic contact following romantic dissolution (Lannutti & Cameron, 2002).

Villella (2010) expanded on Lannutti and Cameron's (2002) research and found that heterosexuals who were not currently in a romantic relationship were more likely to communicate with their ex-partners at least once a month, while those who were in a current romantic relationship were more likely to communicate with their ex-partners less than once a month or not at all. Further, for those who were not involved in a new romantic relationship, more communication was initiated by both parties and fewer respondents reported that they did not communicate with their ex-partners. Contrary to their hypotheses, breakup initiators did not attempt to communicate with their ex-partners less frequently than noninitiators.

Interdependence in Postdissolution Friendships

Dependence level is "the degree to which each of two interacting individuals needs their relationship, or the extent to which each individual's personal well-being rests on involvement in the relationship" (Agnew, Van Lange, Rusbult, & Langston, 1998, p. 940). The level of interdependence should change after a relationship is terminated, as ex-partners go through a process of redefining the self from a "we" to an "I" (Vaughan, 1986). Former partners who become friends, however, are thought to never reach the final uncoupling stage, because while their identities are no longer tied to the relationship, they are still dependent on one another (Foley & Fraser, 1998).

Dependency in any relationship is affected by the rewards and costs provided by the partner and by possible alternative partners (Agnew et al., 1998). A romantic relationship is often terminated when the perceived costs outweigh the rewards or if one or more partners believe they will have better outcomes with alternative relationships. When former partners remain friends, however, there must still be a possible favorable outcome of the cost-reward ratio. Busboom et al. (2002) found that the resources partners retained from their romantic relationship carry over to their postrelationship friendships. Partners who perceived a higher level of resources as opposed to costs also reported having a higher quality of friendship and higher levels of satisfaction with their former partner and new friendship. The more resources ex-partners perceive, the more likely they are to have a friendship after the romantic relationship has ended.

The investment model (Rusbult, 1980) builds off of interdependence theory by suggesting that dependency is additionally affected by satisfaction, investment, and possible alternatives in a relationship. These three components produce the experience of commitment, which then leads to the shared identity of "us" or "we" as opposed to the singular "I" or "me" (Agnew et al., 1998; Arriaga, Agnew, & Rusbult, 1997). The strength of the association between the investment model variables and interdependence in romantic relationships is strong and relatively well established.

Less is known about the relationship between these variables in ex-partner friendships. Lin and Rusbult (1995), however, suggest that the pattern can be seen across any type of friendship, but is strongest in romantic relationships. This may be due to the different level of exclusivity between romantic relationships and friendships or the different rules and scripts for each type of relationship (Agnew et al., 1998). Schneider and Kenny (2000) reported that participants engaged to a lesser extent in the rules of friendships (e.g., share news and success, show emotional support) in ex-romantic partner friendships than in platonic friendships. Further, they reported fewer benefits (e.g., have fun and relax with this friend) and more costs (e.g., you feel irritated when you are with this friend) in ex-romantic partner friendships than platonic friendships, suggesting lower levels of interdependence in ex-romantic partner friendships (Schneider & Kenny, 2000).

Trajectories/Transitions of Postdissolution Friendship

It is important to consider the trajectories of romantic relationships to ex-partner friendships. The inclusion-of-other-in-the-self literature (IOS; Aron, Aron, & Smollan, 1992) suggests that individuals in an intimate relationship perceive overlap in their self and the self of their partner. Consequently, individuals must redefine themselves during the process of uncoupling (Foley & Fraser, 1998). The shift may include a stage of private redefinition of the self as being independent from the other, followed by a redefinition of the selves that occurs between the partners. Lastly, a public stage of redefinition is completed with the couple's family and friends (Vaughan, 1986).

Some research has examined the trajectories of post-breakup as a series of "turning points." Turning points are considered to be a valuable analytic tool, as they indicate the commutative and developmental nature of the relationship (Baxter & Bullis, 1986) and are able to describe a complex progression of the postdivorce process (Graham, 1997). Two examples of these turning points in a postdivorce relationship are "well-functioning binuclear family" and "dysfunctional former spouse relationship." According to Graham (1997), these trajectories may be satisfying or dissatisfying and are initiated, maintained, redefined, and formulated primarily through communication. Although there are at least five different trajectories post-divorce, the most frequently identified turning point was the well-functioning binuclear family (Graham, 1997). This suggests that individuals made an effort to have a relationship in which they could mutually define their new roles, successfully coparent, and jointly address children's needs. In postdissolution nonmarital relationships, on the other hand, Koenig Kellas, Bean, Cunningham, and Cheng (2008) found that the most frequently reported turning point was a negative redefinition of the relationship resulting from an argument, unrequited negative advances by an ex-partner, or harassment. Positively redefining a relationship resulted from social support, cathartic talks, and becoming friends (Koenig Kellas et al., 2008).

Boundaries and Rules of Postdissolution Friendship

As noted earlier, couples often lack scripts to help them navigate their newly defined relationships (O'Meara, 1989). The ex-partners who become friends may experience awkward transitions related to physical interactions that may have become routine in their romantic relationships, such as hugging and kissing (Foley & Fraser, 1998). The symbolic meaning of the physical acts must be defined (O'Meara, 1989), and such definitions are often only implied instead of explicitly stated (Metts et al., 1989).

If physical relations are continued, the lack of obvious rules when the physical relationship is terminated may leave ex-partners feeling hurt and confused, which may result in one partner feeling abandoned a second time (Isaacs & Leon, 1988). However, individuals who establish more practical (discuss children, daily events, practical problems) rather than personal (discuss personal problems, possibly the relationship) boundaries for their friendship experience more postdissolution adjustment. Practical discussion was related to a lower somatization and lower overall psychological disorder symptomology. The authors suggest that this style may promote better mental health because it emphasizes discussing practical matters rather than personal problems with the ex-spouse (Isaacs & Leon, 1988). Some other challenges to creating boundaries in postromantic friendships include equity issues (Paine, 1974; Rawlins, 1992), which traditionally involve an unequal distribution of resources between males and females (Lipmen-Blumen, 1976). Ex-couples must also negotiate public performances and perhaps even overcome potential rumors or attributions of suspicious others. These rumors or attributions result from many people having been socialized to disbelieve that men and women can be friends without a sexual relationship or the desire for a sexual relationship (Rawlins, 1982). The attributions of others are important to the role of the social network in ex-partner relationship development.

Social Network Factors

Even though a friendship is generally developed and maintained between two people, the social context in which a friendship is formed is especially crucial for ex-romantic partners. The social network of the couple, as either a resource or obstacle, plays a critical role in predicting the likelihood and quality of postdissolution friendship. One's social network might include family, friends, colleagues, classmates, neighbors, church members, and other contacts, including online contacts (e.g., Facebook friends). Social network factors may moderate the effects of intrapersonal and dyadic factors on ex-partner friendship quality. Introducing new romantic partners into the situation can present a unique challenge for ex-romantic partners. Further, the presence of children can determine whether a friendship is likely to form.

Social Network

The process of uncoupling takes place in a social and cultural context (LaGaipa, 1982), and social networks are likely to be part of an individual's change of identity following a breakup (Greif & Deal, 2012). For example, Kalmijn and Broese van Groenou (2005) found that divorced individuals had more contact with their friends than their married counterparts. The authors suggested that divorced individuals wanted to make up for the loss of their primary relationship by reestablishing their social identity with others.

Although some family members may offer support of a postdissolution friendship, others may negatively influence the relationship. Foley and Fraser (1998) offer qualitative accounts of such rejection from families. For example, they describe one individual whose parents, friends, and priest thought the relationship was a bad idea and the individual's family even threatened to withhold financial support for college. A continued friendship under such conditions would be difficult. Some individuals may feel they need to end the friendship with their ex-partner to comply with the social network because the network's social support is a valuable resource after a breakup (Greif & Deal, 2012). When ex-partners continue a friendship without social approval, some resort to keeping their friendship secret because they fear the social network's condemnation (Foley & Fraser, 1998). Ultimately, the network's lack of support can discourage some partners from maintaining a friendship with their ex-partner or further complicate remaining friends.

As noted, the social network does not always disapprove of ex-partner friendships, and their support can facilitate the postdissolution friendship (Foley & Fraser, 1998). Some network members might want the network to remain intact, and supporting the ex-partners' continued friendship might mean that they could avoid choosing between them. Some network members might also support the friendship in hopes that the couple will renew their romance, restoring the original network structure. Whatever the specific reasons for the network to support the friendship, their approval can help ex-partners navigate their new relationship status on their own terms.

Nevertheless, ending a relationship with a partner who shares a social network can be problematic. The greater the number of friends that ex-partners share, the more interpersonal contact they have with each other post-dissolution (Lannutti & Cameron, 2002). This network overlap constrains the types of tactics individuals use to disengage from their relationships, perhaps in an attempt to avoid hostility between each other if they remain connected through friends. Individuals with large network overlap tend to use more positive tone and deescalation strategies to disengage, expressing regret and empathy and leaving the prospect of a future reconciliation open (Banks et al., 1987). Thus, individuals may take into consideration that they will continue to see their ex-partners through their social network, and employ strategies that demonstrate sensitivity to their partner's feelings.

New Partner

The presence of a new relationship partner can have a significant impact on a friendship between former romantic partners. Individuals who begin a new romance are less likely to remain friends with an ex-partner, and if they do remain friends, the new romance has a negative impact on friendship quality (Brumbaugh & Fraley, 2014). With the presence of a new partner, the ex-partners initiate contact less frequently and have less overall contact, because the newly attached partners may no longer need the benefits provided by communicating with former partners. They can obtain such benefits from their new partners and they are less attached to their dissolved relationship than the other partner. Therefore, it is likely that the less attached partner will communicate less frequently (Foley & Fraser, 1998; Villella, 2010). Additionally, despite the end of the romance, the abandoned ex-partner is more likely to favorably view reconciliation and have a favorable implicit attitude toward his/her ex-partner until a new partner displaces that association (Imhoff & Banse, 2011). In turn, ex-partners remain in each other's lives because their roles are unfulfilled by someone else. A new relationship partner can satisfy a partner's need for intimacy and facilitate the emotional detachment from the ex-partner (Spielmann, MacDonald, & Wilson, 2009), perhaps better than the mere passage of time (Imhoff & Banse, 2011).

Not all new relationships prompt former partners to sever ties with an ex-partner, however, especially when the new relationship is initiated shortly after the dissolution. Brumbaugh and Fraley (2014) found that individuals in a "rebound relationship," a relationship initiated before feelings for the former partner are resolved, reported a greater degree of contact with a former partner than those who waited longer to date. Furthermore, those who initiate relationships more quickly tend to compare their current partner with their former partner more frequently, perhaps because perceiving similarities between them may provide them with a sense of stability.

The new partner often tolerates his or her partner's friendship with the ex-partner if they perceive it as solely a friendship (Buunk & Mutsaers, 1999). Nevertheless, other new partners may be wary that the relationship is only a friendship, given the frequency of partner reconciliation (Dailey et al., 2011). Therefore, the new partner may also encourage the termination of the friendship in an effort to cease their partner's emotional attachment to the ex-partner. Despite sometimes being an obstacle to the ex-partner friendship, a new partner may be valuable in overcoming the dissolution of the romantic relationship, and individuals who begin to date demonstrate greater emotional adjustment than those who remain single (Brumbaugh & Fraley, 2014; Imhoff & Banse, 2011; Rhoades, Dush, Atkins, Stanley, & Markman, 2011).

Presence of Children

Somewhat counterintuitively, the presence of children from former romantic relationships is related to lower postbreakup friendship (Buunk & Mutsaers, 1999;

Ganong & Coleman, 1994; Masheter, 1991). Coparenting after a divorce or breakup may be the cause of strife in a relationship and may lower the possibility of having a good friendship (Buunk & Mutsaers, 1999; Ganong & Coleman, 1994; Masheter, 1991). Perhaps the necessarily collaborative nature of coparenting after a breakup may be one more barrier to high-quality friendships for those involved. However, this outcome may depend on the types of communication the former partners use regarding their child, as more positive forms of communication can lead to friendlier interactions, even though these interactions are not necessarily indicative of an actual friendship (Isaacs & Leon, 1988).

Discussion

Many people consider friendship with an ex-romantic partner after relationship dissolution as desirable, fewer make it happen, but some become best friends. Not only are there many factors involved in the formation of ex-partner friendships, but these intrapersonal, dyadic, and social network factors interact in complex ways to determine the type of relationship that one has with an ex-partner.

Future Research

In the area of intrapersonal factors, the ex-partner friendship research needs to address some basic demographic variables. For example, future research needs to better distinguish between friendships of dissolved dating relationships and dissolved marital relationships as well as explore nonheterosexual ex-partner friendships. Various religious and legal issues, as well as commitment and relationship duration variables, underlie possible differences between these demographic groups. Further, when examining demographic differences, it is often helpful to also examine moderators (e.g., under what conditions are there differences between ex-dating and ex-married partners) and mediators (e.g., what are the underlying mechanisms that explain the differences between ex-married and ex-dating partners). In addition, more research is needed on the positive (e.g., feel a connection) and negative (e.g., revenge) motivations to develop (or not) friendships with ex-partners and the influence of those motivations on the satisfaction, commitment, and communication on the future of the ex-partner relationship (Adamsons & Pasley, 2006; Bullock et al., 2011).

More dyadic research is needed on ex-partner friendships with data collected from both ex-partners. Many methodological and statistical advancements have been made in collecting and analyzing dyadic data (Kashy, Campbell, & Harris, 2006). For example, dyadic research can examine similarities and differences across a wide range of both persons' perceptions and experiences and how they relate to relationship outcomes (Wittenborn, Dolbin-McNab, & Keily, 2013).

More research is needed on the social network, both as a cause of and an effect on the ex-partner friendship. For example, researchers should examine the heterogeneity within the social network. Some of an ex-partner's social network (e.g., family, friends) may support the friendship (or lack thereof), others may oppose, and still others may be indifferent. In addition, the theory of reasoned action/planned behavior concept of subjective norms may be useful (Fishbein & Ajzen, 1975; 2010). The approach involves defining a subjective norm as a product of the individual's perceptions of referents' (family members, friends) attitudes about the ex-partner friendship and the individual's motivation to comply with each referent on the issue (Fishbein & Ajzen, 1975, 2010).

Finally, more longitudinal research would greatly improve our understanding of intrapersonal, dyadic, and social network factors. Most studies of friendship following breakup are cross-sectional, and many rely on retrospective self-reports. It would be beneficial if researchers could follow a romantic couple from their intact romance through the dissolution of the relationship, and continue to follow them post-dissolution. This would provide an increased understanding of how these relationships progress and the complex interplay of factors that guide the postdissolution relationship.

Implications for Therapy

While we strongly support the need for more basic research, it is apparent that ex-partner friendship research has applied implications. Therapy can help the individual or the dyad cope with intrapersonal, dyadic, and social network obstacles to developing a healthy ex-partner relationship. Seligson (1991) describes therapy that helps ex-partners, who attend therapy together, explore the consequences of their behaviors and the ex-partner's reactions. Therapy can also help ex-partners improve communication and develop coparenting skills that facilitate emotional health for all family members (Leek, 1992). Likewise, Barris and Garrity (1997) emphasize divorce planning that includes developing a low-conflict, cooperative relationship between ex-partners to minimize hurt. In general, behavior therapy can help individuals practice more positive, rewarding behaviors, and decrease negative or punishing behaviors (e.g., R. L. Weiss, Hopps, & Patterson, 1973). In this context, cognitive-behavioral therapy can help ex-partners change their ineffective perceptions, beliefs, and attributions related to the ex-partner, become more forgiving, and help to change destructive relationships with friends and family (e.g., Epstein & Baucom, 2002).

Concluding Remarks

Research on ex-partner friendships has been multidisciplinary and has examined factors at the intrapersonal, dyadic, and social network levels of analysis. The research

findings have implications both for understanding basic relationship processes and for applications such as therapy. Postdissolution friendship should continue to be examined by researchers across the social sciences to provide a greater understanding of a type of relationship in which few social scripts and norms currently exist.

Note

1. After the first author, the authorship order was determined alphabetically.

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Transgression, Forgiveness, and Revenge in Friendship

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In a provocative essay, McCullough, Kurzban, and Tabak (2013) argued that, however different they may appear, forgiveness and revenge evolved to serve complementary functions—the preservation of valuable relationships in the case of forgiveness and the deterrence of harm in the case of revenge. So fundamental to human survival are our relationships with kin and close members of our social networks, McCullough and colleagues' argument goes, that their maintenance and preservation placed pressures on our evolution that led to the development of behaviors designed to ensure their continuance into the future.

The premise that forgiveness has pride of place in this adaptive toolkit is perhaps easier to appreciate than the premise that revenge does. When a transgression causes a rift between individuals whose lives are intertwined in some valued or valuable respect, forgiveness, or a willingness to replace negative motivations toward an offender with positive motivations (Fincham, 2000), seems well suited to repairing that rift and thereby avoiding the costs that might accompany loss of or permanent damage to the relationship (Fincham, 2000). What McCullough et al. and others who share similar perspectives on the social utility of revenge recognize, however, is that in some interpersonal situations there may be important payoffs associated with the use of revenge (McCullough et al., 2013). Indeed, the same interdependence that motivates forgiveness and a conciliatory response to harm under some sets of circumstances might motivate revenge, or acts designed to repay harm with harm (Stuckless & Goranson, 1992), in other instances. In particular, when there is too much riding on a relationship to tolerate continued bad behavior on a relational partner's part, revenge (or the threat of revenge) may prove a powerful tool for correcting the partner's behavior and/or regulating social interactions. Indeed, this may be especially true if an individual has reason to expect that forgiving may fail to bring about needed change in a partner's behavior (McNulty, 2010).

In our view, friendships are located squarely among those relationships that humans value most and that offer individuals the greatest benefits in terms of fulfilling needs for intimacy, belonging, and social support (Fehr, 2004; Oswald & Clark, 2006). Because of this, friendships should figure prominently among those relationships characterized by the kind of interdependence that establishes the greatest premium on the benefits of—while simultaneously raising the stakes associated with—forgiveness and revenge. Scholars who study friendship have been rather slow to develop an interest in these constructs, however, at least in comparison with their counterparts who study romantic relationships. In fact, the literature on friendship contains comparatively few articles on transgressions and provocations. Moreover, few of those who study forgiveness and other responses to wrongdoing have designed their investigations to shed light either on friendship per se or on how friends evaluate, experience, and respond to breaches of the rules of good conduct among friends.

The present chapter is predicated on the assumption that understanding people's responses to the breaches of good behavior that occur in close relationships is no less important when those relationships involve friends than when they involve romantic partners—or family members or other important members of our social networks. Our goal in this chapter is thus to review the existing literatures on friendship, forgiveness, and revenge with the aim of revealing important gaps in our understanding of their points of connection. We aim, in particular, to provide an overview of factors that previous research and theorizing suggest are likely to promote or prohibit forgiveness and revenge among friends. In doing so, we focus our attention on three kinds of factors reflecting characteristics of the person transgressed on/provoked, characteristics of the friendship in which the offense/provocation occurs, and characteristics of the transgression/provocation or situation in which it occurs. We end the chapter with a discussion of research on gender differences in forgiveness and revenge in friendships. Our review is necessarily speculative because, as we indicated earlier, researchers have yet to engage in sustained and focused investigation of either forgiveness or revenge among friends. Consequently, we draw from the broader literatures on these topics—both in relationships and more generally.

Forgiveness and Revenge in Friendship: Important but Neglected Topics of Inquiry

Before we begin our review, we present three lines of evidence to demonstrate that the need for systematic investigation of forgiveness and revenge among friends is pressing. First, research suggests that friendships constitute one of the most common contexts in which people encounter transgressions, provocations, betrayals, and related aversive experiences such as hurt feelings and hurtful messages. Friends were the most frequently identified perpetrators in Rapske, Boon, Alibhai, and Kheong's (2010) study of unforgiven offenses (32.4% of offenders), for example, as well as

in Leary, Springer, Negal, Ansell, and Evans's (1998) study of hurt feelings (39% of offenders). Similarly, collapsing across same-sex (26% of offenders) and cross-sex friends (12% offenders), friends also outnumbered all other categories of offenders in McCullough, Bellah, Kirkpatrick, and Johnson's (2001) study of forgiveness. As even this limited sampling of studies illustrates, friendships are the breeding grounds for many of the events and experiences that elicit offense, injury, and upset and therefore common contexts in which issues of forgiveness and revenge arise.

Second, there are strong conceptual grounds for believing that wrongdoings may cause more harm, be more difficult to forgive, and inspire greater desire for vengeance when they occur between friends than when they involve at least some other kinds of interaction partners. For instance, in observing, "It is easier to forgive an enemy than to forgive a friend," William Blake (1757–1827) highlighted the fact that, because we care about them and expect them to care about us, friends often have the power to hurt us in ways that even those against whom we harbor strong antipathies do not. Friendships may not be bound by formal rules systems as some other relationships are, but they are nevertheless guided by unwritten expectations or codes of conduct that are socially observed (Argyle & Henderson, 1984; Bryant & Marmo, 2012; MacEvoy & Asher, 2012). Research clearly shows that individuals often perceive the violation of such rules of friendship as a betrayal (Samter & Cupach, 1998), that such violations are the most common causes of friendship dissolution (Samter & Cupach, 1998), and that their impact can be devastating, eliciting both tendencies to forgive and to retaliate (Haden & Hojjat, 2006).

Finally, friendships differ from other significant interpersonal relationships in ways that make them unique. Friendships are, for example, relatively free from obligatory ties, duties, and other constraints (Oswald & Clark, 2006). In addition, they may be more difficult to maintain over time and changing circumstances than some other kinds of relationships at least in part because their day-to-day conduct rests on the kind of implicit, informal rules we discussed earlier (Argyle & Henderson, 1984). Friendship is also generally considered a relationship between equals, relatively devoid of the differences in status and power that typify relationships between, for example, parents and children, employers and employees, and heterosexual romantic partners (Helgeson, 2009). Taken together, such considerations call into question whether it is prudent to generalize from studies of forgiveness and revenge in family and romantic relationships to relationships between friends and thus underscore the need for investigations aimed expressly at exploring both constructs as they play out among friends.

Characteristics of the Victim

We begin our discussion of factors that might prohibit/promote forgiveness and revenge among friends by considering characteristics of the victim. A review of the

literatures on revenge and forgiveness reveals several individual differences that might serve as potentially important determinants of whether people respond to a friend's bad behavior with forgiveness or revenge. Researchers have examined such variables both at the level of broad dispositions or traits and also at the level of narrower, more circumscribed personality characteristics.

At the level of broad personality dimensions, research suggests that variation in agreeableness, emotional stability, and honesty-humility are reliable predictors of forgiveness/revenge (Fehr, Gelfand, & Nag, 2010; Lee & Ashton, 2004; McCullough et al., 2001; Shepherd & Belicki, 2008). For instance, the likelihood that individuals will respond to interpersonal offenses in a charitable, forgiving fashion has been shown to increase the more agreeable (i.e., concerned with interpersonal harmony) and honest/humble they are, and the less they are emotionally labile (i.e., the less neurotic). Research further suggests that lower levels of both honesty-humility and agreeableness predict vengefulness (Sheppard & Boon, 2012), endorsement of norms of negative reciprocity (Perugini, Galluci, Presahi, & Ercolani, 2003), intentions to enact revenge (Lee & Ashton, 2012), and appraisals of the desirability of revenge (Sheppard & Boon, 2012).

The results of other studies attest to the role that several more circumscribed aspects of personality, such as trait empathy, may play in shaping friends' responses in the aftermath of transgressions/provocations. For example, although much of the emphasis in the forgiveness literature is on state empathy and how it mediates the association between apology and forgiveness (e.g., McCullough et al., 1998), a recent meta-analysis (Fehr et al., 2010) demonstrated that dispositional variation in people's propensity to take others' perspectives and to experience empathic concern, commonly considered core attributes of empathy (Batson & Shaw, 1991), were consistently and positively related to forgiveness across a number of studies.

Narcissism, too, emerges as a potentially valuable predictor of forgiveness and revenge (Rasmussen, 2016). In particular, narcissistic entitlement, a propensity to believe that one deserves special treatment, has been shown to associate with a constellation of unforgiving attitudes and inclinations (Exline et al., 2004). Compared with their less entitled counterparts, for example, entitled narcissists are less forgiving of those who have harmed them and more dismissive in their attitudes toward forgiveness (e.g., less persuaded of its moral rightness and potential to bring about benefits, more concerned about its personal costs). They are also more demanding in the conditions (e.g., compensation, expressions of contrition and remorse) they deem must be satisfied before they will even consider forgiving. Narcissistic entitlement also predicts both a heightened tendency to perceive offense—that is, to believe that one has been the victim of wrongdoing (McCullough, Emmons, Kilpatrick & Mooney, 2003)—and to respond to offense/provocation by retaliating (Rasmussen, 2016).

Finally, research suggests that people vary in vengefulness, or the extent to which they perceive repaying harm with harm as morally justified and desirable

and, as a result, are inclined to respond to interpersonal problems with vengeance (McCullough et al., 2001). Not surprisingly, dispositional vengefulness has been shown to be negatively related to forgiveness and positively related to appraisals of revenge. For instance, McCullough, et al. (2001) found that the higher individuals scored on a measure of dispositional vengefulness, the more they ruminated about an offense, the less they forgave the offender, and the more slowly their desires for revenge dissipated over time. Sheppard and Boon (2012) also found that, when considering its benefits and costs, people were quicker to perceive revenge as desirable and slower to perceive it as undesirable, the higher their scores on dispositional vengefulness.

Characteristics of the Friendship

McCullough's (McCullough et al., 2013) evolutionary perspective on revenge presumes that interdependence plays a pivotal role in determining the results of the mental calculus by which individuals determine which course of action to pursue in the aftermath of wrongdoing. If the relational characteristics most relationship researchers have examined in their investigations of forgiveness are any indication, they appear to share this point of view.

Research suggests, for example, that commitment may be associated with forgiveness in several theoretically and practically important ways. First, it appears to promote forgiveness. The greater their commitment to a romantic partner, for instance, the more individuals are inclined to forgive the partner's breaches of wrongdoing (Fehr, et al., 2010). Second, commitment has been shown to moderate the impact of forgiveness on psychological well-being (Karremans, Van Lange, Ouwerkerk, & Kluwer, 2003). Specifically, across a variety of types of relationships, the psychological benefits that individuals appear to derive from forgiving their partners increase commensurate with their commitment to their partners. In addition, there is longitudinal evidence suggesting that forgiveness may help to preserve commitment to a dating partner in the wake of severe transgressions (Ysseldyk & Wohl, 2012). In other words, the association between commitment and forgiveness may be bidirectional such that forgiveness contributes to relationship maintenance through preventing declines in commitment at the same time that commitment itself encourages forgiveness.

Although characteristics of the relationship between avenger and avengee have not yet captured much attention among scholars who study revenge, there is tentative evidence linking commitment with appraisals of revenge, as well. For example, in a recent study examining the experiences of avengees—that is, targets of revenge—Boon and Yoshimura (in press) found that individuals who believed they had been the targets of an important relational partner's act of revenge reported lower commitment to their partners than individuals who believed their partner

had not targeted them in this fashion. Additionally, among the subsample of participants who self-identified as avengers, individuals believed that they deserved to pay for the harm they had caused their partners and viewed the act of revenge as having satisfied their avenging partner's goals to a greater extent the more highly committed they were to these partners. These findings suggest that, when individuals in low commitment relationships believe that their partners have targeted them for revenge, they may be quicker than those in high commitment relationships to construe their partners' actions as undeserved, vindictive, and unlikely to succeed in achieving the partners' goals.

Characteristics of the Transgression/Provocation

Finally, understanding when people will consider forgiveness a viable option in the face of a friend's bad behavior and when they might instead be inclined to repay harm with harm will likely require detailed consideration of features of the act or event that precipitated feelings of injustice or upset to begin with. The literatures on forgiveness and revenge offer some insights into the kinds of characteristics that might be worthy of examination in this context. Regardless of the specific form they take, provocations/transgressions vary along a number of dimensions—including severity/intensity, the degree to which they reflect intent to harm, and capacity to communicate symbolic meaning.

Severity of Harm

With respect to severity, the general finding is that blame increases and willingness to forgive decreases as offense severity increases (Boon & Sulsky, 1997; Fehr et al., 2010). We posit that forgiveness might be least likely and revenge most likely when a friend's wrongful act is deemed "unforgivable." Research clearly suggests that there are limits to what people consider it possible to forgive (Macaskill, 2005; Rapske et al., 2010), with very severe transgressions/provocations such as murder, sexual assault, and sexual abuse emerging in previous research as prototypes of unforgivable offenses. Because most friendships never encounter such extreme transgressions/provocations, however, it is important to note that lay conceptions of the sorts of offenses that are not forgivable appear to extend well beyond these exemplars (e.g., Rapske et al., 2010). Research suggests, for example, that many individuals consider sexual infidelity an unforgivable betrayal (Rapske et al., 2010). This finding serves as a reminder that perspective and construal matter: The threshold for perceiving an act as sufficiently severe as to eliminate possibilities for forgiving a friend who engages in such an act may vary across individuals, situations, and occasions.

The importance of perspective and construal is echoed in the literature on revenge. For example, Stillwell, Baumeister, and Del Priore (2008) argue that

differences in perspective inherent to the roles of victim and perpetrator often result in a tendency for both parties in a revenge episode to see themselves as victims. In particular, avengers may be inclined to perceive their act of revenge as a fair and justified response to the injustice or suffering they experienced, whereas avengees may be inclined to perceive it as both excessive and unwarranted—as an “overreaction” to their own previous actions. Such divergent perspectives on the same behavior may lay the foundation for escalation of conflict and acts of counterretaliation. In understanding the role that severity or intensity of harm plays in promoting forgiveness and/or revenge, then, we would be well advised to bear in mind that there are multiple viewpoints on this issue and that these viewpoints may not agree.

Intent to Harm

Beyond judgments of severity of harm, research suggests that the degree to which the offender intended to cause harm is also liable to be an important consideration in predicting the nature of an individual’s response to his or her friends’ actions (Boon & Sulsky, 1997; Fehr, et al., 2010). Although there are reasons to believe that even unintended harms damage relationships (Vangelisti, 1994), perceptions that a friend acted purposively and with forethought imply a degree of personal and/or relational devaluation that both calls into question whether forgiveness would be appropriate and more fully justifies a vengeful response.

Reparatory Behavior

Research also suggests that people view forgiveness as conditional on the occurrence of certain kind of reparatory moves on the offender’s part that communicate repentance or remorse (e.g., Fehr et al., 2010). There is no corresponding evidence to suggest that revenge is conditional in this way. Nevertheless, it seems likely that an offender’s failure to communicate remorse potentiates desires for vengeance and may enhance the benefits perceived to result from acting on such desires (i.e., because an act of vengeance may be perceived as holding the potential to elicit such remorse).

Apologies, expressions of remorse, and amends making may matter so much to victims in part because they influence the symbolic meaning attached to an offense. As Fincham (2000) notes, transgressions/provocations may be understood on multiple levels. On the surface they may be interpreted and responded to in terms of the particular behaviors they involve (e.g., a lie, a rumor, a breach of trust or loyalty). There is a second level, however, at which they may be interpreted as symbolic of deeper, more enduring issues reflective of problems in the relationship, defects in the offending partner’s character, or the offending partner’s view of the victim/target. When a friend fails to apologize, makes light of the victim’s feelings of hurt or offense, or refuses to make restitution for harm done, such behavior may

communicate a disregard for the victim that elicits a search for deeper meanings in the friend's actions. The results of this search may threaten cherished beliefs about the friendship, the friend, and/or the self. Compounding this tendency is the fact that the symbolic meaning associated with transgressions or provocations appears to be greater when the transgressor is a friend (or other close relationship partner) rather than acquaintance or stranger (Rapske et al., 2010). It may be deeply disturbing to find oneself the victim of sexual betrayal under any circumstances. It may be even more profoundly upsetting, however, to discover that the extradyadic partner is a friend. We expect better behavior of our friends and, when their behavior fails to live up to these higher standards, we may be more angry and feel more deeply violated than when others with whom we are less interdependent offend. Such "rules" of friendship (Argyle & Henderson, 1984) are dictated socially, shape the expectations that individuals hold for their friends, and often differ by gender (Felmlee, Sweet, & Sinclair, 2012).

Gender and Friendship

In this section, we discuss the role of gender in forgiveness and revenge among friends. This is an important topic of inquiry because research suggests that social norms regarding gender impact friendship rule expectations (Felmlee et al., 2012) and thus judgments and reactions to violations of such expectations (Miller, Worthington, McDaniel, 2008). More generally, we devote considerable attention to gender because we believe that it contributes in a unique but complex way to our understanding of forgiveness and revenge in friendship. That is because our discussion of the role of gender necessarily involves a consideration of the characteristics of the victim and the transgressor (gender of the friends), the friendship (same- vs. cross-sex friendships), and the transgression (e.g., sexual tension in cross-sex friendships). We first review gender differences in friendship rules within same- and cross-sex friendships and then discuss research findings on the association between gender and forgiveness/revenge within friendships.

Despite many similarities between men's and women's friendships (Wright, 2006), there are also marked differences. Research on friendships of girls and women reveals high levels of empathy, self-disclosure, and friendship maintenance behaviors (Helgeson, 2009; Matlin, 2012; Oswald & Clark, 2006; Rose & Asher, 2004). Males' same-sex friendships, on the other hand, involve shared activities that are often of competitive nature (Vigil, 2007). Men are also less inclined than women to self-disclose to their same-sex friends because such an action may be perceived as giving other men a competitive advantage (Greif, 2009). Overall, men's same-sex friendships are characterized as lower in both maintenance and intimacy compared with women's (Helgeson, 2009; Matlin, 2012). In view of differences in the way that men and women manage certain aspects of their same-sex friendships,

it is logical that men and women may have different standards when it comes to judging and reacting to friendship transgressions.

Gender Differences in Friendship Rules

Developmental research suggests that, when it comes to transgressions involving breaking core friendship expectations, girls are more sensitive to such violations than boys and react more negatively. In a study by MacEvoy and Asher (2012), for example, girls (9–11 years old) were more distressed than boys by friend transgressions, provided more negative interpretations of the friends' behavior, and reported more negative emotions than did boys. Moreover, even though both girls and boys consider loyalty a desirable characteristic in friendships, girls have higher expectations of loyalty and commitment than boys in childhood and adolescence (Clark & Ayers, 1993). Ideal friendship expectations are developed based on societal norms (Felmlee, 1999) and personal experiences with friends during the adolescent years (Wiseman, 1986). Once formed, these ideal friendship standards tend to remain relatively stable throughout adult life (Bigelow & La Gaipa, 1980; Hall, 2011).

Same-Sex Friendships

Consistent with the developmental research presented, studies suggest that adult women also have higher standards for their same-sex friendships than do men (Fuhrman, Flannagan, & Matamoros, 2009; Hall, 2011). Felmlee et al. (2012) found that women were more critical of norm violations in their friendships than were men, especially when the topic of transgression related to trust and intimacy. In a meta-analysis of 37 studies, Hall (2011, p. 723) found that same-sex friendship expectations were higher for females in three out of four categories: symmetrical reciprocity (e.g., loyalty), communion (e.g., self-disclosure, intimacy), and solidarity (e.g., companionship). However males had higher expectations in agency (e.g., physical fitness, status). Benenson and colleagues (2009) also reported that males had greater tolerance for strains within their same-sex peer relationships than did women. Similarly, according to Hall, Larson, and Watts (2011), women hold higher friendship maintenance standards than men. These findings are in line with research suggesting that women attach more importance to intimacy and closeness in their friendships than men do (Aukett, Ritchie, & Mill, 1988; Fehr, 2004). One sociopsychological explanation for this finding is that because women hold less power in the society, they may be more reliant on their friendships for support and "their need for informal ties may result in greater demands and expectations for these crucial bonds" (Felmlee et al., 2012, p. 525). Evolutionary psychology offers a different explanation for this finding. According to this view, women may have developed higher expectations for intimacy because their intensive investment in bearing and raising children necessitated formation of close bonds with other women, who

would be able to provide assistance in times of need (Bleske & Buss, 2000; Hall, 2011; Vigil, 2007).

Cross-Sex Friendships

Although less prevalent than same-sex friendships, cross-sex friendships have recently received more attention from relationship researchers (Monsour, 2002). Cross-sex friendships are similar to same-sex friendships in that they provide intimacy, companionship, and social and emotional support. Yet, they are different from same-sex friendships in that they provide a window into the world of the other sex, and in some sense are free of some of the competitive tendencies inherent in same-sex friendships (Rawlins, 2009). In spite of such benefits, cross-sex friendships inherently pose unique challenges for the individuals involved. More specifically, a distinguishing feature of the cross-sex friendships is that they can contain an undercurrent of romantic and/or sexual tension (Afifi & Faulkner, 2000). A friend's move to initiate a romantic involvement may be perceived as a relationship transgression and elicit a negative reaction, leading to the dissolution or weakening of the relationship (Bleske-Rechek et al., 2012). Samter and Cupach (1998) reported that cross-sex friends were more likely than same-sex friends to report conflict about friendship rule violations, miscommunication, and tension around the topic of sexual or romantic intimacy. In particular, compared with women, men report more attraction to their cross-sex friends (Bleske-Rechek et al., 2012) and perceive sexual relations with them as more beneficial (Bleske & Buss, 2000). Not surprisingly, it is more acceptable for women to express physical affection with a friend than it is for men to do so (Felmlee et al., 2012). Werking (1997) found that in 48% of cases, cross-sex friends terminated their friendship because the transition from friendship to romantic relationship was unsuccessful. Fuhrman and colleagues (2009) reported that behavior expectations for cross-sex friends were similar to, or lower than those for same-sex friends. However, the findings of a second study indicated that individuals not involved in a romantic relationship held higher expectations for their cross-sex friends than for their same-sex friends. We now turn to the topic of gender differences in revenge and forgiveness.

Gender Differences in Revenge and Forgiveness

Research on gender differences in revenge within close relationships typically indicates that men are more vengeful than women (e.g., Brown 2004). Scholars have reported that men and women differ in their moral reasoning when it comes to the judgment of what constitutes an appropriate response to a relational transgression (Jaffe & Hyde, 2000). Such findings are supported by theories that propose that through socialization women are oriented to think about morality in terms of caring for others and preserving relationships, whereas men's sense of morality revolves

around securing justice and obtaining fairness in relationships (Gilligan, 1994). Accordingly, in the face of a transgression women are motivated to maintain their relationships by forgiving, whereas men may be inclined to exact justice by seeking revenge (Miller et al., 2008). Moreover, past theorizing and research indicating that generally women demonstrate greater empathy and emotional investment in their close relationships (Taylor et al., 2000) has fueled the assumption that women are more forgiving than men. Research findings regarding the role of gender in forgiveness, however, have been mixed.

In a meta-analysis of forgiveness in close relationships (Miller et al., 2008), for example, women were found to be more forgiving than men, and men more vengeful than women. Moreover, no effect of type of relationship (friendship or romantic relationship) on forgiveness was found. However, a more recent meta-analysis (Fehr et al., 2010) with a larger sample (including unpublished dissertation data) and different methodology found no evidence of gender differences in forgiveness. The findings of this meta-analysis dismiss the notion that gender exerts a general (main effect) influence on forgiveness. However, an important possibility may be that a more nuanced relationship between gender and forgiveness exists. For instance, gender might moderate the effects of forgiveness's correlates (Fehr et al., 2010). One such correlate is state empathy.

Empathy has received a great deal of attention from forgiveness scholars, and some have even suggested that empathy may partly explain the association between gender and forgiveness (Swickert, Robertson, & Baird, 2015). In particular, studies have reported that empathic processing leading to forgiveness may involve different paths for men versus women (Exline & Zell, 2009). One study (Root & Exline, 2011) found that encouraging study participants to think empathically about the transgressor facilitated forgiveness in men but not in women. The authors suggested that women did not respond to the prompt because they had already taken the step of thinking carefully about empathic reasons to forgive prior to their participation in the study. Further, forgiveness for women involves a long-term healing process as opposed to a one-time decision (Root & Exline, 2011). Future studies should explore if indeed empathic thinking plays out differently in the way in which men and women approach forgiveness. Other studies have investigated the relationship among gender, empathy, and age in the forgiveness process. In one recent study (Swickert et al., 2015), empathy served as a mediator between forgiveness and gender, but only for younger individuals. In other words, younger women were more likely to show empathy and forgive the transgressor than were younger men. However, empathy did not play a strong role in explaining the association between gender and forgiveness for older adults. Clearly, the interrelations among gender, forgiveness, and empathy are more complex than previously imagined and warrant further investigation.

As discussed earlier, friendships are distinctive close relationships and differ from other types of close relationships in a number of important ways. The few

studies that have exclusively studied forgiveness in friendships have found interesting gender differences. In a study of actual incidents and hypothetical scenarios of forgiveness in same- and cross-sex friendships, Hojjat, Boon, and Owoc (2013) reported that men were more likely to forgive a same-sex friend, while females were more likely to forgive a cross-sex friend. This finding is in line with the literature suggesting that women hold higher standards in their same-sex friendships (Fuhrman et al., 2009), whereas men are relatively more tolerant of transgressions committed by their same-sex friends (Benenson et al., 2009). The results of this study suggest however, that both men and women tend to be less forgiving of women friends. Similarly, in a study of attitudes regarding breaking friendship rules (Felmlee et al., 2012), both men and women were more critical of a female friend who betrayed a secret than of a male friend who did so. These findings make sense, given past research suggesting that women are often relied on as confidants and sources of emotional support by both men and women friends (Fehr, 2004). Perhaps the high expectations for women to maintain that caretaker role translate into harsher judgments, once it is perceived that this friendship rule has been violated by women. Future research should focus exclusively on forgiveness in friendships and investigate whether reactions to friendship transgressions (either forgiveness or revenge) align with specific societal friendship rule expectations for men and women.

Directions for Future Research

As we hope the literature reviewed in this chapter makes clear, the need for further research on forgiveness and revenge in friendship is considerable and the gaps in existing knowledge are many. Friendships constitute a unique and widely valued relationship form, exist across the life span, and are among the most common contexts in which betrayals, conflicts, transgressions, provocations, and the like occur. Yet those who study forgiveness and revenge have not generally situated their investigations in relations between friends or examined in any depth the nature, quality, and characteristics of those friendships in which these phenomena occur. We thus end this chapter with a call for friendship researchers to take up the study of forgiveness and revenge—and related constructs such as grudge holding and unforgiveness. In doing so, we highlight three considerations we believe must guide such research if it is to succeed in enriching our understanding of how people respond to acts of wrongdoing that take place among friends.

First, we think it will be important for researchers to craft their studies of forgiveness and revenge in ways that embrace the considerable diversity that characterizes friendships. Researchers investigating transgressions/provocations in friendships must pay attention to the types of friendships they study and to possible differences among these friendships along a number of dimensions including gender, sexual orientation, number of persons involved, and age. The literature we reviewed in

this chapter points to the importance of considering both the gender of the individual parties to the friendship (male vs. female) and the gender composition of the friendship as a whole (same-sex vs. cross-sex friendships) in studies of forgiveness and revenge. But we know little or nothing, for example, about whether or how sexual orientation or the number of parties to the friendship alters the dynamics when wrongdoing occurs among friends.

Second, for reasons we do not entirely understand, the literatures on both forgiveness and revenge have focused to a considerably greater degree on the victim/avenger (i.e., the individual who was provoked) than on the transgressor/avengee (i.e., the provoking party and therefore the target of revenge). For example, in contrast to the considerable body of research examining those traits and dispositions that predict a victim's/avenger's responses to wrongdoing, we know comparatively little about the personality dimensions that make a transgressor more or less "forgivable" or an avengee more or less likely to elicit retaliation. This unfortunate gap in our understanding seems destined to persist as long as researchers, through their choice of research questions, continue to prioritize the perspectives and experiences of victims/avengers over those of transgressors/avengees. Ultimately, studies that examine the perspectives and experiences of both (or all) victims/avengers and transgressors/avengees within the friendship dyad (or network) would offer the most complete insights into forgiveness/revenge among friends.

Finally, we believe it will be important to conduct research that compares forgiveness and revenge across different types of relationships (e.g., romantic relationships, friendships, and family relationships) so we can explore the extent to which variables and processes identified as important in one relationship context are also important in other relationship contexts (e.g., Haden & Hojjat, 2006). Does commitment play the same role in relation to offenses/provocations that occur in friendships, for example, as it appears to play in relation to offenses/provocations that occur in romantic relationships? Do the power dynamics at play in family relationships result in marked differences in how situations involving transgressions/provocations unfold in families versus friendships given that friendships are generally considered relationships between equals?

Conclusion

Demographic changes such as declining marriage rates and the consequent increase in the number of people living as singles (DePaulo & Morris, 2005), in addition to shifts in gender relations and patterns of family structure, have led some scholars (e.g., Allan, 2008) to speculate that friendships might hold greater significance in people's lives in contemporary Western society than they ever have before. As people spend more of their lives uncoupled, and as their freedom to define for themselves the relationships that matter in their lives increases, the potential exists

for friends to assume a greater importance in people's lives than they have in times past. The more that this is the case, we think, the more researchers will be drawn to study friendship. Given the potential damage that transgressions, betrayals, and the like may cause in friendships, speculations concerning the increasing importance of friendships lend a sense of urgency to our efforts to understand how people deal with acts of injury and offense perpetrated by or against their friends.

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Competition in Friendship

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Dan and Steve both learned to play guitar when they were about 10 years old. They took lessons together, taught each other songs, and by the time they were 13 years old, they had both become fairly competent guitar players. Although best friends, they would often argue with one another about which one of them was the “best” guitar player. After a few rather heated arguments, Dan and Steve both quietly realized that if one of them were to “win” this competition, it would probably end their friendship. Instead, one day after a particularly intense jam session, they found a compromise! Both agreed that Steve was the best rhythm guitarist, while Dan was better on lead instrumental parts. They never argued about it again.

Many societies greatly value competitiveness in relation to economics, politics, entertainment, and sports. On a personal level, however, humans are ambivalent about competition. While we tend to admire the competitive person’s desire to achieve important goals, master the environment, and prevail in the midst of adversity, we also tend to be uncomfortable around people who show little concern for others, put other people down, and place winning ahead of all else.

When it comes to friendship, competition can be both a virtue and a vice. Throughout the life span, there are ample opportunities for our competitive endeavors to either facilitate friendships or to drive others away. For example, competition can be adaptive in helping children and adolescents shape their self-concept and identity by revealing how they “stack-up” to their friends at school, sports, and other social activities. Later in life, rivalry among friends can take the form of competing for romantic partners, promotions at work, or even friendly competition during leisure activities. On the other hand, because of its inherently aggressive and dominating nature, competitiveness as an enduring personality trait may come with social costs that can include loneliness and greater difficulty making and keeping close, quality friendships.

In this chapter, we take a social-developmental approach to examining the role of competition in friendship. We begin by first articulating the nature of competition and competitiveness as conceptualized by social psychologists. Next, we take an

abbreviated life span approach and review findings regarding the role of competition during childhood, adolescence, and adulthood. Finally, we introduce an integrative model that aims to further our understanding of the social-developmental and cultural processes that influence the impact of competition between friends.

The Nature of Competition and Competitiveness

The study of competition and competitiveness has a rich history grounded in experimental social psychology (e.g., Deutsch, 1949; Triplett, 1898). Most of this work, however, focused on the effects of *situations*, which were structured to be either competitive or cooperative with the main goal being to determine how individuals respond in these situations (e.g., do people accomplish more or feel better about themselves in a competitively or a cooperatively structured situation?) Thus, definitions of competitiveness were framed in terms of this situational structure. In their summary of the existing research at the time, May and Doob (1937) described competition as situations where a goal is scarce or cannot be shared. Similarly, while studying the effects of competition and cooperation on group processes, Deutsch (1949) defined competitive situations as ones in which goal attainment by one party precludes attainment by other parties. Although much useful information has come from situational studies of competition, they do not tell us a great deal about individual differences in competitiveness or how these differences might impact close interpersonal relationships such as friendships. More recently, researchers have found a multidimensional approach to competition to be useful. It has been proposed that competitive motivations and behaviors are rooted in either (1) the drive to outperform others or (2) the drive to improve oneself. Importantly, these two dimensions of competitiveness seem to be associated with distinctly different social and interpersonal outcomes.

It's Not How You Play the Game That's Important, but Whether You Win

Several theorists and researchers have described a competitive orientation that is based on achieving superiority over others that parallels Bakan's (1966) concept of "unmitigated agency." For example, the neoanalyst Karen Horney (1937) described "hypercompetitiveness" as an indiscriminate need by individuals to compete and win at any cost as a means of maintaining or enhancing feelings of self-worth. She theorized that hypercompetitiveness is characterized by manipulation, aggressiveness, exploitation, and denigration of others across a myriad of situations, and has a deleterious impact on an individual's development and functioning. Ryckman and colleagues (e.g., Ryckman, Thornton, & Butler, 1994) found support for Horney's contentions and characterize hypercompetitiveness as competing in situations

that do not call for it, turning friendly activities into contests, and feeling powerful and superior when outdoing others. A number of other researchers have found variations of this type of competitive orientation as “performance goals” (Dweck & Elliott, 1983), “interpersonal competition” (Griffin-Pierson, 1990), “other-referenced competition” (Tassi & Schneider, 1997), and “competing to win” (Hibbard & Buhrmester, 2010).

It’s Not Winning That’s Important, but Whether You Have Improved

A second dimension of competitiveness is derived from the social psychological sense of an individualistic orientation, with the goal of improving one’s own capabilities. The focus is on competence and improvement relative to one’s own past accomplishments rather than on one’s status relative to others. This form of competitiveness is characterized by a drive to surpass one’s past performance, absolute standards, or even physical challenges (e.g., “conquering” a mountain). Researchers have found a plethora of evidence for this dimension of competitiveness in the form of “learning goals” (Dweck & Elliot, 1983; Dweck & Leggett, 1988), “goal competitiveness” (Griffin-Pierson, 1990), “personal development competitiveness” (Ryckman, Hammer, Kaczor, & Gold, 1996), “task-oriented competition” (Tassi & Schneider, 1997), and “competing to excel” (Hibbard & Buhrmester, 2010).

Although competitive people are often respected and admired in many cultures, it is also possible that their drive to win can undermine friendships. H. S. Sullivan (1953) argued that competition leads to less intimacy and support in close relationships, but he was likely talking about the traditional definition of competition as the desire to outperform others rather than the drive for personal excellence. We now turn to research that has examined the role of competition and competitiveness in friendship throughout the life span, as well as the social and interpersonal implications of competition between friends.

The Role of Competition in Friendship Across the Life Span

Research regarding the impact of competition on friendship has typically been framed in terms of two general contentions. On the one hand, competition is thought to be an inevitable component of the human condition, and social comparison among close others is believed to be necessary for one to measure his or her own achievements against others to get a sense of one’s own mastery level (Tassi & Schneider, 1997). Although Sullivan (1953) maintained that more hostile forms of rivalry could destroy friendships, he also suggested that some benign forms of competition might actually help youth (especially boys) realize their abilities and

achieve healthy separation from parents. On the other hand, competition has also been thought of as detrimental to maintaining close, quality relationships because it produces less liking and interferes with the satisfaction of personal needs as compared with cooperation (Deutsch, 1949; Singleton & Vacca, 2007). Moreover, competition is thought to impact friendships negatively because it causes tension and ill feelings due to the fact that one friend will win while the other will lose, which can, in turn, negatively affect the "loser's" self-evaluation (e.g., Tesser, 1988; Tesser & Moore, 1990). Berndt (1996) maintained that not all competition is undesirable, but when competition gets too intense it can lead to negative feelings and a generally negative interaction style between friends. Kohn (1992), however, argued that there is virtually no evidence that competition is either inevitable or desirable. Instead, friendships primarily exist for personal satisfaction and enjoyment rather than fulfillment of a task or goal (Wiseman, 1986).

Most of the research regarding the impact of competition on friendships and other close relationships has been conducted with either children or adolescents. The studies conducted with adult samples tend to predominantly comprise emerging adults (i.e., college-age), although a few studies have included middle-age adults. Here, we take an abbreviated life span approach and highlight representative findings at each developmental level.

Childhood

Competition among young children has been studied both in terms of competitive situations and competitiveness as a personality trait. For example, early research demonstrated that under competitive (rather than cooperative) conditions in a token-giving game, 4- to 5-year-old children showed less altruism toward their peers (Masters, 1971), and children rated as competitive by teachers had lower empathy scores than children rated as less competitive (Barnett, Matthews, & Howard, 1979). In analyzing the verbal social interactions between friends and nonfriends among first and third graders, Newcomb, Brady, and Hartup (1979) discovered that, regardless of incentive condition in a block-building task (promotive or individualistic), friends were more affective, made more references to equity, and used more mutual (rather than individualistic) commands; overall, the interaction between friends was much more harmonious than the interaction between nonfriends. When comparing resource allocation of pennies in a social decision-making task among 8- to 12-year-olds, Knight and Chao (1991) found more frequent cooperation and less frequent competition among siblings and friends versus acquaintances. Moreover, this study suggested that boys used individualistic resource allocation for normative social comparison with friends, whereas girls used more equality resource allocation and less superiority resource allocation than boys. Tassi and Schneider (1997) demonstrated that elementary school-age children could distinguish between task-oriented and other-referenced types of competition, and

more importantly, there was a clear association between other-referenced competition (i.e., hypercompetitiveness) and dislike by peers. In an Italian study of 8-year-olds, although friends displayed more competitive behavior than nonfriends in a competitive game, behavior in the game was unrelated to the continuation of the friendship (Fonzi, Schneider, Tani, & Tomada, 1997). More recently, Ensor, Hart, Jacobs, and Hughes (2011) observed 6-year-old children playing competitive board games and found that when threatened with losing the game to a same-sex friend, boys (more so than girls) displayed problem behaviors and made negative comments and gestures during the game.

Researchers have also examined children's cognitive processing about competition as well as developmental changes in competitiveness. For example, Komolova and Wainryb (2011) gave 5-, 10-, and 17-year-olds hypothetical scenarios showing a protagonist and friend in conflict situations with either trivial or "weighty" outcomes for each of the characters. The 5- and 10-year-olds prioritized the friend's preferences regardless of the match of the characters' desires, whereas 17-year-olds more carefully weighed the balance of the characters' desires and reasoned that personal desires must sometimes give way to support a friend. Other research suggests a developmental shift in preferences away from competition within friendships. For example, Berndt, Hawkins, and Hoyle (1986) showed that friends (versus nonfriends) increased their preference for equal sharing rather than competition between fourth and eighth grades; moreover, eighth graders did not consider competition as an acceptable alternative to equal sharing. To sum, although past work provides clues about the impact that competitive situations and trait competitiveness may have on friends and nonfriends, when taken together, these studies do not seem to indicate any clear pattern regarding the role of competition in friendship among young children.

Adolescence

Much of the work on competition in friendships during adolescence is grounded in the assertion made by Sullivan (1953) that competition is natural and encouraged in youth, but hostile rivalry in early adolescence is antithetical to intimacy and could facilitate the termination of friendships. In a study of seventh graders in Canada, Costa Rica, and Cuba, Schneider, Woodburn, del Pilar Soteras del Toro, and Udvari (2005) found that hypercompetitiveness (defined as an intense need to win expressed by hostility and disregard for the opponent as a person) within friendship was associated with conflict, less closeness, and relationship dissolution. Moreover, this study found that hypercompetitiveness was more strongly associated with poor-quality friendships for females than males. In a study comparing gifted versus nongifted junior high students, Schapiro, Schneider, Shore, Margison, and Udvari (2009) found that gifted students demonstrated a more task-oriented competitiveness, whereas nongifted students demonstrated more other-referenced competitiveness, and other-referenced competitiveness negatively affected

friendship quality. Similarly, Hibbard and Buhrmester (2010) showed that although both competitive male and competitive female adolescents experience less empathy and more discord in their same-sex friendships, a competing-to-win orientation was associated with significantly fewer friends, less closeness in same-sex friendships, and more loneliness among females only. Especially for adolescent females, hyper-competitiveness has been empirically linked to internalizing problems, aggression, and peer relationship difficulties (see Hibbard & Buhrmester, 2010).

Research suggests, however, that not all competition may be destructive to adolescent friendships. For example, the drive to achieve mastery or competing to excel has been shown to be associated with greater perceived social competence (Chen et al., 2004), and enjoyment of competition has been associated with more companionship and continuation of friendship among male adolescents in both individualistic and collectivist cultures (e.g., Schneider et al., 2005; Schneider, Dixon, & Udvari, 2007). Similarly, Hibbard and Buhrmester (2010) found that a competing-to-excel orientation was associated with greater closeness among adolescent male friends. For the most part, however, this study indicated that competing to excel was unrelated to social functioning, but positively related to self-esteem and negatively related to depression among both males and females.

Some research suggests that the relationship between competition and friendship during adolescence is more complicated than just the type of competitiveness involved. In contrast to trait competitiveness predicting behavior across domains, some researchers have argued that the concept of competitive motivation must be domain-specific and that domain-specificity is pivotal to understanding the interpersonal implications of competition (Tassi & Schneider, 1997). For example, McGuire (2014) recently found that the particular competitive domain itself and its importance to the adolescent's self-concept likely mediates the relationship between competition, friendship, and emotional distress; that is, the effect of competition on friendship may vary depending on how important competitive domains like school, sports, social attention, and attractiveness are to the adolescent. It is also possible that the quality of the friendship itself makes a difference. In an examination of the balance between closeness and individuality in adolescent friendships, Shulman and Laursen (2002) showed that interdependent friends did not see conflict as threatening as did disengaged friends. Engaged friends showed less anger during conflict, blamed each other less, and had "cooling off" periods, whereas disengaged friends tended to blame each other and showed more anger during conflict. Thus, perhaps when the relationships are good to begin with and the domain relevance is relatively low, a little "friendly" competition between teenage friends is not so deleterious after all.

Adulthood

To date, there is a paucity of research regarding competition and friendship in adult samples. Most of the work on adults has been conducted with emerging adults in a

college setting, and although a few studies have included middle-age adults in their samples, virtually no developmental research exists examining competition and friendships in later life.

Research findings regarding competition in adult friendship tend to mirror those found among children and adolescents. Research looking at college-age friends and nonfriends in competitive and cooperative video game environments showed that when playing with friends under a cooperative goal structure, players who were friends had a stronger commitment to game goals than nonfriends, but friends and nonfriends behaved similarly in a competitive goal structure (Peng & Hsieh, 2012). Along the same lines, Crouse Waddell and Peng (2014) showed that cooperative game structures (versus competitive game structures) increased trust between both friends and nonfriends, but neither type of game structure increased state hostility in participants regardless of the relationship between players. Interestingly, physiological research looking at brain wave activity among college students during competition with friends and strangers showed that although concern about one's own outcomes consistently outweighed concern about others' outcomes, individuals' motivation to win was more robust when competing against a stranger (Wang et al., 2014). These researchers speculated that the investment of empathy, reciprocity, and altruism is usually high during friendship development and maintenance, and that concern for the well-being of a friend is likely activated alongside self-interest when competing against friends. These kinds of findings are consistent with the idea that because of perceived threats to the friendship, individuals' levels of competitiveness are likely higher with members of the "out-group" (i.e., strangers) than with members of the "in-group" (i.e., close friends; e.g., Bornstein, Budescu, & Zamir, 1997; Harris & Miller, 2000). However, as with the adolescent research, the picture may be more complicated. For example, Tesser and Smith (1980) examined whether the threat to an individual's self-esteem was greater when outperformed by a friend rather than a stranger on a competitive task and whether the relevance of the task played a role. They found that when the task relevance was low, participants were more competitive with strangers, but when the task relevance was high, participants were more competitive with friends. Such findings lend support to the idea that the specific competitive domain may moderate the influence of competitive motivations and behavior among friends.

Other research has not examined adult friendships per se, but the findings seem to align with the friendship research. For example, Ryckman, Thorton, Gold, and Burckle (2002) found that hypercompetitiveness was unrelated to romantic relationship satisfaction or commitment among emerging adults, but it was associated with fewer positive relationship features (e.g., trust, honest communication) and more negative features (e.g., conflict, control). Ryckman and colleagues have also found associations between hypercompetitiveness and low benevolence and altruism (Ryckman, Libby, van den Borne, Gold, & Lindner, 1997), trait aggression (Ryckman et al., 1996), and endorsement of the value that "violence is manly"

(Ryckman Hammer, Kaczor, & Gold, 1990). In contrast, personal development competitiveness (i.e., competing to excel) was found to be associated with greater social affiliation (Ryckman et al., 1996).

The focus of other adult studies has often been on gender differences and competition for romantic partners in particular. In a study of adult professionals (ages ranging from 21 to 55 years), Sapadin (1988) found that competitiveness is considered an extremely disliked trait in same-sex friends among both men and women. Interestingly, however, this study also found that women were more bothered by competition with other women for mates, whereas men were most bothered by the “one-upmanship” aspect of competition. Along these same lines, Singleton and Vacca (2007) discovered that male same-sex friends were more competitive than either cross-sex or female dyads, and competitiveness and conflict had negative effects on friendship satisfaction. More recent work has been consistent with previous findings. Brewer, Abell, and Lyons (2013, 2014) discovered a connection between competitiveness and the amount and depth of self-disclosure among female friends, but competitiveness adversely affected friendship attachment among both males and females. In one of the few studies of males only, Busse and Birk (1993) showed that competitiveness was associated with less intimate self-disclosure among male graduate students over 35 years of age.

A handful of studies with adults explored the evolutionary underpinnings of intrasexual competition for mates (see Buss, 1994), but most of this work has looked chiefly at competition between women. For example, in a study of college-age women, Bleske-Rechek and Lighthall (2010) found that friends tended to be similar in physical attractiveness, but less attractive friendship dyads experienced more rivalry in their friendship than more attractive dyads. Similarly, Harris-McDonald (2009) showed that among women, competitiveness was negatively related to the development of a feminist identity, self-esteem, and age, whereas competitiveness was positively associated with hostility toward other women. In a study of adult immigrants returning from Britain to their birthplace of Barbados, difficulties in forming new friendships were highly related to gender, with most friendship problems for females stemming from sexual and workplace competition with other indigenous women (Phillips & Potter, 2009). In general, studies that include both men and women tended to find that competition is seen as a cost to same-sex friendship and is often characterized by cruel behavior, sexual rivalry, and even mate stealing (e.g., Bleske & Buss, 2000). In research testing the idea that evolutionary mechanisms have evolved that prevent or reduce mating rivalry with same-sex friends, Bleske and Shackelford (2001) found supporting evidence that emerging and older adults get more upset about mating rivalry with friends than strangers, that they are motivated to select friends who can be trusted not to compete with them to attract or steal mates, and that they are sensitive to the possibility of being deceived by friends about mating rivalries. These researchers also found a noteworthy gender difference in that females reported that they would be unlikely to

become friends with a sexually promiscuous female and to introduce such a friend to a boyfriend.

Toward an Integrative Model of Competition and Friendship

Based on the research that has been conducted to date, the impact of competition on friendship seems to be dependent on (1) gender; (2) the type of competition (or competitiveness) one is talking about; and (3) culture. We argue that to understand the role of competition in friendship, it is necessary to consider the interconnections between these elements in terms of normative social-developmental processes as well as the cultural transmission of interpersonal motives and values. The context for the following discussion is the intersection of these three important elements.

Motives, Needs, and Gender Socialization

One way to conceptualize competitiveness is to consider an individual's personal motivations, needs, or goals for competing. Often these motivations are grounded in a person's social development through socialization processes, where the goal is to shape an individual's values, motives, and behaviors to fit into the existing culture (Gardiner & Kosmitzki, 2010). Many classic theories of psychology contend that human interaction and behavior is organized around two broad categories of needs or motives (see McAdams, 1988). One cluster of needs or motives is focused on gaining agency, power, and excitement, whereas the other cluster is focused on gaining communion, intimacy, and love. The first cluster has at its core individualistic motives and has been referred to as *agentic* needs; the second cluster centers on social or interpersonal motives and has been referred to as *communal* needs (Buhrmester, 1998). Ideally, a balance is struck between the satisfaction of agentic and communal needs for an individual's healthy psychological and social adjustment (e.g., Bakan, 1966). In terms of competition, agentic and communal needs can be at odds with one another (e.g., a friend beats another friend in a competitive game bringing glory to one individual and hurt feelings to the other), or they can work together (e.g., a win in a team competition encompasses an agentic sense of achievement *and* a communal sense of camaraderie among teammates).

Although most persons in individualistic cultures possess both agentic and communal needs and look to friendships as one way to satisfy these needs (Buhrmester, 1998; Buhrmester & Prager, 1995), past research and theory suggests that the overall importance of having either agentic or communal needs met may differ by gender. For example, several theorists contend that males and females come from two distinctly different "cultures" and that they acquire decidedly different gender-related social interaction styles (Brown & Gilligan, 1992; Maccoby,

1990; Tannen, 1990). Governed by implicit societal norms, social interaction styles can be thought of as scripts for interaction that shape behavior with both guidelines about how to act in social situations and prohibitions about how not to act in social situations (Hibbard & Buhrmester, 1998). The agentic social interaction style is status-oriented; focuses on goals of dominance, instrumental rewards, and asymmetry in social interactions; and tends to be stereotypically associated with masculine characteristics. Competitiveness plays a central role in an agentic orientation, and both gender-role socialization theory and empirical findings suggest that boys are “trained” from an early age to be competitive (e.g., Kohn, 1992; Lever, 1978; Maccoby & Jacklin, 1974). In contrast, the communal interaction style is connection-oriented, focuses on maintaining personal relationships, cooperation, and support, and tends to be stereotypically associated with feminine characteristics. Overt competition is antithetical to the communal style because it runs counter to the idea that being “nice” helps to build and preserve interpersonal bonds. There is also evidence to suggest that socialization by peers plays an important role in shaping and encouraging these two kinds of interaction styles among males and females (e.g., Hibbard & Buhrmester, 1998). Maccoby (1990) noted that peer interactions are segregated by gender from about age 3 until age 11 years, and these “segregated play groups constitute powerful socialization environments in which children acquire distinctive interaction skills that are adapted to same-sex partners” (p. 516). Maccoby’s work suggests that children seek gender-linked norms in the broader culture and then try to conform and encourage others to conform to the cultural “ideal.”

Type of Competition

To the extent that competing to win (i.e., head-to-head competition) is a more normative part of the agentic social style but inconsistent with the “be nice” ideal of the communal style, it is likely to be less damaging to male-male friendships than to female-female friendships, and there is some evidence that this is the case (e.g., see Hibbard & Buhrmester, 2010). Moreover, cultural gender role norms and prescriptions for males and females may encourage the pursuit of some needs while discouraging the pursuit of others. For example, in Western culture the norms for female-female friendships seem to encourage and reward intimate self-disclosure and emotional support but discourage overt competition and any attempts to highlight differences in status (Brown & Gilligan, 1992; Hibbard & Buhrmester, 1998; Maccoby, 1990; Tannen, 1990). In contrast, the norms for male-male friendships seem to discourage communal expression or sentimentality at all cost while encouraging direct competition and “one-upmanship” (Buhrmester, 1998). Males may derive more enjoyment from head-to-head competition (Schneider et al., 2005), whereas females may perceive this type of competition as interpersonal hostility (Helgeson, 1994). To sum, traditional gender socialization in Western society likely

results in male friends being relatively comfortable with competing to win but may leave female friends rather uneasy about it.

On the other hand, because the motivation is individual accomplishment instead of a “zero-sum” enterprise, competing to excel is likely less related to friendship quality. Rather, this type of competition is meant to encourage individual achievement without undermining communal connectedness. Competing to excel is also less gender-typed, does not involve inflicting loss on others, and is relatively normative for both genders in contemporary Western culture, so it should not inherently undermine close friendships. Indeed, most of the life span research presented earlier in this chapter seems to support this contention. Moreover, this type of competition might even be of some benefit to friendships in the form of facilitating higher social competence among males and females (e.g., Chen et al., 2004; Wentzel, 2005) or as a way to promote social bonding and companionship among males in both individualistic and collectivist cultures (Schneider et al., 2005).

Cultural Values

The influence of culture on the socialization and prevalence of competitive motivations and behaviors among children, adolescents, and adults is complex and cannot be overstated. Unfortunately, this area is lacking in terms of both modern conceptualizations and recent research. Early research and theory took a helpful but simplistic approach that assumed that individualistic cultures foster individualistic, competitive values, whereas collectivist cultures foster group-oriented, cooperative values. For example, Hofstede (1980) asserted that in collectivist cultures—where the emphasis is on group success and individual ambitions are reserved for the attainment of group goals—competitiveness may be seen as undesirable for both males and females. Yet, as Schneider et al. (2006) argued, this simple reduction of individualism versus collectivism is not sufficient to explain why children from different cultures show variation in competitive motivations, goals, and behaviors. The trend is to move away from categorical views and toward more fluid representations of value systems within a culture represented as a continuum with individualism and collectivism as the end points. Moreover, these value systems operate through socialization processes at various contextual sublevels (e.g., family, peers, school; Schneider et al., 2006).

Although a thorough review of the literature regarding cultural differences in competitiveness is beyond the scope of this chapter (see Schneider et al., 2006, for a review regarding cultural differences in competitiveness among children and adolescents), there are a few themes that can be taken from past cross-cultural research and theory that may help explain the role of competition in friendship. For example, in his discussion of the concept of individualism as two indigenous psychologies, Sampson (1977, 1988) articulated the differences between *self-contained individualism*, where the emphasis is on firmly drawn self-other boundaries and personal

control, and *enssembled individualism*, where the self-other boundary is more fluid. In self-contained individualism, the self is viewed as exclusionary, such that “if one were to draw a circle marking off the region of self from the region of nonself, the circle would be drawn as to exclude others from the region defined as belonging to the self” (Sampson, 1988, p. 16), whereas in ensembled individualism, the view of self is more inclusive, such that “the circle would include others within the region defined as self” (Sampson, 1988, p. 16). Unfortunately, cross-cultural research addressing the transmission of these conceptually different types of individualism is scarce, but it is possible that, depending on the prevalent values regarding individualism encouraged in a particular culture, friends may approach competition with distinctly different motivations. If the motivation is “winner take all” (as is likely in cultures encouraging self-contained individualism), the friendship may suffer, but if the motivation is “we’re competing but we’re ultimately in this together” (enssembled individualism), the friendship likely stays intact. Perhaps in close, high-quality friendships, the competitive “circle” includes both self and friend, whereas in poor quality friendships or competition with strangers, the circles are separate. Not surprisingly, these two motivations seem to align with—and possibly work in conjunction with—the concept of competing to win versus competing to excel.

Summary

Clearly, this integrative model of the role of competition in friendship is speculative and needs further empirical examination. Without rigorous longitudinal, cross-cultural research, it is impossible to specify the direction of influence between the overlapping elements of the model outlined here. However, as we begin to understand the precise connections between gender socialization, the motives underlying competitiveness, and how individualistic and collectivist values are socialized and transmitted through cultural institutions, we will better understand the processes that make competition either a boon to friendship or the path to friendship dissolution.

Future Directions

The future study of competition in friendship holds much promise, but researchers should consider several issues as they expand on previous work in this area. First, it is not completely clear whether a competitive *situation* has exactly the same impact on friendship as competitiveness as an *enduring personality trait*. Although there are threads of consistency in the past findings, future research should attempt to tease apart these influences both conceptually and methodologically. For example, it may be that some friends can “turn on” the competitive drive when in a competitive situation and turn it off (or “cool off”) when the contest is over, whereas other friends

may be constantly trying to outdo one another *across* situations. The former may be benign to friendship; the latter might be more destructive. Second, future research should continue to investigate the multidimensional nature of competition. We contend that both the drive to outperform others *and* the drive to achieve mastery make up an individual's competitive motivation. If competitiveness is thought of only as trying to outperform others and where winning is the only motivation, competition would likely be associated with generally deleterious interpersonal outcomes. The drive for excellence, on the other hand, is seen as having many virtues, and examining both aspects of competitiveness provides a more balanced perspective of the role competition plays in friendship. Third, the influence of competition on friendship needs to be examined throughout the life span within a cultural context. As we have shown, most research stops at young adulthood. It would be interesting to see whether friends in later adulthood continue to compete with one another, and, if so, what the nature of that competition is. Perhaps with a lifetime of interpersonal experiences behind them, older friends are better able to negotiate conflicts and manage social comparison than children, adolescents, or even younger adults. Finally, the role that culture plays in the transmission of competitive needs and motives should be examined. Cross-cultural research on competition and friendship is severely lacking, and researchers seeking to understand the interconnections between societal values, gender norms, and interpersonal relationships must begin to consider the specific social and developmental contexts where competition takes place.

Conclusions

Reflecting on the example of the competition between the guitarists Dan and Steve introduced at the beginning of this chapter, several issues regarding competition and friendship become clear. First, the type of competition matters. Although Dan and Steve were at first trying to "one-up" each other as musicians (competing to win), they soon realized that the glory of one of them "winning" would result in hurt feelings and perhaps eventually the breakup of the friendship. As they negotiated a solution that would meet their agentic needs while maintaining their communal connection, their competitiveness likely became more of a motivation to excel and a pursuit of individual improvement. Second, the quality of the friendship matters. As Sullivan (1953) and others have argued, close quality friendships foster interpersonal competencies such as the ability to effectively manage conflict. To the extent that the friendship is a good one, Dan and Steve are likely able to handle any current and future conflicts that may arise from competing with each other. Simply put, in terms of friends competing with friends, it may be that the close get closer and the distant just get more distant. Finally, culture matters. Although the research on culture and competition between friends is scarce, there is no doubt that friendships are initiated and maintained within a specific cultural framework. Friendship

does not happen in a vacuum. Societal motives, values, and gender-related norms for interpersonal interactions are effectively transmitted by family, peers, schools, and other cultural institutions and play a pivotal role in competition in friendship across the life span.

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PART IV

BENEFITS AND MAINTENANCE
OF FRIENDSHIPS

Friendship and Health

JULIANNE HOLT-LUNSTAD

Introduction

Friendship is unnecessary, like philosophy, like art. . . It has no survival value; rather it is one of those things that give value to survival.

—C. S. Lewis

Not only do close friendships give meaning to our lives and make us happier (Helliwell, Layard, & Sachs, 2013), but contrary to this statement by C.S. Lewis there is now substantial evidence that they have a powerful influence on physical health and even survival. Indeed, both the quantity and quality of social relationships may influence physical health and risk for early mortality. Research evidence indicates that having fewer and lower-quality social relationships is associated with poorer physical health and greater risk for early mortality, while having more and better relationships is associated with better physical health and greater odds of survival (De Vogli, Chandola, & Marmot, 2007; Holt-Lunstad, Smith, & Layton, 2010; Uchino, 2006). Social relationships can take many forms that include both familial and nonfamilial relationships. Much of the early research on social relationships and physical health has been focused on familial or kin relationships, however, a significant amount of time is spent interacting among friends (Hartup & Stevens, 1999). This has led to an increased focus on *friendship* as an important component of one's social network and source of social support, which subsequently may have important implications for health.

The aims of this chapter are to (1) describe the multiple ways in which friendship has been defined and systematically studied; (2) review the historical and theoretical perspectives that may be applied to understanding the association between friendship and health; (3) provide an overview of the conceptual pathways by which friendships may influence health; (4) review the evidence that links friendship to better physical health outcomes; (5) address the potential detrimental influence of friends on health; and finally (6) address potential implications of changing trends in technology-mediated social interaction for understanding the association between friendship and health.

Definition and Measurement Approaches

The terms “friendship,” “peer relationships,” and “social networks” are often used interchangeably but are distinct constructs. Friendship has been defined as a relationship based on mutual respect, appreciation, and liking (Bryan, Puckett, & Newman, 2013), whereas peer relationships are conceptualized as time spent with those of roughly the same age and maturity level. Although these may overlap, they are not necessarily the same construct given that peers may or may not be considered friends. Likewise, as will be discussed further later, the concept of “friendship” is evolving and broadening as Internet social networks advance.

Within the health literature, the influence of friendship has been measured in diverse ways—similar to the influence of social relationships more broadly. These can be broken down into two broad categories that examine the structure and functions of the relationship (Berkman, Glass, Brissette, & Seeman, 2000; Cohen & Wills, 1985; Uchino, 2006). Generally, these two approaches distinguish the aspects of social/friendship networks and the support that they provide. *Structural* aspects of relationships refer to the extent to which individuals are situated or integrated into social networks. A *social network* describes connections between individuals and their relationships or network ties. Measures of social networks typically assess the density, size, or number of relationships. *Social integration* is used to describe the extent of participation of an individual in a broad range of social relationships, including active engagement in a variety of social activities or relationships, and a sense of communality and identification with one’s social roles. *Functional social support* and corresponding measures focus on the specific functions served by friends, and are measured by actual or perceived availability of support, aid, or resources from these friendships. For example, friendship can be an important source of social support, which can include *emotional support* (e.g., expressions of care and concern), *informational support* (e.g., information or advice to help one cope with stress), *tangible support* (e.g., direct material aid, also referred to as instrumental, practical, or financial support), and *belonging support* (e.g., others to engage in social activities; Cohen, Mermelstein, Kamarck, & Hoberman, 1985; Cutrona & Russell, 1990). These functions also can be differentiated in terms of whether social support is perceived or received (Dunkel-Schetter & Skokan, 1990). Perceived support refers to the perception that support is available and will be provided if needed, whereas received support refers to the actual support provided by others. Importantly, received and perceived support are only moderately correlated and thus should be viewed as distinct constructs (Wills & Shiner, 2000). Thus, the influence of friendships on physical health is generally evaluated in terms of (1) the extent of integration in social networks, (2) the quality of social interactions that are intended to be supportive (e.g., received social support), and (3) the beliefs and perceptions of support availability held by individuals (e.g., perceived social support).

Historical and Theoretical Perspectives

Although friendship has been systematically examined for over a century (Monroe, 1898), the majority of these studies focus on friendship in childhood and adolescence, with less known about friendship in older adulthood—a time when developmental processes may be most likely to manifest in physical health outcomes. Moreover, much of the research has focused on friendship as a relationship process, relationship outcomes, and psychological outcomes, with less attention paid to friendship in the context of physical health outcomes.

To understand how friendship might influence health, it may be useful to place it into the broader context of major theoretical models that have been used to guide research on close relationships and health. Although there are many theoretical models that have been proposed, the social network theory and social support theory are highlighted, because these are closely relevant to how friendship may influence health, as friends are likely a substantial portion of one's social network and source of social support.

Social Network Theory

The term “social network” has been attributed to the sociologist Barnes (1954), as well as the anthropologists Bott (1957) and Mitchell (1969). Social network theory describes the individual as a node and the relationships to others within the network as ties. A social network then may be illustrated as a network of individuals connected by ties. The social network perspective puts greater emphasis on the relationship between ties within the network than on the individual. These networks are thought to have an influencing pressure on individuals' attitudes and behaviors, which in turn may influence health. Thus, social network analysis is a systematic way of detecting the magnitude of these pressures. Social network theory has been applied across many disciplines to examine the relationships between individuals, family, and groups. In an effort to understand the association between social networks and health, social networks are often examined in epidemiological studies, as well as to model health education, disease prevention, spread, and treatment, in addition to healthcare structure and coordination. More recent conceptualizations of social networks (Berkman et al., 2000) further argue that networks operate through four primary pathways: (1) provision of social support; (2) social influence; (3) social engagement and attachment; and (4) access to resources and material goods.

Social Support

Two influential reviews were published in 1976 that emphasized the health relevance of the qualitative aspects (e.g., functional support) that social networks might provide. These two reviews highlighted the important role that social support might play on physical health outcomes. Social support was defined as information from

others that one is cared for, loved, esteemed, and part of a mutually supportive network (Cobb, 1976). The review by Cobb presented evidence suggesting that these social support resources were important in managing stressful life events such as pregnancy, hospitalization, and bereavement. Cassell focused more on the biological processes linking support to health (Cassel, 1976). After reviewing studies suggesting that social support may modify health-relevant bodily processes (e.g., blood pressure, endocrine activity), Cassell argued that social support should be viewed as a protective factor. Together Cassell and Cobb conclude that social support is protective from the potentially pathogenic effects of stress.

Conceptual Pathways by Which Friends Influence Health

The influence of social relationships on physical health has been examined across a number of different disciplines including psychology, medicine, epidemiology, sociology, anthropology, and public health. From this interdisciplinary perspective multiple pathways have been identified by which friends may influence physical health outcomes. General theoretical models have emerged from this work suggesting that friendships and their associated social support may be health-promoting by influencing both psychological and behavioral processes (Uchino, 2006). For instance, friends may be important sources of social support and thereby influence psychological pathways (e.g., stress appraisal) as well as behavioral pathways (e.g., health behavior change). These pathways are thought to influence health-relevant biological pathways that ultimately influence the development or progression of physical health outcomes. Friendships may also have a direct influence on health-relevant biological outcomes (e.g., blood pressure) that may lead to clinical disease end points such as hypertension.

The Stress-Buffering Model

The most well-known stress-related theoretical model is the stress-buffering model of support (Cohen & Wills, 1985). This model is based on the hypothesis that stressors have an adverse influence on health behaviors and physical health outcomes but that social support can help “buffer” or minimize the negative health effects of stress. This stress-buffering occurs through a cognitive appraisal process (interpretation of the situation and our coping resources) that can in turn weaken or “buffer” the normally robust association between stress and health-related outcomes (Cohen, 1988).

The Matching Hypothesis

The matching hypothesis, a variation on the stress-buffering model, predicts that the stress-buffering of social support is most effective when there is a match between the

type of support provided and the needs arising from the stressful event (Cutrona & Russell, 1990). More specifically, it predicts that emotional and belonging support should be most effective for uncontrollable events (e.g., job layoff), whereas informational and tangible support should be most effective for controllable events (e.g., preparing for a job interview; Cutrona & Russell, 1990). Importantly, this is one of the few theoretical models that highlights how different functional components of social support might be related to different outcomes based on the characteristics/type of the stressor (e.g., controllability).

The Direct Effect Model

This model postulates that social support is effective more generally regardless of stress levels (Cohen & Wills, 1985). In their review, Cohen and Wills found that structural measures of support were more likely to demonstrate direct effects. The direct effect of structural measures was seen as representing direct (e.g., encouragement to behave more healthily) or indirect (e.g., greater life meaning from relationships leads to better self-care and less risk taking) social control processes (Umberson, 1987). However, there is now evidence that functional support can also have direct effects on health by increasing a sense of connection, self-esteem, and control over life due to knowing that you are cared for and supported by others (Lakey & Orehek, 2011; Thoits, 2011).

Relational Regulation Theory

Relational regulation theory (RRT) was proposed as an extension to account for direct effects of social support on mental health outcomes. According to RRT, everyday interactions with another person (e.g., chatting about the events of your day, gossip, sports talk) regulate an individual on a daily basis, which may result in positive outcomes such as general comfort with that person and a sense of well-being (Lakey & Orehek, 2011). Because relationship representations may generalize to stressful contexts, daily interactions may serve as the basis for stress-buffering or prevention. Indeed, researchers have been able to predict which relationships might be most beneficial months later based on analyses of brief 10-minute laboratory-based discussions (Veenstra et al., 2011).

Social Capitalization Theory

This is one of the few perspectives that does not focus on the benefits of support during stressful times but rather suggests that friendship may be beneficial via positive experiences. While friends can be an important source of support during stressful times, when something positive or exciting happens we also want to share it with a friend. More specifically, this theory suggests that by sharing positive events with a friend we experience even greater benefits (or *capitalization*) than the benefit of experience itself (Gable, Reis, Impett, & Asher, 2004).

Sharing positive experiences with a supportive and responsive friend has been shown to influence positive affect, happiness, and personal and relationship well-being (Lambert et al., 2013). The responsiveness of support received from friends during positive events also provides critical information as to the availability of the source during times of stress (Gable, Gosnell, Maisel, & Strachman, 2012). While less research has linked social capitalization to physical health outcomes, other research has linked such affective states and relationship well-being to health processes (Dockray & Steptoe, 2010; Stellar et al., 2015), making this a potentially promising line of research.

Friendship and Physical Health Outcomes

Does friendship have a significant influence on physical health, or does one's physical health influence friendships? There is data to suggest the association between friendship and health may be bidirectional, such that friendship can influence health and health can influence friendship (Bryan et al., 2013). Importantly, however, there exists strong epidemiological evidence of a directional effect of relationships on health (Holt-Lunstad et al., 2010). Thus, the majority of this chapter focuses on the directional effect of friendship on physical health. Likewise, the influence that friendships may have on physical health may be either positive or negative. While being socially connected can be protective, friendships may also have a deleterious effect on health via encouraging unhealthy and risky behaviors and/or by serving as sources of stress.

Effects of Health on Friendship

There is evidence to suggest that health factors (e.g., smoking status, BMI, muscularity, depression, etc.) can influence the development, maintenance, and dissolution of friendships (O'Malley & Christakis, 2011). Adolescents in poor health are also more likely to form smaller social networks and occupy less prominence within their networks than their healthy peers (Haas, Schaefer, & Kornienko, 2010). However, in a review of youth with chronic pediatric conditions, evidence suggests that children and adolescents with chronic health conditions such as cancer, asthma, and diabetes generally do not have more problems with peer relations than do their healthy counterparts (La Greca, Bearman, & Moore, 2002). Moreover, this review found that friends often facilitated adaptation to their health condition. However, those with more stigmatizing conditions (e.g., HIV) and conditions of the central nervous system (CNS; e.g., cerebral palsy) were more likely to encounter social difficulties. Thus, it appears that the nature of the health condition may play an important role in whether it may impact friendships and peer relations.

Effects of Friendship on Health

Overall, there is strong evidence for the protective effect of social relationships on health, with stronger evidence for perceived support than received support (see review by Uchino, 2009). This evidence comes from laboratory, field, and epidemiological studies across morbidity and mortality outcomes. Most studies measure perceptions of social support in a broad way that includes perceptions of support from friends, family, and acquaintances; however, the majority of these studies do not break down results by relationship type. Thus, results include the effects of friendships, but few studies isolate the effects of friendship specifically. Evidence for effects of friendship on health behaviors, self-reported health and symptomatology, clinical health outcomes, and overall mortality are briefly highlighted in this section.

Health Behaviors

In both youth and adults, friends and peers have a significant influence on the development and maintenance of positive and negative health habits. Friends may influence health by encouraging, modeling, or promoting norms of healthy behaviors (e.g., physical activity, fruit and vegetable consumption, adequate sleep) and deterring risky behaviors (e.g., smoking, binge drinking, drug use, risky sexual behaviors). For instance, even among adults, data shows that peers influence fruit and vegetable consumption (Buller et al., 1999). In older adult women, support from a friend was the most successful in predicting physical activity across the life span (Harvey & Alexander, 2012). Many health behaviors tend to also cluster together such that they co-occur (e.g., alcohol and substance abuse, nutrition and physical activity). One study found that descriptive norms of friends were associated with multiple behavior clusters (Dusseldorp et al., 2014). Thus, not only might friends influence health habits, but, given that these habits tend to cluster, this influence may be compounded.

Friends can also be sources of information relevant to health behaviors. For example, in a recent study of a random sample of 915 adolescents, participants completed an anonymous questionnaire that asked about their preferred source of health information (Baheiraei, Khoori, Foroushani, Ahmadi, & Ybarra, 2014). Results of this study indicated that the preferred source of this information was their mothers (51.11%) and same-sex friends (40.11%), with older adolescents preferring friends. In another study, older women were asked whom they were closest to and how they contributed to their health (Moremen, 2008). When it came to direct caregiving, most preferred family members to friends; however, some felt they would also call on their friends. Women described the ways in which confidants kept them healthy, which included “(1) offering advice and encouragement about diet and exercise, (2) providing meals and transportation, (3) laughing, talking, and joking with them, (4) keeping them happy and feeling good about themselves, and, on rare occasions, (5) offering spiritual guidance” (Moremen, 2008, p. 160).

Self-Reported Health and Symptomology

The majority of studies that examine the health influence of friendship specifically measure self-reported health. A longitudinal study among a Scottish cohort found that the number of friends in childhood predicted self-rated health in adulthood (Almquist, 2012). There were gender differences in this association, such that for women it was a gradient effect (the fewer the number of friends the worse the health) whereas for men it was more of a threshold effect (only those without friends showed poorer health). In a national survey study of older adults, older people who had a close companion friend in the place where they worship had higher self-reported health and with fewer outpatient physician visits over time; however, these findings only held for the oldest-old study participants (Krause, 2010). This also appears to be consistent among adolescents. Examining the friendship data from the National Longitudinal Study of Adolescent Health, results show that having a larger number of friends improves physical and mental health (Ho, 2014). Specifically, each additional friend increases an individual's general health measure by 6.6%. Taken together these data suggest that the number of friends one has, across childhood, adolescence, adulthood, and old age, is beneficial to physical health.

Social support has been shown across a number of studies to buffer the negative effects of stress, but there may be some utility to support from friends specifically. For example, one study found that having a friend to confide in played a moderating role in the negative health effects associated with losing a spouse (widowhood, divorce, separation; Bookwala, Marshall, & Manning, 2014). This study found that those who had a friend as a confidante reported lower somatic depressive symptoms, better self-rated health, and fewer sick days in bed during the preceding year than those who reported not having a friend as confidante.

Clinical Health Outcomes

There is substantial evidence linking social support to coronary heart disease (CHD), the leading cause of death in most industrialized countries. For example, in a prospective study examining perceived social support from family, friends, acquaintances, and significant others on mortality or recurrent event, found that perceived social support was associated with better recovery among patients with a recent acute myocardial infarction (Lett et al., 2007). Further, a 2010 systematic review and meta-analysis examined prospective studies that measured both structural and functional social support and cardiovascular outcomes at follow-up. These included studies of CHD etiology, development of CHD in previously healthy individuals, and CHD prognosis, which includes individuals with pre-existing CHD (Barth, Schneider, & von Kanel, 2010). Across multiple studies, there is evidence for the beneficial effect of functional support. Perceived social support, or the perception of positive social resources, is important in CHD prognosis.

Another clinical outcome that is gaining interest is oral health, given that periodontal disease is also significantly associated with heart disease (Lockhart et al., 2012). In an intriguing study of oral health, various aspects of social relationships, including number of close friends, were examined to see whether these were associated with clinical measures of current disease, markers of good oral function, and subjective oral health (Tsakos et al., 2013). They found that those with four to six close friends had fewer decayed teeth and lower probability for root decay than those with fewer friends.

Mortality

There is now substantial evidence for the protective effect of being socially connected on risk for mortality from all causes. Some of the first epidemiological evidence was highlighted in an influential review of five prospective studies (House, Landis, & Umberson, 1988). Since that time, the number of studies examining the influence of social relationships (both functional and structural aspects) and mortality has grown exponentially. In a meta-analysis of 148 independent prospective studies, results indicate that individuals with greater social connections (averaged across the different measurement approaches) have a 50% greater likelihood of survival compared with those low in social connections (Holt-Lunstad et al., 2010). The effect was consistent across gender, age, initial health status, and causes of mortality.

There is now evidence of the directional effect of relationships' influence on mortality (Holt-Lunstad et al., 2010). Most studies tracked initially healthy participants; however, regardless of initial health status, those who were more socially connected lived longer. Most notably, the overall magnitude of the effect on risk for mortality was comparable with and in many cases exceeded the effect of many well-established risk factors for mortality. For instance, lacking social connectedness carries a risk equivalent to smoking up to 15 cigarettes per day, and is greater than alcohol abuse, physical inactivity (sedentary lifestyle), obesity, and air pollution, among others.

The studies included in the meta-analytic review measured the influence of social relationships in diverse ways, including both functional (received support, perceived social support, and perceived loneliness) and structural aspects (marital status, social networks, social integration, complex measures of social integrations, living alone, social isolation). With the exception of marital status and perhaps living alone, each of these measurement approaches likely included the influence of friends. Assessments that took into account the multidimensional aspects of social relationships were associated with a 91% increased odds of survival. Such measures account for a diversity of relationships. Likewise, other research suggests that having a diversity (not just a large number) of relationships was associated with better immune functioning (Cohen, Doyle, Skoner, Rabin, & Gwaltney, 1997) and even

white matter microstructural integrity in the brain (Molesworth, Sheu, Cohen, Gianaros, & Verstynen, 2015). Together, these data suggest that perhaps different relationships serve different functions and thus access to diversity would be adaptive. Further, these data suggest that both friendship networks and the social support they provide are important.

Potentially Deleterious Health Effects of Friendship

While friends can exert a positive influence on health behaviors, evidence shows that friends can also exert a powerful negative influence as well.

Unhealthy Behaviors

A unique approach to understanding the role of friendship on health behaviors comes from the work of Christakis and Fowler on *social contagion*. They review a series of studies that show the spread of various health indicators within social networks (Christakis & Fowler, 2013). For example, one's chances of becoming obese increased by 57% if he or she had a friend who became obese within a given time frame (Christakis & Fowler, 2007). Evidence from large datasets demonstrates the significant influence of social networks on alcohol consumption (Rosenquist, Murabito, Fowler, & Christakis, 2010), smoking (Christakis & Fowler, 2008), aspirin use and cardiac events (Strully et al., 2012), depression (Rosenquist, Fowler, & Christakis, 2011), and sleep loss and drug use in adolescents (Mednick, Christakis, & Fowler, 2010). They further argue that formation of friendships, relationships that are neither kin nor mate, tend to be formed with genetically similar others (Christakis & Fowler, 2014; Fowler, Settle, & Christakis, 2011).

Sources of Stress

Friends can be rich sources of social support that can help us in times of stress, but friendships can also be sources of stress themselves. Much of the research has focused primarily on positive relationships, however many friendships are characterized by both positivity and negativity (Campo et al., 2009; Uchino, Holt-Lunstad, Uno, & Flinders, 2001). The assumption that friendships are solely supportive has overgeneralized many individuals' experiences—yet data shows that roughly half of people's friendship networks are made up of ambivalent relationships (Bushman & Holt-Lunstad, 2009; Holt-Lunstad & Clark, 2014).

Several studies have examined the influence of interacting with an ambivalent friend relative to a supportive friend on cardiovascular reactivity (Gramer & Supp, 2014; Holt-Lunstad & Clark, 2014; Holt-Lunstad, Uchino, Smith, & Hicks, 2007; Uno, Uchino, & Smith, 2002). In these studies, participants were asked to bring in a friend to the lab as part of the study. Results from these studies have demonstrated greater cardiovascular reactivity when interacting with an ambivalent friend

compared with a supportive friend. Several other studies using other research designs have shown consistent findings. This finding is consistent whether the target (ambivalent relationship) is physically present or not (Carlisle et al., 2012), whether one is interacting with an experimentally manipulated or existing relationship, and whether the effect is examined at the relationship level (examining a specific relationship dyad; Holt-Lunstad et al., 2007) or network level (number of ambivalent relationships in one's network; Uchino et al., 2001). Greater cardiovascular reactivity associated with ambivalent relationships was also seen across multiple types of laboratory tasks; and when examining young adult (mostly undergraduate) as well as middle to older adult samples (Uchino, Holt-Lunstad, Bloor, & Campo, 2005). Taken together, the evidence suggests a generalized negative influence of ambivalent relationships on acute cardiovascular functioning in a laboratory setting. These studies suggest that ambivalent relationships are linked to deleterious health-relevant processes. Importantly, there is also evidence to suggest that these effects may be chronic. Ambivalent friendships occupy roughly half of one's social network, involve a similar level of contact as supportive friends, and are maintained over the long term, suggesting that the influence of these relationships may not be isolated but rather may potentially have a pervasive impact (Bushman & Holt-Lunstad, 2009).

Looking to the Future

Recent advancements in technology have led to dramatic shifts in the way in which we interact socially and the way in which social support is communicated. The use of the Internet and mobile technology is widespread, even in developing and emerging nations (Pew Research, 2015), and is now the primary form of communication. Recent developments in technology are even changing the way in which many define what is considered a friend (see Ledbetter, chapter 6, this volume). For example, many do not consider a friend on Facebook to be true a friend. Technology is already currently involved in and influencing the development, maintenance, and even termination of friendships, and new developments (e.g., intelligent machines, wearable devices, immersive environments, etc.) are happening at an exponentially rapid pace. The long-term consequences of these developments are yet unknown.

This raises an important question of whether friendship online has similar health effects as off-line friendships. Research is now exploring both equivalencies between technology-mediated and face-to-face communication, as well as the potential unique benefits of each approach to social support. There is some evidence to suggest that participation in a broader social network available online can promote well-being and provide a buffering effect during times of stress (Dutta-Bergman, 2004). For example, one study found that the number of Facebook friends was associated with stronger perceptions of social support, which was associated with

reduced stress, and in turn less self-reported physical illness and greater well-being (Nabi, Prestin, & So, 2013). In an experimental study where subjects were randomly assigned to increase frequency of Facebook posts, results revealed experimentally induced reductions in loneliness relative to the control group and that these reductions in loneliness were due to increased feelings of connection to friends on a daily basis (Deters & Mehl, 2013). However, other studies point to potential pitfalls (Luxton, June, & Fairall, 2012; Steers, Wickham, & Acitelli, 2014). For instance, presence of a mobile phone in social settings may reduce closeness and quality of interactions interfering with social support (Przybylski & Weinstein, 2013). Likewise, usage of social media has been linked to greater depressive symptomology (Steers et al., 2014) and even suicide-related behavior (Luxton et al., 2012). Thus, we need to acknowledge and better understand both the positive and negative health implications associated with social technology.

Conclusion

Friendship is an important and significant part of our daily social experience that has widespread implications for our health and well-being. There is currently a large and growing literature on the significant influence our social relationships have on physical health; however, relatively less is known about friendship specifically. While much is known about social networks and the social support associated with them, few studies specify the specific nature of the relationship type (e.g., friend, spouse, family, coworker, parent-child, etc.). Undoubtedly, friendships are a part of our social networks and are a frequent source of social support—both of which have been robustly linked to physical health outcomes. Further, meta-analytic data on mortality found the greatest effect among studies that used multidimensional measures of social integration—it was associated with a 91% increased odds of survival. Such measures account for a diversity of relationships (e.g., spouse, children, parents, other relatives, close friends, community involvement, coworkers, neighbors, etc.), suggesting that perhaps different relationships serve different functions and thus access to diversity would be adaptive. Given recent trends suggesting technology-mediated communication is now the dominant form of social interaction, friends may occupy a greater prominence among interaction partners via social technology. Importantly, while research suggests that friends and friendship networks may have a powerful influence on health, this influence may be positive or negative. Although more data is needed, it is possible that social technology may accelerate and accentuate this influence. Additionally, a life span perspective is needed to take into account distinct antecedent processes and mechanisms that are relevant to different sources of support over time (Uchino, 2009). Finally, because friendship is unique in being a voluntary/optional relationship, further research is needed to determine the potential particular pathways by which friendships influence health.

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Friendship and Mental Health Functioning

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Sias and Bartoo (2007) described friendships as a psychological “vaccine” against both physical and mental illness. They hypothesized that prophylactic benefits are often derived from the emotional, tangible, and informational support provided in close personal friendships.

Other clinical researchers have posited that broader forms of social support provide resiliency by “buffering” reactions to life stress (Turner & Brown, 2010). This chapter reviews evidence in support of the contention that personal friendships and social support enhance resiliency to stressors such as trauma, losses, maltreatment, and other developmental adversities. This literature review will be followed by an analysis of original data that provides a test of the general hypothesis that close child and adult relationships portend better overall mental health.

Links between friendship and mental health indices are complex. First, friendship represents a complex construct without a uniform definition. Second, mental health symptom clusters extend across many relevant dimensions that vary in their sensitivity to interpersonal influences. Third, relationships between mental health and friendship variables, however measured, are inherently complicated by their bidirectional nature. While cause–effect relationships prove difficult to establish, collective correlational findings are useful in identifying the sorts of mental health symptom clusters that are most likely to emerge when critical social support and friendship circles have been destabilized.

Defining Qualities of Friendship

Hayes (1988) defined friendship as a voluntary interdependence of two persons over time involving companionship, intimacy, affection, and mutual assistance intended to facilitate the socioemotional goals of both parties. Sullivan (1953) emphasized decades ago that friendships serve many purposes including companionship, assistance, affection, intimacy, alliance, emotional security, and self-validation. Friendships also convey a sense of mutual value, enhance communication

and interpersonal skills, and buffer both partners against life stressors (Bukowski, Hoza, & Boivin, 1994).

Developmental Contributors to Friendship Capacity

Secure and affirming parent–child relationships have been predictive of close and sustainable young adult friendships (Wise & King, 2008). Conversely, childhood maltreatment and other forms of developmental adversity may have deleterious effects on the capacity of the child to develop healthy friendships and other interpersonal relationships. Childhood abuse victims appear to have greater difficulty in initiating and sustaining satisfying peer relationships (Smith, 1995). Parental physical abuse has been found to predict less rewarding adult best friendships (Mugge, King, & Klophaus, 2009). Children from abusive homes have reported that they feel more negative toward a greater portion of their best friendships than do children with nonremarkable histories (Salzinger, Feldman, Hammer, & Rosario, 1993). Abused girls tend to report higher levels of anxiety, depression, and avoidance in their adult relationships (Fletcher, 2009; Godbout, Sabourin, & Lusser, 2009). Peers of abused children have also reported that their abused counterparts are more aggressive and less cooperative (Egeland, Yates, Appleyard, & Dulmen, 2002). Studies have tended to find lower levels of peer support during adolescence (Doucent & Aseltine, 2003) and strained adult friendships among individuals exposed to domestic violence during upbringing (Green & King, 2009; Wise & King, 2008).

Friendship Benefits

Close friendships portend higher levels of self-esteem, psychosocial adjustment, and interpersonal sensitivity (Bagwell et al., 2005). Individuals who identify lifetime friendships have been found to be better adjusted than their friendless peers (Gupta & Korte, 1994). Adults who describe their friendships as more positive and satisfying also report lesser feelings of anxiety and hostility (Bagwell et al., 2005). Young adults who described a close friendship in preadolescence have been found to show greater enjoyment, assistance, intimacy, emotional support, sensitivity, loyalty, mutual affection, and overall higher quality of life than those who did not (Bagwell, Newcomb, & Bukowski, 1998). Close best friendships predict higher general interpersonal happiness (Demir, Özdemir, & Weitekamp, 2007). Best friendships also appear to reduce the chances of being victimized by peers and, if victimization occurs, buffer the negative effects (Cowie, 2000; Owens, Shute, & Slee, 2000). These protective benefits may extend to dampening the deleterious effects of problematic home environments (Schwartz, Dodge, Pettit, & Bates, 2000).

Theoretical and qualitative writings are available to posit the mechanisms by which friendship conveys so many benefits. Friendships often provide warmth, affection, nurturance, and intimacy (Bollmer, 2005) while contributing to self-esteem,

positive family attitudes, and enhanced romantic relationships (Bagwell et al., 1998). Reciprocal friendships can supply cognitive and affective resources, foster a sense of well-being, socialize both parties, facilitate mastery of age-related tasks, and provide developmental advantages that can extend into old age (Hartup & Stevens, 1997). The sense of inclusion and belonging in childhood and adolescence can extend to participation in social organizations and a satisfying social life in adulthood (Furman & Robbins, 1985). Friendships also facilitate adaptive life transitions, including college and workforce entrance, marriage, having children, spousal death, and retirement (Magnusson, Stattin, & Allen, 1985).

While positive friendship effects appear numerous, the negative impact of peer rejection warrants equal attention. Deviant peer interactions appear to diminish feelings of well-being (Pagel, Erdly, & Becker, 1987) and contribute to delinquency among vulnerable adolescents (Hartup & Stevens, 1997). Peer rejection and early school dropout have been linked (Coie, Lochman, Terry, & Hyman, 1992). Peer rejection has also been associated with delinquency, criminality, lower school performance, vocational competence, aspiration level, less participation in social activities, and many mental health problems in preschool, middle school, and adolescence (Deater-Deckard, 2001). Peer rejection can come in a variety of forms, including bullying, being ignored, and relational aggression (Bagwell et al., 1998; Salmivalli, Kaukiainen, & Lagerspetz, 2000). Children who are victimized by peers often express hostility, aggression, or withdrawal from social interactions. Social withdrawal after peer rejection has often been accompanied by depression (Rubin & Burgess, *in press*) and even suicidal ideation (Carlo & Raffaelli, 2000; DiFilippo & Overholser, 2000) among children and adolescents.

Friendships and Mental Health

Adults whose friendships were characterized by frequent conflict, antagonism, and inequality have been shown to have higher rates of psychiatric symptoms than their positively relating peers (Bagwell et al., 2005). King and Terrance (2008) studied best friendship correlates with psychiatric symptomatology among college students using the Minnesota Multiphasic Personality Inventory (MMPI-2). They found 57 (31%) significant ($p < .05$) correlations between MMPI-2 and Acquaintance Description Form (ADF-F2; Wright, 1985, 1989) scale indicators of best friendship closeness, value, and durability (Cohen d effect sizes ranging from .28 to .72). Four of the ADF-F2 scales (security, social regulation, personal, and situational maintenance difficulty) were strongly related to the selected MMPI-2 features. Higher Depression (D), Psychasthenia (Pt), and Hypochondriasis (Hs) scores predicted lower levels of best friendship security along with higher situational maintenance difficulty.

While close friendships often serve positive, protective, and healthy functions, relationships high in antagonism, conflict, and inequality can just as predictably

trigger internalized or externalized symptoms of psychological distress (Bagwell et al., 2005). In this regard, destabilized “friendships” appear to be detrimental to mental health. Nezelek, Imbrie, and Shean (1994) found that individuals with low levels of intimacy (i.e., low quality) with their best friends had higher levels of depression. Friendships appear to have an even more direct impact on self-esteem. As with depression, the more positive features in a friendship dyad, the greater the self-esteem and the lower the symptomology of the individuals (Bagwell et al., 2005). Further, King and Terrance (2005) relied on the Millon Clinical Multiaxial Inventory (MCMI-II; Millon, 1987) and the ADF-F2 to examine associations between personality disorder attributes and best friendship qualities. Passive-aggressive, avoidant, schizotypal, sadistic-aggressive, antisocial, borderline, and/or self-defeating personality disorder attributes were linked to best friendships that were less secure (effect sizes ranging from .67 to .78). Passive-aggressive, self-defeating and borderline attributes also predicted best friendships that were more strongly influenced by the pressures and expectations of outsiders.

Social Support and Mental Health

Friendships contribute greatly to the broader resiliency factor of “social support.” Social support has been defined as the perceived level of emotional, informational, or practical assistance collectively provided, or made available, by significant others (Thoits, 2010). Emotional support includes providing love, empathy, and nurturance to another person. Informational support may come in the form of advice or suggestions to deal with a problem or stressful event. Instrumental (practical) social support is represented by tangible aid or services that directly help someone in need. The perception of social support can be even more effective than tangible support itself (Taylor, 2011). While an individual who lost their job may be comforted by their spouse, just knowledge of the availability of partner support is effective comfort in its own right. Perceived, rather than demonstrable, social support has been most strongly linked with stress resistance and well-being (Turner & Brown, 2010). The subjective experience of having a network of caring individuals when needed constitutes social support (House, 1981).

The “buffering hypothesis” proposes that social support enhances resiliency in responding to life stressors (Turner & Brown, 2010). The diathesis-stress model of psychopathology posits that stressors interact with a genetic predisposition to produce the expression of a disorder (Holmes, 2004). Social support is an important consideration in this model since it serves as a protective factor against the deleterious effects of both stressors and genetic predispositions (Buchanan, 1994). Social support appears to have positive effects on mental health prior to onset, at onset, and during stressor exposure. Social support also reduces the risk of onset and relapse after successful treatment (Gayer-Anderson & Morgan, 2013).

In one 3-year follow-up study of first episode psychotic patients, higher levels of social support predicted lower levels of positive symptoms (e.g., auditory or visual hallucinations) and fewer hospitalizations (Norman et al., 2005). Social support and stress have been found to account for 40% of the variance in depression symptoms among single mothers (Cairney, Boyle, Offord, & Racine, 2003). Depression also appears to erode peer social support during later adolescence (Stice, Ragan, & Randall, 2004). Beyond depression, social support also has an effect on anger and other emotions. Social support was inversely related to anger, impulsivity, and suicide risk within one PTSD sample (Kotler, Iancu, Efroni, & Amir, 2001).

Original Analyses

In the current literature review as presented previously, we noticed a paucity of research on the extent to which childhood and adult social support and friendship qualities covary with (self-reported) psychiatric histories. Therefore, we analyzed some original data for the purposes of further elucidation of the hypotheses advanced in this chapter regarding these bidirectional friendship associations. It was hypothesized that these friendship and social support correlates would be broad and often substantial in size. These original analyses were intended to illustrate the important mutual influences of friendship and mental health on one another. While our primary analytic focus was on friendship predictors of psychiatric diagnoses and treatment, a decision was made to extend these analyses even further to include measures of different forms of psychological distress. We attempted to select a broad range of distress indicators to better sample the full range of associations that might be expected between friendship and psychological dysfunction in the college population. These dimensional symptom measures included depression and panic indices, trait aggression, problem drinking, body image preoccupation, and even satisfaction with life.

Method

Original data was collected and analyzed to test hypotheses derived from the literature review presented in this chapter.

Participants and Procedure

Undergraduate students ($N = 988$) enrolled in selected psychology classes at the University of North Dakota were given an opportunity to earn extra credit through completion of electronic survey accessed via a web address. No exclusion criteria were applied. Ages ranged from 18 to 55 ($M = 20.22$, $SD = 4.00$). Ethnic representation (Caucasian, 90.1%; Native American, 1.4%; Hispanic, 1.1%; African American,

1.7%; Biracial, 1.0%; Asian, 2.1%; Other, 2.6%) varied in the sample. Women ($n = 750$, 75.9%) outnumbered the men ($n = 221$; 22.4%).

Materials

Friendship and mental health was examined in this study using a range of indices.

Acquaintance Description Form (ADF-F2)

The 70-item ADF-F2 (Wright, 1985, 1989) has been used widely in friendship research. The ADF-F2 generates subscale scores on 13 different dimensions measuring aspects of the respondent's relationship with a target friend. The ADF-F2 is designed to permit customization in terms of defining characteristics of the friendship. This study relied on an abbreviated version of the ADF-F2 that focuses exclusively on the personal maintenance difficulty (MD-P subscale) of the respondent's "best friendship." Personal maintenance difficulty is defined by the ADF-F2 as the extent to which the relationship was seen to be "frustrating, inconvenient, or unpleasant due to the habits, mannerisms, or personal characteristics" of the best friend. Internal ($r = .62$) and test-retest ($r = .79$) reliability has been established previously for the MD-P subscale of the ADF-F2. The ADF-F2 subscales have been linked to a wide range of concurrent validity indices (Green & King, 2009; King & Terrance, 2006; Mugge et al., 2009; Walter & King, 2013; Wise & King, 2008).

Friendship Circle Favorability

This variable was derived (customized with reversed metric with high scores indicating favorability) from the Peer Relationships scale developed through the Consortium of Longitudinal Studies on Child Abuse and Neglect (LONGSCAN) project coordinated at the University of North Carolina (<http://www.unc.edu/depts/sph/longscan/>). Respondents were asked questions about their satisfaction with the collective friendships they formed in school from kindergarten through high school. Item examples included: *How many of the kids at school (K-12) were friendly toward you? How satisfied were you with the friends you usually hung around with during your school (K-12) years?* Reliability data is unavailable for this measure, but a variety of concurrent validation indices have been provided by the scale developers (LONGSCAN, 1998).

Social Support Index

A customized (minor rewording and item deletions) version of the Resilience Factors scale developed through the LONGSCAN project was used for this index.

Respondents were asked to identify specific contributions to their "social support structure" during their school (K-12) years. Item examples included: *Was there*

ever an adult, outside of your family, who encouraged you and believed in you? Did you ever have a part in a drama, music, dance, or other performing arts group? Were you ever a part of a church group?.

Diagnostic Classifications

Diagnoses were established from affirmative responses to the question: *Have you been diagnosed with any of the following medical conditions (leave bubble blank if answer is no or not applicable)?*

Mental Health Treatment History

Treatment histories were determined from affirmative responses to the stem question: *Have you ever?* This stem was followed by reference to all of the treatment interventions listed in Table 15.1. Attempted suicides were distinguished in number but ultimately clustered in the analysis into three categories (0, 1, > 1).

Depression Symptoms

Depression symptom identification was derived by the authors from a customized listing of the DSM-5 diagnostic criteria for major depression. The question was asked: *Have you experienced any of these depression symptoms within the past two weeks?* This depression index relied upon a 5-point metric with symptom ratings ranging from 0 (symptom not present) to 5 (present daily with significant distress or impairment).

Panic Symptoms

Panic anxiety symptom identification was derived by the authors from a listing of the DSM-5 diagnostic criteria for panic attack. The question was asked: *Have you experienced any of these panic symptoms within the past year (rate symptom only if it emerged quickly and peaked within ten minutes)?* This panic index used a 5-point metric with ratings ranging from 0 (symptom not present) to 5 (present daily with significant distress or impairment).

Buss-Perry Aggression Questionnaire

The Buss-Perry Aggression Questionnaire (BPAQ; Buss & Perry, 1992) is a popular trait aggression inventory with 29 items that are scored on a Likert scale (1 = extremely characteristic of me; 7 = extremely uncharacteristic of me) and segregated into four subscales (Physical Aggression, Verbal Aggression, Trait Anger, Trait Hostility). The BPAQ subscale internal consistency (.89) and 9-week test-retest reliability (ranging from .72 to .80) has been reported by the authors. Concurrent validation summaries are provided elsewhere (Kamarck, 2005).

Table 15.1 Relationship Qualities as a Function of Psychiatric Diagnostic and Treatment Histories

	<i>Adult Best Friendship</i>			<i>Childhood Relationship Favorability</i>					
	<i>Maintenance Difficulty</i>			<i>Friendship Circle</i>			<i>Social Support</i>		
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>
Psychiatric Diagnostic History									
Major Depression	68	12.09	5.20	73	9.56 ^c	2.27	75	12.65	3.57
Comparison Group	789	11.55	4.56	882	10.40 ^c	1.88	913	13.22	3.94
Multiple Suicide Attempts	23	13.70 ^a	4.95	27	8.74 ^c	2.31	28	11.00 ^c	4.46
One Suicide Attempt	39	11.79	4.85	43	9.60 ^a	2.08	43	12.30 ^a	4.34
Comparison Group	752	11.39 ^a	4.51	838	10.42 ^{ac}	1.88	848	13.66 ^{ac}	3.19
Bipolar Disorder	8	16.5	7.35	12	10	1.71	12	12.75	5.29
Comparison Group	849	11.55	4.57	943	10.34	1.93	976	13.18	3.90
PTSD	24	12.88	3.88	26	9.38 ^b	2.26	27	12.52	3.54
Comparison Group	833	11.56	4.63	929	10.36 ^b	1.91	961	13.2	3.93
OCD	32	13.41 ^a	5.66	33	9.88	2.27	34	13.44	3.69
Comparison Group	825	11.52 ^a	4.56	922	10.35	1.91	954	13.17	3.94
Panic Attacks	58	13.21 ^a	5.27	63	10.06	1.97	63	13.46	3.35
Comparison Group	799	11.48 ^a	4.55	892	10.36	1.92	925	13.16	3.95
Schizophrenia	7	19.43 ^c	4.79	7	10.29	1.70	7	14.29	4.03
Comparison Group	850	11.53 ^c	4.56	948	10.34	1.93	981	13.17	3.92
Alcohol Addiction	8	19.00 ^c	4.54	9	9.55	2.19	9	14.11	3.44
Comparison Group	849	11.52 ^c	4.56	946	10.34	1.92	979	13.17	3.92
Drug Addiction	13	15.77 ^c	5.10	14	10.07	1.77	14	13.93	3.30
Comparison Group	844	11.53 ^c	4.58	941	10.34	1.93	974	13.17	3.92
Borderline Personality	8	16.13 ^b	3.14	8	10.12	1.81	9	14.44	2.83
Comparison Group	849	11.55 ^b	4.61	947	10.34	1.93	979	13.17	3.93
ADHD	45	12.22	3.87	48	9.81 ^a	2.16	49	12.78	3.94
Comparison Group	812	11.56	4.65	907	10.36 ^a	1.91	939	13.2	3.94
Anorexia/Bulimia Nervosa	25	12.96	4.99	26	9.77	1.48	27	12.67	3.41
Comparison Group	832	11.55	4.6	929	10.35	1.93	961	13.19	3.93

	<i>Adult Best Friendship</i>			<i>Childhood Relationship Favorability</i>					
	<i>Maintenance Difficulty</i>			<i>Friendship Circle</i>			<i>Social Support</i>		
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>
<i>Treatment History</i>									
Antidepressants (> 1 Trial)	46	13.37 ^b	4.69	50	9.26 ^c	2.33	53	12.19 ^b	3.91
Antidepressants (1 Trial)	85	11.92	4.75	96	9.96 ^a	2.10	97	13.28	3.39
Comparison Group	688	11.29 ^b	4.49	767	10.45 ^{ac}	1.85	774	13.63 ^b	3.27
ECT	10	17.50 ^c	5.48	9	8.11 ^b	2.09	10	8.50 ^a	7.01
Comparison Group	802	11.39 ^c	4.49	897	10.35 ^b	1.92	907	13.56 ^a	3.24
Mood Stabilizers	11	15.09 ^b	6.07	13	8.15 ^c	2.19	14	8.43 ^b	6.22
Comparison Group	803	11.42 ^b	4.50	895	10.37 ^c	1.91	905	13.60 ^b	3.22
Anxiolytics	135	11.87	4.69	145	9.82 ^b	2.24	147	13.16	3.44
Comparison Group	682	11.39	4.49	765	10.43 ^b	1.85	774	13.58	3.32
Antipsychotics	11	16.91 ^c	5.24	12	7.67 ^c	2.42	12	8.50 ^a	6.71
Comparison Group	804	11.40 ^c	4.50	897	10.37 ^c	1.90	907	13.59 ^a	3.22
Stimulants	53	13.28 ^b	4.94	56	9.63 ^a	2.39	58	11.74 ^b	4.71
Comparison Group	760	11.36 ^b	4.50	851	10.38 ^a	1.89	860	13.62 ^b	3.20
Psychotherapy History	31	11.90	5.58	36	9.19 ^b	2.56	36	12.53 ^a	3.74
Comparison Group	752	11.39	4.50	836	10.44 ^b	1.84	845	13.65 ^a	3.20
Psychiatric Hospitalization	23	12.26	3.86	25	9.44 ^a	2.26	26	12.19	4.75
Comparison Group	780	11.43	4.53	869	10.37 ^a	1.91	879	13.59	3.24

Notes: Comparison groups comprised remaining sample after target members were identified.

Equal cell variances were not assumed unless Levene's test for equality indicated otherwise.

Tukey HSD testing used multiple cell post hoc comparisons.

^a*p* < .05. ^b*p* < .01. ^c*p* < .001.

Michigan Alcoholism Screening Test

The Michigan Alcoholism Screening Test (MAST; Selzer, 1971) has served as an especially popular (> 500 studies) screening measure of alcoholism risk. The MAST comprises 24 (yes/no) items such as: *Can you stop drinking without a struggle after one or two drinks? Have you ever had delirium tremens (DTs), severe shaking, heard voices, or seen things that weren't there after heavy drinking?* Items are weighted differently based on their ability to discriminate between alcoholic and comparison respondents in the validation sample.

MAST reliability ($\alpha = .80$) has been established (Shields, Howell, Potter, & Weiss, 2007) along with extensive evidence of the scale's classification sensitivity and a range of concurrent validity indices (Storgaard, Nielsen, & Gluud, 1994; Teitelbaum & Mullen, 2000). The MAST scores range from 0 to 54 with alcoholism risk suggested by scores in excess of 6.

Goldfarb Fear of Fat Scale

The Goldfarb Fear of Fat Scale (GFFS) is a 10-item scale (Goldfarb, Dynens, & Garrard, 1985) that relies on a 4-point metric to generate scores ranging from 10 to 40. Item content attests to the high face validity of the GFFS (e.g., *Becoming fat would be the worst thing that could happen to me*). Item content has been shown by the authors to be internally consistent ($\alpha = .85$) with high ($r = .88$) 1-week test retest-retest reliability.

Satisfaction with Life Scale

The Satisfaction with Life Scale (SLS; Diener, Emmons, Larsen, & Griffin, 1985) is a brief 5-item measure of global satisfaction with the entirety of one's life up to the point of testing. Item content attests to the high face validity of the SLS (e.g., *in most ways my life is close to my ideal*). The Likert metric allows scores that range from 1 (strongly disagree) to 7 (strongly agree). Item content has been shown to be internally consistent ($\alpha = .72$) with high ($r = .84$) 8-week test retest-retest reliability among college students (Pavot, Diener, Colvin, & Sandvik, 1991). Total SLS scores have been validated in a range of samples (Pavot & Diener, 1993, 2008) with the index mean and standard deviation around 23.5 and 6.4. Scores falling below 15 indicate life dissatisfaction.

Results

This study employed a two-part analytic strategy to examine the associations found between the psychiatric-friendship indices selected for inclusion. The first approach involved group comparisons regarding friendship qualities between respondents who reported and denied specific diagnoses in their psychiatric histories. Group

difference summaries were supplemented by bivariate correlation analyses to show how psychiatric symptom indices covaried with levels of social support and current best friendship maintenance difficulty.

The ADF-F2 personal maintenance difficulty scores in this sample ranged from 5 to 26 ($M = 11.59$; $SD = 4.62$). Friendship circle favorability scores ranged from 3 to 12 ($M = 10.34$; $SD = 1.92$). Social support scores ranged from 0 to 17 ($M = 13.18$; $SD = 3.92$). Depression scores ranged from 0 to 44 ($M = 6.19$; $SD = 7.95$). Panic symptoms ranged from 0 to 52 ($M = 5.56$; $SD = 8.36$). Total Buss-Perry Aggression scores ranged from 0 to 174 ($M = 38.63$; $SD = 31.46$). Fear of fat scores ranged from 0 to 30 ($M = 7.98$; $SD = 7.07$). The MAST scores ranged from 0 to 45 ($M = 4.66$; $SD = 5.12$). Satisfaction with life ranged from 0 to 30 ($M = 20.47$; $SD = 6.18$).

Table 15.1 presents descriptive and inferential statistics for diagnostic and treatment group contrasts on three friendship indices. Those reporting prior suicide attempts described higher best friendship maintenance difficulty, $F(2,811) = 2.98$, $p = .05$ ($d = .51$); favorable childhood friendship circles, $F(2,905) = 13.47$, $p < .001$ ($d = .87$); and weaker childhood social support, $F(2,916) = 11.89$, $p < .001$ ($d = .80$). These three suicide effect size estimates refer to multiple versus comparison group contrasts. Best friendship maintenance difficulties were greater among respondents reporting prior OCD, $t(855) = 2.27$, $p = .02$ ($d = .41$); schizophrenia, $t(855) = 4.56$, $p < .001$ ($d = 1.71$); borderline personality disorder, $t(855) = 2.80$, $p = .005$ ($d = .99$); alcohol dependence, $t(855) = 4.61$, $p < .001$ ($d = 1.62$); or drug addiction, $t(855) = 3.30$, $p = .001$ ($d = .92$), diagnoses. Prior panic attacks were associated as well with best friendship maintenance difficulty, $t(855) = 2.43$, $p = .02$ ($d = .37$). A trend was identified for higher best friendship maintenance difficulty among bipolar disorder patients, $t(855) = 1.90$, $p = .10$.

Respondents reporting histories of major depression, $t(953) = 3.07$, $p = .003$ ($d = .44$); PTSD, $t(953) = 2.57$, $p = .01$ ($d = .51$); or ADHD, $t(953) = 1.94$, $p = .05$ ($d = .29$), described relatively unfavorable childhood friendship circles during upbringing.

Best friendship maintenance difficulties were greater among respondents reporting prior treatment with ECT, $F(2,810) = 4.27$, $p < .001$ ($d = 1.32$), or antidepressant, $F(2,816) = 5.02$, $p = .007$ ($d = .46$); mood stabilizing, $t(812) = 2.67$, $p = .008$ ($d = .79$); antipsychotic, $t(813) = 4.02$, $p < .001$ ($d = 1.19$); or stimulant, $t(811) = 2.98$, $p = .003$ ($d = .42$), medications. Participants reporting prior antidepressant, $F(2,910) = 11.22$, $p < .001$ ($d = .62$); ECT, $t(904) = 3.48$, $p = .001$ ($d = 1.17$); mood stabilizer, $t(906) = 4.14$, $p < .001$ ($d = 1.16$); anxiolytic, $t(908) = 3.10$, $p = .002$ ($d = .32$); antipsychotic, $t(907) = 4.88$, $p < .001$ ($d = 1.41$); stimulant, $t(905) = 2.31$, $p = .02$ ($d = .39$); psychiatric hospitalization, $t(892) = 2.40$, $p = .02$ ($d = .48$); or psychotherapy, $t(870) = 2.89$, $p = .006$ ($d = .65$), treatment described less favorable childhood friendship circles during upbringing. Social support during upbringing appeared relatively lower among respondents

who reported prior treatment with antidepressants, $F(2,921) = 4.96, p = .007$ ($d = .43$); ECT, $t(915) = 2.28, p = .048$ ($d = 1.29$); mood stabilizers, $t(917) = 3.10, p = .008$ ($d = 1.32$); antipsychotics, $t(917) = 2.62, p = .02$ ($d = 1.30$); stimulants, $t(916) = 3.00, p = .004$ ($d = .49$); or psychotherapy $t(879) = 2.04, p = .04$ ($d = .29$).

Bivariate correlations between mental health indicators and relationship outcome measures are presented in Table 15.2. Depression symptoms and lower life satisfaction in adulthood were associated with less favorable friendship circles and lower social support during upbringing. These mental health indices were linked as well to greater strains in concurrent best friendships. Less favorable childhood friendship circles predicted greater panic symptom expression in adulthood. Panic symptoms were linked as well to adult best friendship maintenance difficulty. Less favorable childhood friendship circles and lower social support predicted higher levels of adult aggressiveness (particularly trait hostility). Aggressiveness and hostility in adulthood were logically linked to higher best friendship maintenance difficulty. Goldfarb fear of fat scores were associated with both adult best friendship maintenance difficulty and less favorable friendship circles during upbringing. Elevated risk of problem drinking (MAST) was associated with higher best friendship maintenance difficulty.

Table 15.2 Bivariate Correlates Between Mental Health Distress and Relationship Qualities

	<i>Adult Best Friendship</i>		<i>Childhood Relationship Favorability</i>			
	<i>Maintenance Difficulty</i>		<i>Friendship Circle</i>		<i>Social Support</i>	
	<i>n</i>	<i>r</i>	<i>n</i>	<i>r</i>	<i>n</i>	<i>r</i>
Major Depression	794	.12**	888	-.23***	896	-.16***
Panic Symptoms	776	.12**	862	-.16***	874	-0.06
Buss-Perry Aggression	729	.08*	819	-.11***	826	-.10**
Physical Aggressiveness	793	.08*	890	-.10**	898	-.09**
Verbal Aggressiveness	824	0.01	919	-0.06	930	-0.05
Trait Anger	794	.09**	889	-0.04	900	-0.06
Trait Hostility	804	.18***	903	-.16***	913	-.11**
Michigan Alcoholism Screening Test (MAST)	857	.16***	955	-0.04	988	0.06
Goldfarb Fear of Fat Scale	806	.16***	896	-.13***	907	0.02
Satisfaction with Life Scale	823	-.19***	918	.24***	932	.19***

* $p < .05$. ** $p < .01$. *** $p < .001$

Fisher's z transformations (Ferguson, 1981) identified two significant gender differences in correlation strength. The link between friendship circle favorability during upbringing and trait hostility in adulthood was significantly ($p < .01$) stronger among the women ($r = -.20, p < .001$) in contrast to the men ($r = -.03, p > .05$). Women ($r = -.11, p < .01$) and men ($r = .04, p > .05$) differed significantly ($p < .05$) in their link between social support and panic symptoms.

Discussion

Broad and strong associations were expected to be found in this study between the closeness of child and adult friendships and personal histories of psychiatric symptomatology.

Findings presented in Tables 15.1 and 15.2 provide compelling support for the breadth and depth of these important associations. Adult best friendship maintenance difficulty was significantly higher for participants disclosing histories of seven different major psychiatric conditions (panic attacks, obsessive-compulsive disorder, suicide attempts, drug addiction, borderline personality disorder, alcohol addiction, or schizophrenia), psychiatric pharmacologic treatments of all types (stimulants, mood stabilizers, antidepressants, antipsychotics, or electroconvulsive therapy), and current symptoms of depression, panic attacks, anger, and/or problem drinking. Prior anorexia and/or bulimia nervosa diagnoses were not linked to these friendship and social support indices. These findings were surprising, given the salience of the other mental health nexuses, and a simple explanation could not be found. While childhood social support concerns were predictive of higher psychotherapy and/or hospitalization utilization rates, these forms of treatment were not predictive of current best friendship quality. Psychotherapy often focuses on the enhancement of relationship skills, so perhaps the normative status of current best friendships in this sample reflected well on those treatment histories.

Less consistent links were established between childhood social support and psychiatric history. Smaller friendship circles and weaker social support during childhood and adolescence were, however, strongly linked to multiple lifetime suicide attempts. Childhood friendship circles were smaller as well for respondents with a prior (or current) major depression, PTSD, or ADHD diagnosis. Respondents who described relatively smaller friendship circles and general social support during upbringing were, however, more likely to indicate prior (or current) treatment with antidepressants, mood stabilizers, stimulants, antipsychotics, ECT, and psychotherapy. These developmental deficits within the total sample also predicted adult symptoms of depression, hostility, and lower life satisfaction, but not problem drinking. Fear of gaining weight within the total sample was associated with smaller childhood friendship circles and higher adult best friendship maintenance difficulty.

The results from this analysis suggested a linear relationship between severity of past psychiatric problems (if alcoholism classified as "severe" illness) and current

best friendship relationship difficulties. General life satisfaction was also related inversely to current best friendship maintenance difficulty. Interestingly, neither a diagnosis of (nonsuicidal) major depression nor prior psychotherapy or hospitalization treatment was predictive of current best friendship strains. The extent to which psychiatric problems place an unusual burden on close relationships, or interpersonal conflicts exacerbate mental health symptoms, cannot be determined using this research design. While unmeasured latent variables may account for some covariation, we continue to support the parsimonious hypothesis that friendship and mental health status pose direct, bidirectional, influences on one another.

Future Research Directions

The social consequences of psychiatric diagnoses are often negative in nature. Many diagnoses and disorders affect the lives of individuals through isolation, stigma, and exclusion. One potential avenue for intervention may involve “befriending” programs. Befriending involves the provision of a one-on-one companion who can provide mental health patients with a more natural and nonprofessional resource to enhance functioning, particularly in the social or recreational realm (Davidson, Haglund, et al., 2001; Eckenrode & Hamilton, 2000). While some brief training and background information may be provided, volunteer friends can greatly complement the systematic services already provided by mental health professionals. The befriending strategy has been used sporadically over time. Harris and colleagues (1999) found that chronically depressed women who participated in a befriending program had remission rates of 72% in contrast to 39% remission rates in chronically depressed women in a waiting list group. Befriending programs are one way to help chronically mentally ill patients feel socially integrated (Mitchell et al., 2011). Befriending has led to increases in the frequency and effectiveness of social and communication behaviors among autistic children (Deater-Decker, 2001). Users of befriending groups have reported high satisfaction and a variety of benefits such as decreased isolation, increased self-confidence, increased self-esteem, feeling valued, and gaining a sense of hope and agency (Bradshaw & Haddock, 1998; Davidson, Haglund, et al., 2001; McCorkle, Dunn, Wan, & Gagne, 2009; Staeheli, Stayner, & Davidson, 2004).

The limitations of the method employed in this study warrant emphasis. These results may not generalize well beyond college samples, where mental health histories may vary less extensively than in the general population. College student perceptions of relationship qualities may differ substantially from those offered by older adults in the general population. Retrospective accounts of childhood social support, and even psychiatric history, warrant interpretive caution due to reliability concerns. These psychometric considerations may also vary as a function of the sample composition. The survey employed in this study was completed at a single point in time, and the correlational nature of these analyses precluded causative inferences regarding the nature and direction of any “effects” that are found.

Friendship and social support effects, however, are not easily studied through experimentation. Meta-analyses may eventually help identify the operative relationship qualities that maximize the short- and long-term benefits for recipients exposed to varying levels of psychosocial stress at different development points in time. The complexity posed by this equation of contributing factors is obvious. Longitudinal data may be of even greater value in illustrating how early friendships alter the developmental trajectories of many different mental health conditions. The present review and findings will hopefully contribute to this emerging data base.

Conclusions

Evidence in support of the general claim that personal relationships and mental health are mutually affected by one another seems to be compelling. Hypotheses that close relationships function as a mental health “vaccine” (Sias & Bartoo, 2007) or “buffer” (Turner & Brown, 2010) have been supported in the literature. Questions remain as to the direct and indirect mechanisms of action, magnitude and specificity of effects, and extent to which these factors do indeed operate causally on one another. While effect sizes ranged widely in our college sample, there was a trend for closer associations to be forged in regard to more serious mental health conditions such as schizophrenia, chemical dependence, borderline personality disorder, and suicidality. While our findings suggested robust connections between friendship variables and mental health, this assertion has to be tempered by recognition that even statistically significant effects in this sample accounted for only modest amounts of outcome variance. There is clearly much additional work that has to be done in social and clinical psychology research to more fully understand these complex nexuses.

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Maintaining Long-Lasting Friendships

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Friendships play a significant role in people's social lives. Friendships provide significant social support and opportunities for social connection, and having friendships is connected with mental well-being (e.g., Baumeister & Leary, 1995), happiness (e.g., Demir, Ozdeir, & Marum, 2011), and decreased social loneliness (e.g., Binder, Roberts, & Sutcliffe, 2012). Given the importance of friendships, it is essential to understand not only how friendships are initiated and formed but also how people maintain these friendships over time. In this chapter, I will provide an overview of the research on the importance of engaging in maintenance behaviors to sustain long-lasting, quality friendships. The first part of the chapter reviews the types of behaviors used to maintain friendships with a focus on understanding the variability of behaviors, friendship developmental aspects, and the frequency of use and effectiveness of these maintenance behaviors. The final part of this chapter provides an overview of theoretical frameworks for understanding the process of friendship maintenance. Specifically, we consider how maintenance behaviors function within the context of interdependence theory and interpersonal styles.

Unlike other types of relationships, such as marital and familial relationships, friendships are purely voluntary (Wiseman, 1986). As such, they have a unique vulnerability to relationship deterioration and termination. Indeed it has been suggested that friendships have the "weakest of any close bond in social life, because if it loses the qualities which make for the extraordinary closeness combined with the voluntariness it encourages, it chances loss of all" (Wiseman, p. 192). For example, Roberts and Dunbar (2011) found that both close and intimate friendships, compared with kin relations, experienced greater decrease in emotional intensity of the relationships when there was a decrease in contact or joint activities. The researchers note that their study "reveals that even these very closest friends require active maintenance (contact and performing activities together) to maintain a high level of emotional closeness, and without this maintenance these relationships are prone to decay" (p. 193). Effective maintenance of the relationship appears to be crucial to the continued health and quality of the friendship.

Relationship maintenance is conceptualized both as the phase in between initiation and termination of the relationship and also as a process. That is, once a relationship has been formed the individuals must engage in behaviors that function to sustain the relationship to the individuals' satisfaction. Although not as exciting as friendship initiation or as distressing as termination, the maintenance phase is, hopefully, the longest phase of the friendship.

Friendship Maintenance Behaviors

Relationship maintenance is generally conceived as behaviors that occur between the initiation and termination of the relationship (e.g., Dindia & Canary, 1993). Although the specific goal of maintenance behaviors can vary, relationship researchers generally conceive of maintenance as behaviors that people engage in to "keep a relationship in existence, to keep a relationship at a specific state or condition, to keep a relationship in satisfactory condition, and to keep a relationship in repair" (Dindia & Canary, 1993, p. 163). This variation in the goal of relationship maintenance is interesting to note as people may vary in the desired degree of closeness or intimacy that they want from that friendship. Thus, friendship maintenance behaviors might be used in different ways depending on the underlying motivations of the person in the friendship. Furthermore, these behaviors can occur routinely or be used strategically (Dainton & Aylor, 2002; Dainton & Stafford, 1993). For example, someone might strategically engage in a behavior when one realizes that the relationship is in deterioration and in need of specific intervention. Alternatively, many of these behaviors might routinely occur throughout the relationship and without any specific intention or motivation. This routine use of maintenance behaviors reflect reasons such as internalization of relationship importance or prosocial values, and also serve to promote the successful continuation of the friendship.

In the initial research identifying friendship maintenance behaviors, Oswald, Clark, and Kelly (2004) conducted an exploratory factor analysis of 45 types of possible maintenance activities. These activities were identified in research based on romantic maintenance (e.g., Dainton & Stafford, 1993; Stafford & Canary, 1991) as well as behaviors identified as important for friendships (e.g., Fehr, 1996; Hays, 1984). Based on exploratory factor analysis, Oswald and colleagues found four key maintenance behaviors for friendships: supportiveness, positivity, openness, and interaction. The first factor identified in the exploratory factor analysis was labeled "positivity" (accounting for 30.70% of the variance) and included behaviors that make the relationship rewarding (e.g., *express thanks when one friend does something nice for the other* and *try to be upbeat and cheerful when together*) as well as not engaging in antisocial behaviors that would negatively affect the friendship (e.g., *not returning each other's messages*). The second factor identified was "supportiveness" (accounting for 18.51% of the variance) and included behaviors that involved

providing assurance and supporting the friend (e.g., *try to make the other person feel good about who they are and support each other when one of you is going through a tough time*) and the friendship (e.g., *let each other know you want the relationship to last in the future*). The third factor included behaviors related to “openness” (accounting for 6.63% of the variance) and included behaviors related to self-disclosure (e.g., *share your private thoughts*) and general conversation (e.g., *have intellectually stimulating conversations*). The final factor was labeled interaction (accounting for 4.61% of the variance) and included behaviors and activities that the friends engaged in jointly (e.g., *visit each other’s homes and celebrate special occasions together*). This factor structure was similar for both males and females and was subsequently revalidated with confirmatory factor analyses and shortened to 20 items (5 items per scale). The factors on the shorter scale demonstrated adequate scale structure in the confirmatory factor analysis and also acceptable internal reliability (Cronbach alphas ranging from .75 to .95). The subscales are also positively intercorrelated (r 's ranging from .12 to .61).

These four key friendship behaviors are theoretically consistent with the maintenance typologies that Fehr (1996) identified based on a literature review of friendships. In that review Fehr suggested key strategies of self-disclosure, providing support and assurance, maintaining levels of rewards, and shared time as central for maintaining friendships. These behaviors also share similarities to the types of behaviors that are used to maintain romantic relationships. Based on exploratory factor analysis, Stafford and Canary (1991) identified five relationship maintenance strategies that were important for maintaining romantic relationships. These behaviors included positivity, assurances, openness, shared tasks, and social networks. This suggests that being positive, providing assurances, and support as well as self-disclosure are important for maintaining a variety of types of relationships. In contrast, while socially interacting is important for maintaining the friendships, romantic relationships also focus on interactions that involved shared tasks and social networks. Thus, while there are similarities of maintenance behaviors across relationship types, it is also important to realize that different types of relationships will require different maintenance behaviors.

Use of maintenance behaviors depends on a number of characteristics including the sex of the individuals in the relationship and the status of the relationship. In regard to friendship status, Oswald and colleagues (2004) found that people reported engaging in more of all of the maintenance behaviors in best friendships than in close or casual friendships. People also reported engaging in more maintenance behaviors for close friendships than for casual friendships. Consistent results have been found across numerous studies. For example, among newly formed college friendships, close friends engaged in more maintenance behaviors of positivity, assurances, task sharing, social networking, banter, routine contact, and computer-mediated communication than casual friendships (McEwan & Guerrero, 2012). Binder and colleagues (2012) compared “core friendships” with “significant

friendships,” where core friendships were defined as having a closer level of emotional intimacy than significant friendships. They found that people engaged in more of each of the maintenance behaviors with “core friends” than “significant friends.” Interestingly, the difference in maintenance behaviors between the friend types was most profound for openness, suggesting that intimate self-disclosure was more pronounced in the core friendships. Extending this line of research, Hall, Larson, and Watts (2011) found that best friends were perceived as being more capable of fulfilling ideal relationship maintenance expectations than were close or casual friendships. Taken together, these various findings suggest that friends expect, and receive, more maintenance behaviors from their friendships as they become more intimate.

Consistent with a body of research looking at sex differences in friendships (e.g., Hall, 2011), there are also substantial differences in use of maintenance strategies depending on the sex of the friends. Oswald and colleagues (2004) found that participants reporting on their female same-sex friendship were more likely to engage in supportiveness than those individuals reporting on same-sex male friendship or cross-sex friendships. In contrast, individuals reporting on a cross-sex friendship reported engaging in more supportive behaviors than people reporting on male same-sex friendships. People reporting on cross-sex and female same-sex friendships reported engaging in more openness than those reporting on male friendships. Interestingly, positivity did not vary by gender of friendship. In their research on expectations for friendship maintenance, Hall and colleagues (2011) found that women, compared with men, reported having had higher ideal standards of maintenance behaviors that they expected from their friends. For women, these higher friendship maintenance standards were positively associated with having same-sex friends who actually met the friendship maintenance standard. In contrast, they found for men that having increasingly higher friendship maintenance standards was actually associated with decreased perception that these standards were being fulfilled by their same-sex friends. For both men and women, Hall and colleagues (2011) found that maintenance standards and fulfillment of expectations were positively associated with friendship satisfaction. Taken together, these findings might suggest that male friendships, and to some extent cross-sex friendships, may not be as effective at engaging in maintenance behaviors and may be more vulnerable to deterioration and termination.

The maintenance of cross-sex friendships is especially interesting given that there is the potential for differing relational goals. One friend might want to maintain the relationship as a platonic friendship or alternatively one might want to transition the friendship to a romantic relationship. In investigating cross-sex friendships, Weger and Emmett (2009) found that both men and women who desired a romantic relationship with their friend were more likely to engage in routine maintenance activities. Women who desired a romantic relationship with their male friend also engaged in more of the support and positivity maintenance behaviors. These

findings suggest not only that increased use of maintenance behaviors might be associated with increasing the friendship status from casual to close or best friends but also that in the context of cross-sex friendships the individuals may be using maintenance behaviors to escalate the platonic friendship to a romantic relationship.

In sum, this body of research on friendships suggests that the sex of the friends involved in the relationship may play an interesting role in determining the type, frequency, and goal of the maintenance behaviors used to maintain the friendship. However, this research is still in the beginning stages of fully exploring the role of the friends' sex. For example, research has largely ignored how factors such as sexual orientation or transgendered status might be related to engaging in friendship maintenance behaviors (see chapter 4 for more on these topics). Likewise, most of this research has looked at gender as a binary construct and simply measured sex classification. However, gender roles might play an important role. For example, Aylor and Dainton (2004) found that for romantic relationship maintenance it was the individuals' gender roles (measured as masculinity and femininity), rather than sex, that were a better predictor of their use of maintenance behaviors. Thus, this is an area where additional research could be useful to fully understand the role of sex, gender roles, and sexual orientation in friendship maintenance.

Friendship Maintenance and Relationship Satisfaction

Friendship maintenance behaviors should function to contribute to mutual intimacy, closeness, and commitment, which have been identified as essential aspects of a friendship (Wiseman, 1986). The four friendship maintenance behaviors (supportiveness, positivity, openness, and interaction) have been found to correlate with, and statistically predict, an individual's satisfaction with the friendship (Oswald et al., 2004). However, friendship commitment was predicted by supportiveness and interaction but not by one's use of openness or positivity. This suggests that while positivity and openness may play a role in making the friendship satisfying, they do not have the same predictive strength with commitment to the friendship. It may be that supportiveness and interaction allow the friendships to develop a deeper level of emotional intimacy that promotes long-term commitment.

If maintenance behaviors are enacted to keep a relationship at the desired level of satisfaction, then usage of maintenance behaviors should also be associated with friendship longevity. To examine the predictive ability of maintenance behaviors over time and distance, Oswald and Clark (2003) examined the maintenance of best friendships during the first year of college. Best friendships during adolescence and young adulthood provide an interesting opportunity to understand the function of friendship maintenance during times of transition. For young adults, close friendships are beginning to become more stable, compared with childhood

friendships, yet fewer than half of adolescents' best friendship last longer than 1 year (e.g., Branje, Frijns, Finkenauer, Engels, & Meeus, 2007). Best friends play an especially crucial role for adolescents as they provide acceptance, respect, trust, intimacy and opportunities for self-disclosure (e.g., Cole & Bradac, 1996, see also chapter 15 on best friends and mental health status). However, these friendships, compared with other types of relationships, appear to be especially vulnerable to deterioration when there is a decrease in contact and time spent in shared activities (Roberts & Dunbar, 2011). Thus, it is essential to understand how these close relationships are maintained, especially during periods of transitions when relationships might be especially vulnerable to deterioration or termination.

In a longitudinal study examining what happens to high school best friendships during the first year of college, nearly half of all of high school best friendships transitioned to close or casual friendships (Oswald & Clark, 2003). However, use of the maintenance behaviors of self-disclosure, positivity, supportiveness, and interaction were predictive of maintaining the friendship during the first year of college. Communication-based maintenance seemed to be of central importance and was associated with not only maintaining the best friendship but also sustaining high levels of friendship satisfaction and commitment. Importantly, maintaining the best friendship was associated with less loneliness, further suggesting the importance of maintaining close friendships for social and mental well-being.

There is growing evidence that use of maintenance behaviors may be associated with a wide range of relationship-related behaviors and individual differences. For example, when conflict in a relationship occurs, the friends might engage in maintenance behaviors to sustain the relationship through tough times and simultaneously engage in problem-solving behaviors. Oswald and Clark (2006) found that maintenance behaviors positively correlated with constructive problem-solving styles of voice (actively and positively working toward solving a problem) and loyalty (constructively but passively solving a problem). In contrast, maintenance behaviors were negatively correlated with destructive problem styles of neglect (a passive, destructive way to solve problems) and exit (destructive active way to solve problems).

Friendship maintenance behaviors are also associated with perception of available resources from newly formed social networks (McEwan & Guerrero, 2012). McEwan and Guerrero note that friendship maintenance behaviors not only are used to sustain developed friendships but also can be used to increase closeness in newly formed friendships. In a study of first-year college students, it was found that maintenance of casual and close friendships was associated with friendship quality. Furthermore, friendship quality and close friendship maintenance were directly related to perceived availability of resources from the network.

Engaging in friendship maintenance behaviors appears to have even broader benefits on psychological well-being. Across four studies, Demir and colleagues (2011) found that engaging in friendship maintenance behaviors was strongly predictive of happiness. Furthermore, while previous research has found that autonomy support

from a friend (perception that the friend is supportive of their autonomous actions, perspective, and choices) is predictive of happiness, Demir and colleagues found that this association is fully mediated by use of friendship maintenance behaviors. They argue that perceiving one's friend as supportive of their autonomy is associated with increased engagement of friendship maintenance behaviors to maintain the supportive bond, which in turn contributes to overall happiness.

Together these lines of research suggest interesting implications for friendship maintenance behaviors. Not only does engaging in maintenance behaviors support continuation of a satisfying friendship but also it appears to be part of a broader set of relationship behaviors that help people to resolve relationship conflicts, strengthen friendships that provide autonomy support, and contribute ultimately to a satisfying life and happiness.

Maintaining Friends With Modern Technology

With the development of technology, friends now have a variety of mediums in which they can maintain friendships, even if not in immediate proximity. Online social networking sites are frequently highlighted as being used to maintain long-distance friendships as they allow for frequent "online" interactions and communications (such as instant messaging and active communication exchanges) as well as the ability to stay informed of friends' lives and activities by sharing information via more passive information exchanges such as viewing posts and photos. Given the popularity of online social networking and other computer-mediated communication (CMC) options, it is not surprising that they are becoming an increasingly important part of friendships (see chapter 6, "Friendship and Social Media," for a more thorough discussion) with an increasing number of people reporting that they use CMC to maintain current friendships (e.g., Craig & Wright, 2012; McEwan, 2013) and to escalate the friendships to more intimate levels (e.g., Sosik & Bazarova, 2014).

In an examination of friendship-maintenance strategies specific to Facebook, it was found that people use Facebook to maintain the relationship via "sharing" (self-disclosure by sharing news, updating one's profile, and commenting on a friend's profile, etc.) behaviors and "caring" (indicating care and interaction with the friend by posting special notes on friend's wall, offering support following bad news, congratulating a friend on good news posted, posting photos to share experiences with friends, etc.; McEwan, 2013). Facebook also allows people to passively follow their friends' lives via "surveillance" of the friend's posts and sharing pictures. In McEwan's study of 112 young adult friendship dyads, both of the friends' engaging in the maintenance behaviors that were classified as "caring" were positively correlated with own and friend's report of friendship satisfaction, liking of the friend, and perceived closeness. Similarly, using Facebook as a method of "surveillance" was positively associated with friendship satisfaction, liking, and closeness. However,

a different pattern was found for using Facebook “sharing.” Interestingly, Facebook “sharing” was negatively associated with friendship satisfaction, liking of the friend, and closeness of the friendship. Both one’s own sharing behaviors and their friend’s sharing on Facebook behaviors were negatively associated with satisfaction and liking in the friendship. This is inconsistent with research that finds self-disclosure as an important part of friendship maintenance (e.g., Oswald et al., 2004).

The differential findings for McEwan’s (2013) caring and sharing Facebook maintenance strategies suggest that self-disclosure on Facebook may function differently than face-to-face self-disclosures. The Facebook self-disclosures measured by McEwan’s “sharing” maintenance strategy reflected impersonal mass broadcast of information rather than an interpersonal, intimate exchange. However, the “caring” maintenance dimension included a number of items that reflected personal and intimate exchanges such as congratulating people on their posts of good news and sending condolences upon reading posts of bad news. Thus, the caring dimension included aspects of intimate self-disclosure. These findings together suggest that self-disclosure on Facebook that is intimate and person specific, rather than general mass communication, is predictive of positive friendship outcomes and promotes friendship closeness. Similar results were found by Valkenburg and Peter (2009), whereby instant messaging between adolescent-aged friends was predictive of intimate self-disclosure and friendship quality. Other research has found that Facebook communication strategies that allow for deeper communication that includes self-disclosure and supportiveness, such as private exchanges, rather than mass announcements, not only serve to maintain the relationship but also promote escalation of the friendship to more intimate levels (Sosik & Bazarova, 2014).

The usage of these types of electronic mediums for maintenance may depend on the closeness of the friendship. Yang, Brown, and Braun (2014) found that in newly forming friendships, college students preferred using Facebook posts or text messages that were less intimate. However as the friendship closeness increased, then instant messaging, phone calls, or Skype (computer programs that allow for video conversations) that allowed for intimate self-disclosure became more prevalent. McEwan and Guerrero (2012) had similar conclusions about CMC as a friendship maintenance strategy. They found CMC as a form of maintenance was especially prevalent in the more casual, newly developing friendships, rather than close relationships, where intimate self-disclosure might be more relationship appropriate.

While social networking sites such as Facebook are the most frequently highlighted as CMC mechanisms for maintaining friendships, there are a number of other media that allow friends to engage in maintenance behaviors even when they are not in physical proximity. For example, electronic communication via text and voice messaging (Hall & Baym, 2012) and online gaming programs that allow friends to mutually interact and compete against each other on a game while in different locations (Ledbetter & Kuznekoff, 2012) have been suggested as electronic opportunities for friendship maintenance. For example, Hall and Baym (2012)

argued that phone text and voice messaging is one type of friendship maintenance strategy. They found that use of text and mobile phone messaging contributed to relationship interdependence, which was positively associated with friendship satisfaction. However, there appear to be limits on the effectiveness of mediated communications for maintaining friendships. Paradoxically, mobile phone maintenance expectations also contributed to an overdependence between friends that was negatively associated with friendship quality. This suggests an implication for mobile phone messaging as well as CMC more generally. While these methods may be useful for maintaining friendships, everything must be done in a balance that is mutually appreciated by both friends.

When used to maintain friendship over long distances, CMC has also been shown to have psychological benefits (e.g., Baker & Oswald, 2010; Ranney & Tropp-Gordon, 2012). The use of CMC by first-year students who have low-quality face-to-face friendships was associated with decreased psychological anxiety and depression (Ranney & Tropp-Gordon, 2012). However, this benefit of CMC was not found for individuals with higher quality face-to-face relationships, presumably because they were already getting sufficient social support from their proximal friendships. Other research has suggested that shy individuals appear to benefit more from using online social networks in terms of reducing their loneliness and having higher perceived friendship quality (Baker & Oswald, 2010).

In sum, as technology develops, the opportunities and methods of maintaining friendships also advance. While online social networking sites, CMC, and easy access to cellular phones offer increased opportunities for communicating, it is important to note that not all maintenance across these different media is equivalent. These technologically based maintenance behaviors appear to be most effective when they promote more intimate self-disclosures and opportunities for supporting the friendship. In contrast, frequent but impersonal communication appears to be ineffective at successfully maintaining friendships and promoting the support that comes from those types of friendships.

Dyadic Nature of Friendships and Friendship Maintenance

Friendships are by their nature dyadic and interdependent. That is, to maintain a relationship, it requires effort from both people. The majority of the research on relationship maintenance has focused on one person's maintenance behaviors and his/her self-report of relational satisfaction or quality. However, it is essential to understand how each person's behavior contributes not only to his/her own relationship satisfaction but also to his/her friend's relationship satisfaction. That is, each person's behaviors should be investigated to fully understand how friendships are maintained.

Oswald and colleagues (2004) sought to examine how this dyadic interdependence functioned in friendship maintenance among 148 pairs of friends, who reported on their own engagement of maintenance behaviors and on their perception of their friends' use of maintenance behaviors. There was a high level of self-other agreement, suggesting that one person's behaviors were highly correlated with the friend's perceptions of their behaviors. Furthermore, there was a high level of equity in the friendships, such that each of the friends' reported use of the maintenance behaviors did not differ. Finally, there was a high level of perceived equity, such that participants felt that both they and their friend were engaging in similar levels of maintenance behaviors. Interestingly, these measures of dyadic similarity on maintenance behaviors did not vary by friendship status. So while best friends engaged in more of the maintenance behaviors than did close or casual friends, the dyadic matching on maintenance behaviors did not differ. This suggests that there is reciprocity and matching between the friends when engaging in maintenance behaviors.

For maintenance behaviors to be effective it appears that both individuals' behaviors contribute to the overall dyadic level friendship satisfaction and commitment (Oswald et al., 2004). Thus, it is not what one friend does, but what both friends do jointly, that appears to contribute to the maintenance of a satisfying and committed relationship. However, Oswald and colleagues (2004) did not find that perception of the friend's behaviors was associated with dyadic level satisfaction and commitment. Given the high level of similarity and accuracy in perceptions, this might not be surprising. That is, given the little variability between the two friends reports, it makes sense that actual behaviors rather than perceptions were the stronger statistical predictors. This also suggests that maintenance behaviors are things that friends do together, which results in the high level of self-other agreement in the reports. Similar results were found by Oswald and Clark (2003) in that the maintenance behaviors were found to contribute to dyadic level relationship satisfaction and commitment. In contrast, problem-solving styles tended to be an individual-level behavior and predicted individual-level satisfaction and commitment. Together, the findings from the Oswald and colleagues (2004) and Oswald and Clark (2003) studies strongly suggest that friendship maintenance behaviors are joint, equitable, and mutually engaged in by both friends. These behaviors appear to be inherently dyadic and interdependent in nature. Furthermore, dyadic friendship maintenance sometimes requires people to do what is in the best interest of the friendship (dyadic-level focus) rather than what is an individual's personal interest (individual-level focus).

Theoretical Frameworks for Understanding Friendship Maintenance

Wiseman (1986) notes that friendships, like all long-term relationships, have "unwritten contracts" of how the relationship should function. Friendships have an

expectation of mutual aid, supportive behavior, and “assumed bonds of investment, commitment, and reward dependability which fulfill a friend’s needs” (p. 203). Rusbult’s relationship investment model (Rusbult, 1980, 1983) has provided a useful framework for understanding these components of friendships and the friendship maintenance processes. The relationship investment model proposes that friendship satisfaction is a function of the rewards (positive aspects of the relationship) minus the costs of the relationships. Furthermore, commitment to the friendship is reflected by the satisfaction, plus the investments (what would be lost if the relationship were to end) minus the alternatives (the other things that could be done if the relationship were not in existence). Branje and colleagues (2007) demonstrated in a longitudinal study of adolescents that the investment model predicted stability in friendship as well as the tendency to switch best friends. Furthermore, satisfaction, investments, and alternatives predicted friendship commitment both concurrently and over time.

Friendship maintenance behaviors appear to be engaged in a manner consistent with the predictions of the investment model framework (Rusbult, 1980, 1983). Friends’ usage of maintenance behaviors of support, openness, and interaction positively correlates with relationship satisfaction and commitment (Oswald et al., 2004). Further, the maintenance behaviors correlate positively with rewards and negatively with relationship costs. Likewise, maintenance behaviors positively correlate with investments and negatively with alternatives to the relationship. In sum, maintenance behaviors are associated positively with rewards and investments that support relationship satisfaction and commitment but negatively with costs and alternatives, which negatively contribute to satisfaction and commitment.

The underlying motivation of the use of the maintenance behaviors may also play a role in how the maintenance behaviors correlate with the investment model variables. Mattingly, Oswald, and Clark (2015) studied 115 friendship dyads and asked them to report on their own as well as perceptions of the friends’ use of maintenance behaviors. However, they also asked the friends to report on how often the behaviors were used strategically (with specific intention to obtain a desired result from the friendship) and routinely (without specific intention to obtain a desired result from the friendship). The results of the study indicated that an individual’s self-reported own use of routine maintenance behaviors correlated with their self-reported friendship satisfaction, commitment, rewards, and investments. In contrast, the individual’s self-reported strategic use of the maintenance behaviors was correlated with friendship costs and commitment but negatively associated with rewards. Perceptions of the friend’s use of routine behaviors was positively associated with one’s own friendship satisfaction, rewards and investments, but negatively associated with friendship alternatives. In contrast, perceptions of the friend’s use of strategic friendship maintenance was negatively associated with satisfaction, costs, commitment, and investments and positively associated with friendship alternatives.

These results clearly suggest that the underlying motivation, and perceptions of friend's motive, for engaging in maintenance behaviors has implications for their effectiveness and ultimately the friendship satisfaction. Behaviors that are engaged in routinely correlate positively with relationship satisfaction and commitment, as well as with the variables that are consistent with supporting relationship satisfaction and commitment. In contrast, engaging in these behaviors with strategic intention does not contribute to the friendship satisfaction and commitment and may in fact have the opposite effects. Perceiving that one's friend is strategically engaging in these behaviors was associated with *increased* alternatives and *decreased* satisfaction, costs, commitments, and investments. These findings are similar to the results presented by Dainton and Aylor (2002) findings that routine use of relational maintenance strategies accounted for a larger percentage of the variance in relationship satisfaction and commitment than did strategic maintenance in romantic relationships. Although not tested, it is possible that strategic maintenance behaviors may be seen as manipulative or perhaps signaling an exchange orientation to the relationship. However, routine behaviors might be perceived as signaling a communal orientation to the relationship and through that mechanism contribute to greater friendship satisfaction and commitment.

It is also important to consider, theoretically, *who* is most effective at maintaining friendships. Theoretical frameworks that take into account people's orientations toward relationships may be useful for understanding their use of relationship maintenance behaviors. For example, it has been suggested that people who have communal or interdependent approaches to relationships may be more likely to engage in relationship maintenance behavior (see Ledbetter, 2013; Ledbetter, Stassen, Muhammad, & Kotey, 2010; Mattingly, Oswald & Clark, 2011). One proposed theoretical framework useful for studying relationship maintenance (Ledbetter, 2010) is the inclusion of other in self model (Aron, Aron, Tudor, & Nelson, 1991). From this perspective, friendship closeness is in part developed from including the friend as part of one's own self. Ledbetter and colleagues (2010) argue that relational maintenance behaviors are "acts that foster perceptions of shared resources, identities, and perspectives" (p. 22), which are core parts of including the friend in one's sense of self.

In a qualitative study of relational maintenance behaviors within the context of a romantic relationship, Ledbetter and colleagues (2010) argued that a number of maintenance behaviors facilitate the inclusion of other in self. For example, sharing resources such as finances and helping with shared tasks are maintenance behaviors that reflect the concept of shared resources. Maintenance behaviors of physical contact, expressions of affection, and managing conflict can contribute to a shared identity. Maintenance behaviors of casual conversation, use of humor, intimate conversations, and shared time all contributed to shared perspectives between the individuals in the relationship. Subsequent research has found that these maintenance behaviors positively correlate with the Inclusion of Other in Self Scale (Ledbetter,

2013). Thus, maintenance behaviors may contribute to closeness by facilitating the sense of the partner as part of oneself. While this appears to be a promising theoretical framework for studying maintenance behaviors, to date this has only been tested within the context of romantic relationships. Additional research within the context of friendships is warranted.

Relational interdependent self-construal (RISC; Cross, Bacon, & Morris, 2000) also provides a useful framework for studying individual differences associated with use of friendship maintenance behaviors. Relational interdependent self-construal represents individual differences in the extent to which an individual thinks of oneself as interdependent or independent from his/her close relationships. Individuals with high interdependent self-construal define their self through their social connections and relationships with others. In contrast, individuals with independent self-construal view their self-concepts as independent and autonomous from others. Relational interdependent self-construal is associated with a number of prorelationship variables such as having more close friendships, having greater self-other overlap, engaging in more self-disclosures, and having more satisfying and committed relationships (e.g., Cross et al., 2000; Cross, Morris, & Gore, 2002; Morry & Kito, 2009).

It has been argued that individuals who have a strong RISC should be more effective at maintaining their friendships (Mattingly et al., 2011). Furthermore, Mattingly and colleagues propose that this association between RISC and friendship maintenance behaviors should occur because RISC functions to strengthen the communal relationship. They propose that it is this communal orientation that then results in the individual engaging in more behaviors to maintain the friendship. However, they also argue that this should only occur for maintenance behaviors that occur routinely and reflect a communal orientation to the friendship. They argue that this process does not occur for strategic use of maintenance behaviors, as strategic behaviors reflect an exchange orientation to the relationship. Supporting their arguments, a path model showed that RISC was positively associated with routine maintenance behaviors as well as other prorelationship behaviors of accommodation and willingness to sacrifice. Furthermore RISC was positively associated with communal strength. Importantly, communal strength mediated the association between RISC and routine friendship maintenance.

Together, both Ledbetter's work on inclusion of other in self (Ledbetter et al., 2010; Ledbetter, 2013) and Mattingly and colleagues' work on RISC (Mattingly et al., 2011) strongly suggest that theoretical frameworks that take into account individuals' communal orientations to relationships can further our understanding of why some people are more effective at maintaining their friendships. This research suggests that having an orientation to the relationship that promotes closeness, via inclusion of self in other or having an interdependent construal, promotes engaging in behaviors that are supportive of the friendship. Furthermore, this suggests that people struggling to maintain satisfying relationships may wish to reflect

on their goals and orientation to relationships as a way to develop insight into their friendship behaviors.

Conclusion

Brehm, Miller, Perlman, and Campbell (2002) write that relationship maintenance is “less exciting than newfound love and less dramatic than separation, but effectively keeping alive the successful relationships you have already formed can contribute substantially to achieving a rich, rewarding set of close relationships” (p. 430). While the body of research on friendship maintenance is growing, there is still a need for additional work. Much of the research is correlational and cross-sectional. Additional research that is longitudinal would further our understanding of how friendship maintenance behaviors are used over time and especially during times of friendship transition and turmoil. Further dyadic work where both individuals in the relationship are assessed will provide a deeper understanding of the interdependent nature of friendships. Furthermore, as technology changes and different methods of maintaining friendships are developed, research should also investigate the effectiveness and limits of these different media. Finally, understanding how people work to maintain other social relationships such as kin relationships, business/professional relationships, dual relationships such as work-friends, and mentoring relationships would provide a more complete picture of maintenance behaviors. Fully understanding the process through which people maintain their friendships will ultimately help researchers and clinicians better understand how to assist people with maintaining relationships that provide important sources of support and contribute to life satisfaction and well-being.

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Conclusion

Friendship: An Echo, a Hurrah, and Other Reflections

DANIEL PERLMAN

Friendship is the hardest thing in the world to explain. It's not something you learn in school. But if you haven't learned the meaning of friendship, you really haven't learned anything.

—Muhammad Ali

Muhammad Ali is not my usual source for wisdom. In his friendship quote, however, I like his implicit message that it is beneficial for us in our daily lives to have grasped the meaning of friendship. Yet I also see in his remark what I hope is becoming a falsehood—namely, his view on whether friendship is something you can learn about in school. It seems to me the current volume is a testimonial that we now know a considerable amount about friendship and we can teach a lot about its nature, its antecedents, its dynamics, and its consequences.

My goal in this chapter is to offer reflections on what the contributors to the current volume have accomplished. I comment on both the chapters in the book and on friendship as an area of research. In places I draw on bibliometric evidence.

In his foreword, William Rawlins claims that friendship is elusive to study yet vital. I touch on both those points, starting with thoughts on why friendships are important. Then, I turn to the elusive issue of how to define friendship. Next, I present bibliometric information on the growth, volume, and disciplinary context of friendship research. After that, I address a central paradox inherent in friendships: their beneficial and detrimental aspects. Finally, I end by considering the future directions of work on friendship.

Two Reasons Why Friendships Are Important

I am delighted that Mahzad Hojjat and Anne Moyer have assembled this volume. Hurrah! I am an unabashed fan of studying friendship; I am appreciative of the range and caliber of scholarship the editors have brought to bear on friendship.

Embedded throughout this book are reasons why friendships are important. Adding to this mix, I highlight two facets that stand out for me.

First, it is true, as is often said, that humans are social animals. We have many different kinds of relationships, but friendships are certainly a significant, pleasant form of them. A considerable amount of the time spent with other people is spent with friends. For example, Chicago area high school students spent 30% of their daily time awake—close to 5 hours—with friends (in comparison with only 18% of their time with family; Larson, 1983). Similarly, a sample of employed Texas women estimated that they spent 2.6 hours per day with friends (compared with 2.7 hours per day with their spouses and 2.3 hours per day with their children; Kahneman, Krueger, Schkade, Schwarz, & Stone, 2004). Furthermore, Kahneman and his colleagues found that participants were in their most positive moods when they were with friends as opposed to with spouses, children, other classes of people, or alone. Larson, Mannell, and Zuzanek (1986) obtained similar results, showing that the pinnacle of happiness is achieved when people are with both their spouse and friends together.

Second, there are interesting and varied views on trends of what is happening in our social lives. Discussions have occurred vis-à-vis survey data (e.g., Fischer, 2009), the impact of technology (e.g., Boase & Wellman, 2006), and postmodernity (e.g., Stevens & van Tilburg, 2011). Some see modern life leading to a decline in relationships, others see ways social change is opening new doors. Postmodern theorists such as Beck and Giddens (see Stevens & van Tilburg, 2011) believe that in moving away from a more traditional society our lives have become more individualized. They posit that we have greater freedom to set our personal lifestyles and to construct our personal social networks according to our personal preferences. Complementing this latter view, I see significant demographic trends that have and are taking place in the United States and other countries around the world. For instance, between 1950 and 2010, the percentage of American adults who were married dropped from 72% to just 51% (Cohn, Passel, Wang, & Livingston, 2011). During roughly the same time span, the proportion of single-person households in the United States has more than tripled from 9% to 28% (Klinenberg, 2012, pp. 4–5). Dystopian scholars likely see these single individuals as lonely and isolated.

My sense is that we all have a need for relationships (Baumeister & Leary, 1995) but the extent to which and means by which we fulfill that need vary. It appears to me that accompanying the trend away from marriage there is an associated trend toward friendships becoming more important in American and probably in many European societies. Consistent with this, Klinenberg (2012, p. 97) notes that single women are more likely than married women to have weekly face-to-face as well as other mediated forms of contact (e.g., phone calls or e-mails) with a best friend. In sum, I am arguing that friendships are important because of the time we spend with friends, the pleasure we derive from friendships, and the increasing role of friendships in filling our social needs.

Exactly What Is Friendship?

When survey researchers ask respondents about their friendships, members of the general public have no trouble answering. But do all respondents have the same notion in mind? Probably not. This brings to the fore the question: Exactly what is friendship?

Definitional Attempts: A Baker's Dozen

Often one of the places scholars start in studying a phenomenon is by defining it. In this book that is certainly true. I found efforts to define or at least describe key attributes of friendship in a majority of chapters (Rawlins; Erdley & Day; Wrzus, Zimmermann, Mund, & Neyer; Adams, Hahmann, & Blieszner; Monsour; Ledbetter; VanderDrift, Agnew, & Besikci; Morrison & Cooper-Thomas; Lunsford; McConnell, Lloyd, & Buchanan; Holt-Lunstad; and King, Russell, & Veith). Some of the qualities assigned to friendships are that they are voluntary, involve an emotional tie (closeness, intimacy, liking and/or affection), may involve aid or support, and encompass companionship. Some definitions note that friendships are between peers and involve mutuality (in the sense that both partners are friends with each other). Friendships are typically referred to as relationships, which implies they are not a fleeting or very limited set of interactions but rather last for some duration.

Wrzus et al. characterize friendships by what they typically are not (e.g., a sexual relationship). Ledbetter raises the question of whether scholars should have a separate name for the large number of so-called friends that people list on social media sites such as Facebook.

One aspect of friendship that contributors to this volume implicitly acknowledge is its conjunctive nature (VanderDrift et al.; Morrison & Cooper-Thomas; and Lunsford). That is, a single relationship can embody friendship as well as other roles (e.g., romantic partner, coworker, mentor, family member, etc.). In a classic early study of the social networks of northern Californians, Claude Fischer (1982) found respondents themselves considered over two-thirds of coworkers and neighbors as friends. Kin were less likely than nonkin to be considered friends, but even among kin, 34 percent of wives were considered friends. Presumably when people see animals as friends (McConnell et al.), this, too, involves the conjunctive roles of being a friend and a pet.

Although there is certainly overlap among definitions, it is also true that there is not a consensus on a single definition. Both Rawlins and Monsour allude to the difficulty scholars have had in reaching a single definition. Monsour reports that in the development of this book, authors were asked if they were going to provide a formal definition of friendship: some said no, some said yes, and others said they would provide typical characteristics of friendship.

A Prototype Approach

My own stance comes closest to those who look for the typical characteristics. I have been influenced by discussions of classical versus prototype definitions (e.g., Fehr, 1988). According to a more traditional approach, friendship has a set of defining attributes and only relationships manifesting all those properties qualify as a friendship. According to the prototype approach, the features of friendship form a fuzzy set—qualities typically found in friendship but not always necessarily there.

Each of these approaches has its advantages and disadvantages, but I lean toward the prototype view. For me, the typical—but not universally present—characteristics (or paradigm case) approach reflects the way life really is—a bit messy. The assumptions of classical definitions are that scholars can agree on characteristics of the entity being defined and that each of the defining characteristics will be manifest in any case classified within the defined category. These assumptions seem shaky to me. Friendship scholars have difficulty totally agreeing on the attributes of friendships. Furthermore, when classical formal definitions are advanced, I am not convinced that the defining characteristics are always present in all the relationships that people think of as friendships. For example, in this book friendships are depicted as involving peers and reciprocity. Nonetheless the chapter on mentoring and friendship included mentor relationships cum friendships between individuals of different status. Similarly, many of the relationships that people identify as friendships are relationships in which partners rate themselves as over- or underbenefited (Messman, Canary, & Hause, 2000) rather than fully reciprocal.

Monsour notes the important point that a lack of consensus on a definition of friendship makes comparing findings across studies difficult. While a prototype definition does not totally resolve this dilemma, having a model with some variability around it may well add robustness to findings. Further, if there is a well-articulated prototype but the prototype varies some across cultures and time, prototype versions can be used as a moderating factor to determine whether the changing nature of the prototype alters friendship's association with other variables.

The Status and Context of Friendship Research

One sometimes gets the impression that friendship is a neglected cousin in social science research. Hojjat and Moyer justify the need for the present book saying that there have not been any other friendship books in recent years, even though research has been increasing. There are a few older volumes and one very recent book on friendship and happiness (Demir, 2015), but I resonate to the editors' point. The current, more general volume fills a noteworthy gap.

Growth of the Friendship Scholarship

To get an indication of the growth of psychologically oriented friendship research, I searched the *PsycInfo* database, which is centered on psychological publications but also has some interdisciplinary content. I searched *PsycInfo* for publications with “friendship” as either a title word or an index term. Figure 17.1 shows the growth of friendship publications since 1965 in 5-year periods. During those 5-year periods, the number of articles with “friendship” as a title word increased from 35 to 655 (or 7 per year to 131), and designating “friendship” as an index term increased from 38 to 2,227 (or 7.6 per year to 445.4). (The changes in index frequencies may reflect changes in the American Psychological Association’s insistence on having index terms starting in the mid-1980s). As a title word, “friendship” was used considerably less than “love” (2,611 times vs. 5,742), a bit more than loneliness (2,302), and over half again as often as “marital satisfaction” (1,649).

Within psychology, there was a period when the study of interpersonal attraction was very prominent. Here the basic goal was to find the determinants of whom we like as friends. Many of these studies were experiments in which the researcher created various experimental conditions and recruited strangers to come to a laboratory to interact for short periods of time (Huston & Levinger, 1978). The frequency with which “interpersonal attraction” was used as an index term surpassed the frequency with which “friendship” appeared as an index term in the *PsycInfo* database for the period 1965–1979. The use of the term “interpersonal attraction” has dried to a trickle over the subsequent years, with use of the term “friendship” continuing to grow. In the most recent 5-year period, there were 39 publications using “friendship” as an index term for every one using “interpersonal attraction.”

To look at the place of the friendship literature from a different vantage point, I counted how many times each different index term in 1,265 articles published in the *Journal of Social and Personal Relationships* (1984–2012) was used. I found that with 178 uses, “friendship” ranked eighth in frequency among nearly 1,000 index

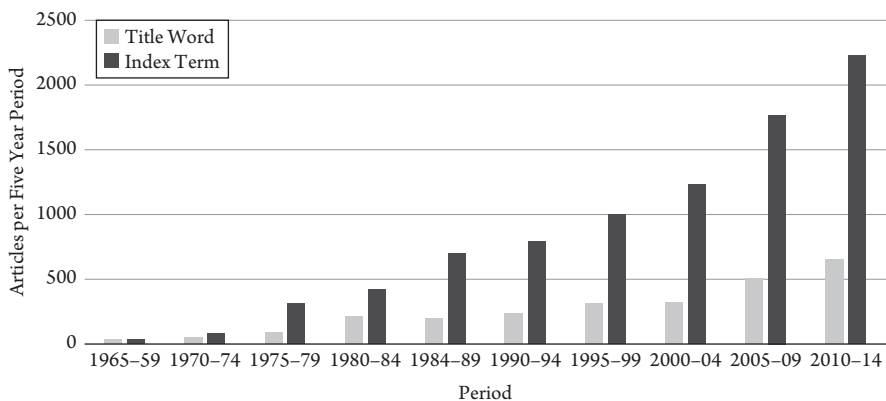


Figure 17.1 Articles with “friendship” as a title word or index term (per 5-year period).

terms. It was used in 14% of all articles. A slightly different analysis covering 1984–2014 showed “friendship” as an index term was used in a slightly higher percentage of articles in the first 15 years of the journal’s history (15.6%) than in the second 15 (11.3%). Clearly, friendship has been and remains a significant topic among relationship scientists.

The Study of Friendship as a Multidisciplinary Endeavor

Over this 50-year period shown in Figure 17.1, “friendship” was used as a *PsycInfo* index term 8,566 times, so the body of literature dealing with friendship in some way is considerable. But the *PsycInfo* database, while it does cover some publications in ancillary disciplines, is not exhaustive. Looking at the professional affiliations of authors in the present volume shows the majority are associated with psychology departments but there are also contributors from communications units (e.g., William Rawlins, William Monsour, Andrew Ledbetter) and human development and family studies (HDFS) or child development departments (e.g., Rosemary Blieszner, Gail E. Walton, myself) plus a sociologist, Rebecca Adams, now chairing a gerontology program. To get a broader picture than the present author list, I checked the departmental affiliation of the first (or corresponding) author (Figure 17.2) of the 178 articles published in the *Journal of Social and Personal Relationships* between 1984 and 2012 for which the word “friendship” was an index term. Slightly over half the authors were from psychology departments (54%), but close to half were from other departments (including communications, sociology, HDFS, and education). Research on friendship is definitively a multidisciplinary endeavor.

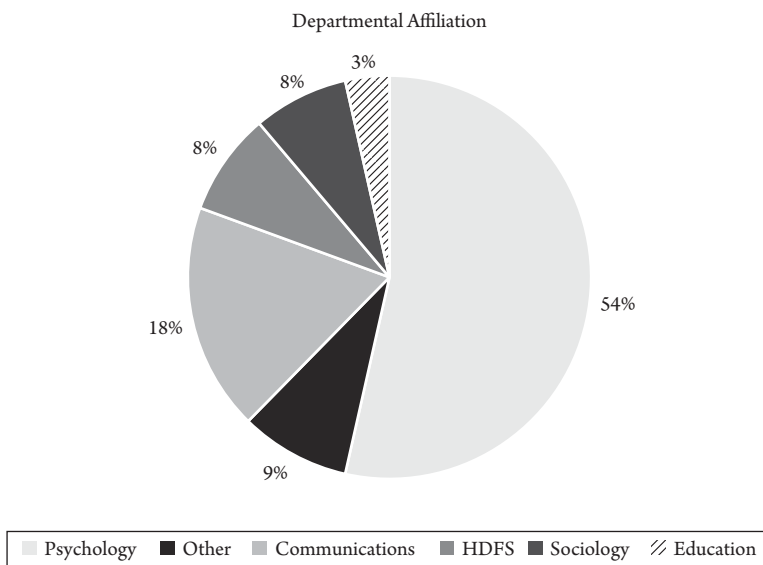


Figure 17.2 Departmental affiliations of the first authors of articles in *JSPR*.

The Paradox of Friendship's Upside and Downside

Our lives often have their upsides and their downsides. Friendships are no different. For a full appreciation of friendship, it is important to consider both sides as well as how these opposing properties can be understood within one phenomenon.

The Benefits of Friendships

A very prominent theme throughout this volume is that friendship is beneficial. Holt-Lunstad is a key spokesperson for this theme. In her chapter she makes the following points, which I quote:

- Having more and better relationships is associated with better physical health and greater odds of survival,
- There exists strong epidemiological evidence of a directional effect of relationships on health . . . being socially connected can be protective,
- Having a larger number of friends improves physical and mental health,
- The overall magnitude of the [social connectedness] effect on risk for mortality was comparable with and in many cases exceeds the effect of many well-established risk factors for mortality. For instance, lacking social connectedness carries a risk equivalent to smoking up to 15 cigarettes per day, and is greater than alcohol abuse, physical inactivity (sedentary lifestyle), obesity, and air pollution, among others, and
- Close friendships give meaning in our lives and make us happier.

Whereas Holt-Lunstad focus on the health benefits of friendship, Erdley and Day and King et al. dig into the psychological and mental health benefits. Erdley and Day discuss how friendship is linked with being less likely to be lonely, depressed, anxious, and/or bullied, as well as with being high in self-esteem and school adjustment. Overlapping some with Erdley and Day's points, King et al. add other associations between friendship and indicators of positive mental health (e.g., higher psychosocial adjustment, higher quality of life).

Several other authors more briefly allude to the theme that friendships benefit us physically and/or mentally (e.g., Rawlins; Hojjat, Boon, & Lozano; Oswald) or illuminate other aspects of this general theme. For example, Morrison and Cooper-Thomas note organizational benefits of friendship: "Employees with a best friend at work are seven times as likely to be engaged in their jobs; in addition they serve customers better, have higher well-being, are more productive, and are less likely to get injured on the job." VanderDrift et al. identify how valuing and embedding a strong friendship aspect in romantic relationships can benefit the romantic relationship (e.g., in terms of dyadic satisfaction) and the lives of the romantic partners (e.g., life satisfaction). McConnell et al. summarize ways having relationships with companion animals is connected to various psychological-type benefits in children and/or adults (e.g., greater self-confidence, self-esteem, and autonomy; less fearfulness,

anxiety, and loneliness) as well as greater physical fitness. Oswald cites data showing that the use of friendship maintenance behaviors promotes closeness in the early stages of friendship development, correlates with one's satisfaction with the friendship, and predicts the longevity of friendships.

The Downside of Friendship

Juxtaposed to the view that relationships benefit us, especially the contributors to Part III of this volume detail ways friendships can, as Hojjat and Moyer say, "sour." A lot of this has to do with the ways relationships themselves entail negative aspects. Hojjat et al. assert,

Friendships are the breeding grounds for many of the events and experiences that elicit offense, injury, and upset . . . friendships constitute one of the most common contexts in which people encounter transgressions, provocations, betrayals, wrongdoings, and related aversive experiences such as hurt feelings and hurtful messages.

Hibbard and Walton discuss the view that competitively structured situations can, at least under some circumstances, block us from satisfying our needs and thereby undermine our liking potential friends and the quality of our relationships with them. In particular, they proffer that when competition is focused on beating others (as opposed to striving for personal excellence), competition is apt to have a deleterious effect.

In another chapter in Part III, Clark, Harris, Fernandez, Hasan, and Votaw focus considerable attention on identifying predictors of remaining friends after a breakup. Their chapter begins, however, with another typically unpleasant aspect of relationships: the hurts that occur both before and after the breakup of romantic relationships that terminate. Ending friendships appears to be more benign than ending romantic relationships, but nonetheless terminating friendships can create hurt feelings, too (e.g., upset, angry, sad; Tortu, 1984). In this volume Adams et al. cite evidence that discussions of fading friendships are dominated by feelings of "betrayal, indifference, and hurt." Similarly, the loss of friends through death can produce feelings of bereavement (e.g., despair, depression, loss, aloneness; deVries & Johnson, 2002).

The negative side of friendship crops up elsewhere in the volume beyond Part III. Erdley and Day indicate how friendships can contribute to youths' socialization into deviant behaviors (alcohol, tobacco, and marijuana use; risky sexual behaviors; delinquent offenses) and contagion effects can contribute to adolescents' experiencing depression. In the work context, Morrison and Cooper-Thomas note how dual coworker and friendship relations can be problematic, and Lunsford notes three ways having a peer as opposed to a more senior mentor may be limiting: (1) peers provide less instrumental support, (2) they may be less willing to provide critical reflections, and (3) the mentoring relationship may be perceived as providing the mentee with

an unfair advantage. Overlapping some of these points, Holt-Lunstad notes friends can foster risky, unhealthy behaviors as well as create stress. In this general vein, King et al. found that college students who had difficulty maintaining friendships were more likely to report suicide attempts, drug addiction, and/or drinking problems.

Reconciling the Pros and Cons of Friendships

Reading this volume, it is clear that friendship has both a positive and a troublesome side, yet overall it seems to me the positive side has the upper hand. In terms of the scholarly literature, although some (Gable & Reis, 2001) take an opposite view, two analyses of relationship research have found that coverage of positive topics is more common than attention to negative aspects (Duck, 1994; Hoobler, 1999). With regard to actual friendship, previously cited data shows being with friends is associated with positive feelings. Friendships are voluntary, so people can disengage if they want. Friends typically do not have the obligations and responsibilities that cohabiting and marital partners have. All in all, it is not surprising that being with friends is generally rated as a positive time in our lives.

A key question becomes, when will friendships be positive for us either in terms of our evaluating them positively or their leading to beneficial outcomes, and when will they be negative? Providing a comprehensive, concrete answer to that question is a daunting task, but I believe we have already seen some elements of the answer and I have ideas about the form the analysis could take. Contributors to this volume have already identified several variables that predict relationship satisfaction. The flip side of those predictions points to when and for whom relationships are not working so well.

Apropos of the form the analysis might take, Clark et al. classify predictors of the success of postromantic relationship into three categories: individual, dyadic, and social network. These categories of variables are clearly important. I would add a fourth category: a broader array of contextual and environmental factors. In research on the health benefits of relationships there is a lot of concern about the form of social connectedness and the pathways via which relationships lead to outcomes (Holt-Lunstad). There is also concern about gender and other group differences. All in all, I might frame the question about positive and negative outcome as follows: Who, under what conditions, via which processes leads to which positive versus negative outcomes of friendships? Essentially this boils down to various categories of variables: predictor, mediator, moderator, and outcome.

Berkman, Glass, Brissette, and Seeman (2000) offer one frequently cited model of the association between social integration and health. They start with macro-structural conditions that influence social networks, which in turn are a foundation for psychosocial mechanisms (e.g., social support) that impact health via various behavioral, psychological and physiological pathways that contribute to positive versus negative health outcomes. Their explication nicely identifies things to consider at each step in their model. For a friendship model we would need to narrow

social networks to friendship per se, and give more consideration to individual difference factors, moderators, and specific outcomes. Nonetheless, Berkman et al.'s analysis illuminates significant components of what might go into a model to identify when friendships might be beneficial versus detrimental in the health domain.

Future Directions in the Study of Friendship

Box 17.1 provides short summaries of the recommendations for future research on friendship that I identified in this volume. The three most frequently mentioned recommendations were to study more diverse populations, to examine the interplay between friendships and technology, and to enhance the way research is done. Each of these recommendations seems sensible. I reflect on each of the three most frequently mentioned suggestions, a couple of the moderately frequently mentioned suggestions, and on theory as a suggested direction.

The Three Most Frequently Mentioned Themes

A recent survey of articles in top psychology journals found that 96% of studies involved WEIRD participants: individuals from Western, educated, industrialized, rich, and democratic societies (Henrich, Heine, & Norenzayan, 2010). Only 12% of the world's population live in such societies. Closer to friendship research, a study of articles in the *Journal of Social and Personal Relationships* found that over half involved research with college students, clearly introducing age and educational biases in the findings (de Jong Gierveld, 1995). In a second study, women were more apt than men to reply to recruitment letters for couple research projects (Hill, Rubin, Peplau, & Willard, 1979). In a third study, ethnic minorities in the Los Angeles area were less likely than Whites to respond to a letter soliciting their participation in marital research, and even if they responded to the solicitation they were less likely to actually agree to be in the study (Karney, Kreitz, & Sweeney, 2004).

Fortunately chapters in this volume do testify that at least some research on diversity vis-à-vis age (Adams et al.), sexual orientation (Monsour), ethnicity (Rose & Hospital), and mental health (King et al.) is being done. In defense of relationship scholarship, perhaps the top psychology journals are not the best places to find research on non-WEIRD samples. Nonetheless, it is clear that biases exist in whom friendship scholars study. Having a more representative database would enhance the external validity and generalizability of what we know.

Like the chapters on diverse populations, the chapter by Ledbetter confirms that research is being done on social media and technological-type innovations (see also Erdley & Day; Holt-Lunstad). Research ideas and trends come from many sources. Work in this area illustrates how technological and societal change can give rise to new avenues of investigation.

Box 17.1 **Recommendations for Future Research**

- Examine more varied populations (e.g., minority groups, disability groups, immigrants, etc.; Erdley & Day; Rose & Hospital; Ledbetter; Hojjat et al.; McConnell et al.; cf. King et al.)
- Technology, electronic communication, and social media (Erdley & Day; Lunsford; Lunstad; Oswald), including a wider array of social media platforms rather than just Facebook (Ledbetter)
- Enhanced research designs (e.g., more complex, longitudinal, dyadic, social network analysis; Wzrus et al.; Ledbetter; Clark et al.; Oswald; cf. King et al.)
- Comparisons and/or interdependencies with other types of relationships (Wzrus et al.; Hojjat et al.; Oswald)
- Examine the causal direction between friendship and other variables (Erdley & Day; VanderDrift et al.; cf. Lunsford)
- Research designed to develop and evaluate friendship interventions (Erdley & Day; Adams et al.; cf. King et al.)
- Study facilitators and barriers to cross-identity relationships and the interaction patterns of individuals in such friendships (Rose & Hospital) as well as the positive and negative motivations for friendships between ex-romantic partners (Clark et al.)
- More qualitative research (Rose & Hospital; Ledbetter)
- Study the friendships of individuals who do not fit neatly into static, binary conceptions of gender (Monsour)
- More precise measures for classification of race, ethnicity, and sexual orientation (Rose & Hospital)
- Greater use of theory (Ledbetter)
- Do research recognizing the interplay between online and other forms of communication (Ledbetter)
- Examine whether offline and online friendships have the same health effects (Lunstad)
- Do more interdisciplinary research (Ledbetter)
- Study individual differences (e.g., attachment styles; VanderDrift et al.)
- Study the operation and fulfillment of higher-order needs in friendships (VanderDrift et al.)
- More research on mentors as friends (Lunsford)
- More attention to mediators and moderators (Clark et al.)
- More research on forgiveness and revenge in friendships (Hojjat et al.) especially on the role of the transgressor
- More research on competition including examining it across the life span, as a situation versus a trait, as a multifaceted phenomenon, and cross-culturally (Hibbard & Walton)

As an aside, although not covered in this volume, another noteworthy domain in which social change has occurred is in the interface between friendships and sexual relations. The phenomenon of “friends with benefits” (having sexual relations in platonic relationships) has been labeled and become a focus of research (Levine & Mongeau, 2010). It merits the scholarly attention it is getting.

This volume does not have a chapter on the methods used to study friendships. I see methods as one of the key pillars of the field. I join with other contributors to this volume in wishing for continued development of methods and greater use of the best methods. Nonetheless, I think there have been various advances in the methods used by relationship scientists in the past two to three decades to applaud (e.g., statistical procedures to handle dyadic data and longitudinal data; experience sampling and daily diary methods; physiological, neuroscience, and biomarker type measures; developments in qualitative research).

In the last 35 to 40 years, it is likely true that psychologically trained relationship researchers have retreated from conducting laboratory experiments that were popular during the era when interpersonal attraction research was more common. Given that social scientists tend to consider experiments the gold standard for inferring causality, some may lament the dearth of experiments. Contributors to this volume called for more work to determine the direction of causality. In defense of a shift toward nonexperimental designs, conducting research on people’s experiences of friendships in their daily lives makes generalizing to people’s actual friendships easier. Some friendship phenomena undoubtedly operate in reciprocal, bidirectional influence patterns. Along these lines, Wrzus et al. discuss how neuroticism influences friendships and how friendships influence neuroticism. Furthermore, there are some logical and statistical methods, given panel type designs, for inferring causality from nonexperimental data (S. Finkel, 1995).

Moderately Frequently Mentioned Recommendations for Future Research

Among the moderately frequently mentioned recommendations for future research, there appear to be a couple of underlying commonalities. First, some contributors to this volume pointed to the need for additional research on their topic of research in general (e.g., Lunsford; Hojjat et al.; Hibbard & Walton). Second, other contributors brought forth ideas about specific profitable avenues research on their topic might pursue (e.g., Monsour; VanderDrift et al.; Ledbetter). Both these thrusts seem sensible.

Wrzus et al. call for doing more research on the interdependencies between friendships and other forms of relationships. Along somewhat similar lines, Oswald also briefly alludes to looking at different types of relationships to get a better overall picture of maintenance behaviors. Wrzus et al. talk about some steps to take along this path. In looking at the interdependencies among relationships, two very plausible positions are (1) that strengths in one form of relationship can compensate

for deficiencies in others and (2) some individuals are generally more successful in relationships, so that people who succeed in one form of relationship are likely to succeed in other forms. Wrzus et al. cite data consistent with the compensation view (e.g., that closeness to friends is inversely related to closeness to family members). Ledbetter cites evidence consistent with a rich-get-richer position: According to the media multiplexity theory for which there is support, people who have stronger friendship ties are the ones who employ more communication media to maintain their relationships. I share Wrzus et al.'s view that further exploration of how different types of relationships intertwine would be valuable and appreciate their thoughts on steps to be taken.

Erdley and Day as well as Adams et al. focused on interventions for enhancing friendship. I especially resonated to their points. In the more general field of marriage and the family, marital preparation as well marital enrichment programs have been developed and researched (e.g., Madison & Madison, 2013). There are journals primarily or partially devoted to research on and therapy for couples such as the *Journal of Couple and Relationship Therapy* and *Journal of Marital and Family Therapy*.

With regard to promoting friendship, there does not appear to be as much. But there is some. For example, social skill training has been used to enhance the peer relations of children and adolescents (Foster & Bussman, 2008). There have also been numerous efforts to alleviate loneliness and social isolation, many of which are aimed at least in part at helping lonely individuals to make new friendships or enhance existing ones (e.g., see Cattan & White, 1998; Masi, Chen, Hawkey, & Cacioppo, 2011).

As we have seen in the discussion of the benefits and downsides of friendship, lacking friends and/or having poor quality friendships is associated with lower physical and emotional well-being. We also know that children with poor peer relations are at risk for later adjustment problems (e.g., dropping out of school, criminal behavior; Parker & Asher, 1987). Further development and evaluation of efforts to enhance children's and adults' friendship is definitely worthwhile.

Theory as a Future Direction

In her seminal 1996 book on friendship, Beverley Fehr devoted a chapter to theories. She covered four psychological traditions: reinforcement, social exchange and equity (divided into interdependence and equity), cognitive consistency, and developmental. For the most part, these were theoretical traditions that could be applied to friendship but were not theories that evolved out of an interest in friendship per se. In surveying the theoretical landscape nearly 20 years after Fehr's volume, it seems to me that at one level the landscape has changed significantly: Reinforcement and cognitive consistency perspectives are less prominent in the literature on friendship, and in their place attachment and evolutionary perspectives have gained in influence (see Harvey & Wenzel, 2006). There are also some conceptual frameworks grounded in psychology that seem narrower but

have relevance to friendships and other frameworks outside of psychology. For example, within psychology these include

1. Gable and Reis's (2010) capitalization model (i.e., the view that sharing good news with close others enhances relationships);
2. Clark's distinction between communal and exchange relationships (i.e., relationships in which we benefit others because we are concerned with their welfare versus relationships in which we do things for others on a quid pro quo basis, repaying or setting up obligations; Clark & Aragon, 2013); and
3. Aron's self-expansion model (i.e., the position that we have a basic desire for self-expansion as a means to accomplish our goals and one way we can achieve self-expansion is what Aron calls "including the other in the self"—having a self-concept that includes some of our partners resources, perspectives and identities; Aron & Nardone, 2012).

Recently, there have been two promising conceptual formulations on interpersonal attraction. E. Finkel and Eastwick (2015) argue that we become attracted to others who help us achieve our high priority needs or goals. Montoya and Horton (2013) have advanced a two-dimensional view: They believe we are attracted to another person to the extent that we believe the other person has the capacity to facilitate our goals/needs and the other person is willing to do so. Outside of psychology there are also useful frameworks. Monsour, for example, points to dialectical and feminist intersectional theories as relevant to friendships.

Of the theories that Fehr covered, the one that most directly stemmed from an interest in dyadic relationships was Levinger's analyses of the development and deterioration of relationships (Levinger, 1980; Levinger & Snoek, 1972). Nonetheless, in what Fehr offered as well as in the current volume, I do not find a general theory of friendship. In this sense I do not find a significant shift in theorizing despite being able to see changes in the attention devoted to specific theoretical viewpoints.

In a special section of the *Journal of Social and Personal Relationships* on how we should study relationships, published in 1995, Ellen Berscheid called for a grand theory. She envisioned a theory that would be multidisciplinary and address various types of relationships, recognizing the similarities and differences among them. In general, I see the social sciences as having moved from more general theories to narrower ones. In the present volume, I admired Lunsford and Hibbard and Walton for advancing more focused conceptual models, respectively, regarding mentoring and competition between friends.

In the 20 years since Berscheid wrote, no grand or metatheory of relationships has been advanced and gained prominence. I do not see one on the immediate horizon. Nonetheless, I would like to see a theory or model that addresses friendship in a broader, more holistic manner.

Apropos of formulating a broader framework, there are two noteworthy dimensions of friendships underlying much of this book: first, that relationships have

a beginning, a middle, and an ending (Ledbetter; Oswald; Morrison & Cooper-Thomas; Clark et al.), and second, that relationships evolve and change over the life span (Erdley & Day; Wrzus et al.; Adams et al.; Hibbard & Walton). There have been models such as Levinger's (1980; Levinger & Snoek, 1972) of how relationships build and decline. There also have been models of how relationships change over at least parts of the life course (e.g., Buhrmester, & Furman, 1986; Carstensen, 1987). It does seem possible and desirable that thinking along each of these two lines could be updated, elaborated more fully, and, whether concerned with multiple types of relationships or not, articulated specifically with reference to friendships.

In this volume, Adams et al. offer a still-evolving, broad conceptual model stemming specifically from an interest in friendship. I find much to admire in their effort that bridges sociological and psychological perspectives. In their writing, Adams, Blieszner and their coauthors have addressed both the previously identified developmental dimensions. Adams and Blieszner are definitely making progress in the direction I am urging. I would love for them to do a monograph-length explication of their views addressing various aspects of friendship in greater depth, offering a set of testable propositions, and conducting (or at least stimulating) programmatic research to test their views. I would also note that in her dissertation and in unpublished papers, Hilla Dotan (2007) has taken steps in the direction of updating models of relationship development especially with reference to work friendships. I hope more work on developing friendship theory in these domains will be produced and published in the years ahead.

Summary and Conclusion

In this chapter I have argued that scholars have had difficulty reaching a consensus on a definition of friendship but that I favor a prototype conceptualization. I claimed that, among other reasons, friendships are important because of the time we spend with friends, the pleasure we derive from friendships, and the increasing role of friendships in filling our social needs. During the past 50 years research on friendship has grown; it is a multidisciplinary endeavor. I highlighted evidence from throughout this volume indicating that friendships can be both beneficial and detrimental. The question is: Who, under what conditions, via which processes leads to which positive versus negative outcomes of friendships? I concluded by discussing directions for future research on friendship, calling for broader, more holistic theoretical analysis.

To take off from my opening Mohammad Ali quote, if you have read this book, I am sure you have learned a lot of things about the value of friendship and what makes them successful. You really have learned something intellectually stimulating and important for your daily life. Hurrah to the editors and the authors for giving us such an informed, current, and broad tutorial.

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