CHAPTER

21 Does Age Matter to LMX and its Outcomes? A Review and Future Research Directions

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Abstract

Age-related changes in industrialized countries have increased interest in how age differences play out in the workplace. However, little research has been done to uncover how age differences may influence the development and maintenance of leader–member relationships. Empirical and theoretical work that has been done in this area suggests that age may be a key demographic factor in understanding LMX, both as a direct and moderating influence. In this chapter we discuss age-related studies that build the case for the effects of age in LMX. We also examine developmental theories and stereotyping research that provide a foundation for understanding of how age differences between employees and supervisors may affect the relationships between them. The authors conclude with a set of research questions in each theoretical area to address in order to develop a comprehensive understanding of the influence of age on LMX relationships.

Key Words: age, age differences, leader–member exchange, leadership, aging workforce

Introduction

As the average age increases in many developed nations across the globe, the industrialized workforce is experiencing unprecedented demographic shifts. Overall, the workforce is aging, with people staying in the workforce beyond traditional retirement ages (Eurostat, 2012; Toossi, 2007, 2012). These trends are due to several factors, including the fact that people are living longer and staying healthier as they age (Vaupel, 2010). These factors have led to an increase of the official retirement age in some countries because their retirement systems must support people for a longer time period than was necessary at one time (Curl & Hokenstad, 2006). Moreover, people in many regions are finding they need to work longer, or to return to work after retirement, as a result of the economic downturn (Moen, 2012).

This has led to several changes in the age demographics of the workforce. First, the average worker is becoming older. Second, older and younger individuals are working together side-by-side across the spectrum of career stages and job levels. Third, and most relevant to the present chapter, there are increasing incidents of extreme age differences between workers and their supervisors. This means that leaders must more frequently supervise highly age-diverse teams of workers, with greater variability and disparity in the age differences of leader–member dyads (Mor-Barak, 2011). Further, the phenomenon of younger supervisors managing older workers is becoming more commonplace (Liebold & Voelpel, 2006).

The purpose of this chapter is to examine the implications of the changing age diversity in the workplace for leader–member relationships. Although a small amount of research has begun to focus on these issues, there is still a great deal that is unknown. In this chapter, we begin by examining the limited research on age differences in leadership in general, and in the dyadic relationships that develop between leaders and followers. Next,

we briefly review findings regarding age-related changes in individual differences (personality, cognitive skills, and motivation), theoretical models that explain how people adapt to these age-related changes, and the social context for aging (age climate) that could affect how older and younger people respond to the workplace in general and to the relationships they build at work. We point out the needed future research along the way to help address how age diversity affects the leader–subordinate relationship.

Possible Age Effects on Leader–Member Exchange and Its Outcomes

Schriesheim, Castro, and Cogliser (1999) provided an overview of the leader–member exchange (LMX) literature through the 1990s, noting that parts of the LMX literature were confusing and not clearly developed. The same could be said today of the study of LMX theory in relation to the aging workforce: namely, that relatively little research has focused specifically on how age of the leader and subordinate can affect the relations between them. As with many areas of organizational psychology, age has only recently received much attention as a result of the aging workforce. Walter and Scheibe (2013) provide a detailed review of the literature on leader age and leader behavior and its outcomes, and they lament the confusing state of the current literature. Specifically, they note that there is inconsistent theorizing in the literature on age in leadership and that there are few consistent findings. The same could be said of the study of age in LMX literature.

Although there is relatively little research regarding age and LMX per se, there are streams of research that can help us to see our way through this challenging situation. We begin by discussing studies on the effects of leader age on performance ratings, followed by a discussion of the effects of age on leader behaviors and outcomes and a review of research on the effects of age congruence in dyadic relationships. We then discuss recent work that suggests that age alone may not affect the relations between leaders and individual followers, but that age interacts with other variables to affect the leader–member relationship. We conclude this section with a discussion of the issue of age versus "deep-level" variables that may affect LMX.

Age and Performance Ratings

Liden, Stilwell, and Ferris (1996) tracked the effects of supervisor and subordinate age on objective and subjective measures of performance. Using data collected over a period of 6 years (1980–1986) in a large U.S. corporation, they found that older employees performed better than younger employees on both objective and subjective measures, a finding that is consistent with other research on age-related performance differences (Ng & Feldman, 2008). In addition, however, the authors found that the subordinates of older leaders showed higher performance than the subordinates of younger leaders. These effects may be characteristic to the nature of the work, where older supervisors may provide greater opportunities such as sales for their subordinates. No effects were found for age differences or similarities in the supervisor–subordinate dyads. As much as anything, this study helped to identify some of the key issues and pointed out the need for greater theorizing regarding age and the supervisor relationship.

Effects of Age Congruence on Leader–Team Member Relationship

A number of studies have examined the effects of age congruence on the relationship between supervisors/leaders and followers. One of the key questions here is whether demographic differences, including age differences among team members, actually do affect perceptions and performance. The relational demography literature, which examines the effects of demographic similarities and differences among teams, is particularly relevant to understanding whether age differences between leaders and followers have similar effects on their dyadic relationships.

In an early study of the effects of demographic similarity in teams, Tsui and O'Reilly (1989) looked for the effects of relational demography in supervisor–subordinate dyads, examining the effects of demographic similarity and differences within the dyad. Specifically, using a sample of 272 supervisor–subordinate dyads, they found that demographic differences in dyads leads to lower ratings of perceived effectiveness by supervisors, less attraction between supervisors and subordinates, and increased perceptions of role ambiguity by subordinates. However, they also noted that the age effects were minimal: Age differences only had marginal effects on subordinate role ambiguity, and there were no effects on supervisor ratings of effectiveness. Moreover, later studies by Harrison and colleagues (Harrison, Price, & Bell 1998; Harrison, Price, Gavin, & Florey, 2002) showed that the effects of demographic differences on group relations and functioning can be largely erased over

time as members come to know each other in more meaningful ways (e.g., personality, abilities) beyond the "surface" demographic characteristics such as gender and age.

Shore and Bleiken (1991) provide a study that may help to shed light on the effects of age in supervisor–subordinate relationships, examining the effects of age and supervisor–subordinate age congruence on performance ratings. Using a sample of 70 assemblers and their supervisors, they found inconsistent results for age bias and that bias may only be important for certain dimensions of performance ratings. Again, this is consistent with later research by Harrison et al. (1998, 2002) that found age had few effects on team relationships and functioning once team members had gotten to know each other at a deeper level.

Other studies have also found small or nonexistent effects of age in leader–member relations. Schaffer and Riordan (2013) found that age similarity in leader–member dyads in an insurance company was not significant in predicting the extent to which followers perceived discrimination or exclusionary treatment coming from their supervisor. Similarly, Epitropaki and Martin (1999) examined the combined impact of relational demography and leader–member interactions on employee attitudes and well-being and found that only similarity in tenure, combined with LMX, influenced positive employee outcomes. Age similarity was nonsignificant. Further, Perry, Kulik, and Zhou (1999) found in a sample of 35 groundskeepers that employees who were older than their supervisors had less absenteeism and more OCBs, suggesting that incongruence may not have negative effects.

Fagenson-Eland, Baugh, and Lankau (2005) examined the effects of age differences in mentor–protégé dyads. Using a sample of 27 dyads from two high-technology companies, they found that age differences within the dyad reduced agreement between the mentor and the protégé about the extent of mentoring provided. The authors suggested that one reason for this effect of age differences on perceptions of the relationship is that people from different age cohorts may have different expectations as a result of their differing social experiences. Of course, such differences may also be found because of the differences in accumulated experience of dyad members of different ages.

Though not directly related to LMX, Kearney (2008) examined whether age differences between leaders and followers affects the relationship between transformational leadership and group performance, primarily because of decreased perceived legitimacy on the part of a leader that is not older than the followers. As expected, Kearney found that the relationship between transformational leadership and team performance was positive when the leader was older than most team members, but the relationship was nonsignificant if the leader's age was close to the group mean.

In short, the effects found for age differences on within-group dyadic relationships, either among group members or between members and leaders, have been mixed. While some studies have suggested that such differences do not matter, others have suggested that they may matter under certain circumstances.

LMX as a Mediator Between Age and Leader–Follower Outcomes

Two studies by Gellert and Schalk (2012a, b) show how LMX may play a mediating role in understanding the relationship between age issues and important leader outcomes. First, using a sample of 152 workers in residential homes, they found that age-related attitudes of employees affected their LMX perceptions, which in turn affected self-reported employee performance and job satisfaction (Gellert & Schalk, 2012a). In a separate study of 150 workers in residential homes for the elderly, Gellert and Schalk (2012b) found that LMX mediated the relationship between employee age and job satisfaction, and partially mediated the relationship between employee age and performance. Taken together, these studies provide an interesting account of how both leader and follower age impact work outcomes through LMX. However, both of these studies were limited by cross-sectional designs and single-source data, perhaps inflating the relationship between the mediator (LMX) and the antecedents and outcomes.

Interaction of Leader Age with Other Variables on the Leader Relationship

A more compelling possibility is that age interacts other variables (either characteristics of the leader or of the follower) to affect the dyadic relationship. One study, although not strictly related to LMX, illustrates the impact of leader age on aspects of the organization. Zacher and Gielnik (2012) examined the effects of CEO attitudes on the age culture of an organization. Specifically, using a sample of 66 small and medium-sized organizations and 274 employees, they found that CEO age was related to a positive age culture when CEOs had a

more positive attitude toward older workers. For CEOs with a less positive attitude, the relationship between CEO age and organizational age culture was nonsignificant. Given the importance of age climate to organizational outcomes such as turnover and productivity (e.g., Boehm, Kunze, & Bruck, in press; Kunze, Boehm, & Bruch, 2011), these findings point to the importance of leader age and attitudes in impacting the organization.

A second study by Zacher, Rosing, and Frese (2011) examined the interaction of age with a leader's "legacy beliefs" (the belief that one's work and actions will have a lasting impact on future generations) on leadership effectiveness. They used a sample of 106 German university professors and their research assistants to see the combined effects of leader legacy beliefs and age on leader effectiveness. Age was positively related to legacy beliefs such that the older a worker was, the more he or she felt that actions would have a lasting impact. But perhaps more interesting, older leaders with high legacy beliefs were rated as being more effective by their followers than those low in legacy beliefs. This bodes well for understanding not just whether age affects subordinates' perceptions of leader effectiveness, but also which characteristics make older leaders more or less effective.

Another study demonstrated that leader age may also interact with subordinate characteristics, namely, subordinate beliefs and stereotypes, to affect follower perceptions of the leader–follower relationship. Although not directly examining the effects of age on LMX, Zacher and Bal (2012) provide an example of how leader age *may* impact relationship quality. Using a sample of 128 professors and their research assistants—a case where there can be considerable differences in age between the leader and the follower—Zacher and Bal looked at whether leader age affected leader age-related work concerns (e.g., less interest in research; more awareness of exit) which in turn might affect research assistant ratings of passive–avoidant leadership and proactive leadership. They found that this mediated relationship was not supported. Instead, however, they found that leader age interacted with follower age stereotypes to affect follower perceptions, such that leader age only had detrimental effects on follower ratings of proactive leadership and passive–avoidant leadership when the follower had negative age stereotypes. In other words, individual followers only seemed to have negative views of their older leaders when they held negative age stereotypes themselves. This particular study suggests that not only leader characteristics but follower characteristics as well should be examined for its interactive effects with age on the LMX relationship.

Zacher, Rosing, Henning, and Frese (2011) examined the interactive effects of leader age with leader generativity, or the extent to which the leader establishes and guides members of future generations, and the key mediating role played by LMX. Using a sample of 128 university professors (leaders), each matched with one research assistant (follower), they found that leader age was related to leader generativity as rated by the research assistants, and that leader age was also negatively related to leader effectiveness. However, generativity moderated the effects of leader age, such that older leaders high in generativity showed little decrease in effectiveness. In other words, older leaders perceived to be high in generativity were about as effective as younger leaders. A key for LMX research is the finding that subordinate-rated LMX mediated the effects of this interaction. More specifically, the combined influence of supervisor age and generativity on leader effectiveness happened through LMX. In short, this study provides a deeper understanding of how age interacts with other characteristics to shape leader effectiveness. Moreover, it shows that characteristics sometimes associated with age (in this case, generativity) can actually interact with age. Finally, it shows how LMX can be an important mechanism to explain how this affects leader effectiveness.

Perhaps the complexity of interactions between leader and follower demographics and LMX is best shown in a study by Nishii and Mayer (2009). They examined the combined effects of demographic diversity and LMX, as well as LMX differentiation (the extent to which subordinates perceive varied leader–member relationships across their team), on turnover in 348 supermarket departments. They found evidence for a three-way interaction, such that there was only a significant interaction between demographic diversity and LMX differentiation when the LMX mean was high. Note, however, that the diversity variable was a combination of multiple demographics—age, gender, tenure, and ethnicity—such that the specific effects of age diversity could not be examined. However, these findings do show that demographic differences may play a role in LMX relationships. It is also possible that different levels of age differences between leaders and different subordinates in the group may play a role in LMX differentiation, although this is an area for future research. Most important, however,

is that this study further illustrates that we might need to look less for simple age effects on LMX and more at the combination of age with LMX and with other variables.

Leader Age: Surface versus Deep Characteristics

As previously mentioned, some research has suggested that over time, demographic variables may become less salient in impacting attitudes and relationships. A number of authors have noted the importance of differentiating surface characteristics (in the case of the present discussion, age) from deep characteristics (see Harrison et al., 1998; Harrison et al., 2002) such as leadership skills. Harrison and colleagues (1998, 2002) have argued that surface demographic differences such as gender, ethnicity, and age are less likely to be problematic in groups or teams where people come to know each other in deeper ways (e.g., personality), as opposed to in situations where people do not know each other as well (e.g., in selection interview situations).

For these reasons, Klein and Wang (2010) argue that it is easily possible (and incorrect) for researchers to conflate two such characteristics (e.g., age and a particular leader behavior) simply because they may covary. For example, just because older leaders tend to exhibit certain leader characteristics (e.g., generativity), it doesn't mean that all older leaders will do so; in fact, there may be quite a bit of variability among older and younger leaders. The study by Zacher et al. (2011) described above is a good case in point: Although age was correlated with generativity, it was really the combined, interactive effects of age and generativity that impacted leader effectiveness.

Walter and Scheibe (2013) provide a detailed review of the literature on leader age and leader behavior and outcomes, presenting an emotion-based conceptual model that may help provide boundary conditions for *when* leader age matters. Specifically, they argue that the effects of leader age on leader behaviors and outcomes may be moderated by the leader's functional age (continued availability of physical and cognitive resources; Sterns & Scheibe, 1995) and psychosocial age (subjective perceptions of one's own age; Sterns & Miklos, 1995), as well as the cognitive and emotional demands of the particular work context. In short, the conceptual work presented by Walter and Scheibe (2013) has set the stage for a greater understanding of when leader age may affect leader behavior and the LMX relationship.

Summary

There has been relatively little work that specifically examines the effects of leader age on actual LMX, although several studies have examined age differences regarding dyadic relationship quality. Studies suggest that within groups and teams, age alone may not always have a strong effect on the supervisor–subordinate dyad. In fact, the effects of a surface characteristic such as age in the relationship may be attenuated over time, as members learn more important things about the leader and each other beyond their demographic characteristics. Further, a number of studies have shown that age may interact with other perceptions and characteristics of the leader and the follower to affect leader effectiveness, and recent models hold promise for understanding the boundary conditions within which leader age will matter.

Age-Related Changes That May Affect the LMX Relationship

Although relatively little research has been done to examine the effects of age on LMX, much theoretical and empirical work has been done to uncover the influence of age on work attitudes, behaviors, and motivation. This literature begins to provide some insight into *when* and *why* leader and employee age may be an important determinant of the quality of the leader–member relationship, which can then inform research in this area. In this section we discuss the application of several developmental theories to the workplace, exploring how the tenets of each may impact the development and maintenance of LMX. We also demonstrate how contextual variables, such as stereotypes, organizational climate, and employee and leader perceptions could influence the quality of the leader–member relationship. We identify research questions related to LMX as we examine these topics (see Table 21.1 for a summary of these).

Age and Changes in Personality

Although personality is generally considered to be stable, research also shows that there are significant changes in personality with age. For example, many dimensions of conscientiousness increase through adulthood, while neuroticism tends to decrease (e.g., Roberts, Walton, & Vichtbauer, 2006.) Relatedly, there is evidence that older persons may be better at emotion regulation (e.g., Blanchard-Fields, 2007; Carstensen, 1992; Scheibe & Zacher, in press). It is important to note, however, that while there may be some within-individual changes in personality,

Table 21.1. Streams for future research as to how LMX may be affected by leader and subordinate chronological age or age differences.

Empirical Finding or Theory Related to Age	Questions for LMX Research
Age-Related Changes	
Personality changes	• Do personality differences better prepare older and younger people for their roles as leaders and followers? • What is expected of different age groups in a leadership role? • Do differences in emotion regulation better prepare older people for leadership?
Age-related changes in motivation	• Do age-related differences in motivation (intrinsic/extrinsic, generativity motives) impact the LMX relationship? • Do differences in generational values affect LMX?
Lifespan Development Theories	
Selection, optimization, and compensation	• How do SOC strategies on the part of leaders or followers enhance (or hurt) the LMX relationship? • How might SOC-oriented interventions improve the leader dyad, especially for older leaders?
Socioemotional selectivity theory	• How do the aspirations of younger leaders (e.g., toward advancement) affect their subordinates and the quality of the leader–member relationship? • How do age differences within a dyad (with corresponding differences in the goals) affect LMX relationships?
Age Perceptions and Stereotyping	
Stereotypes of older and younger workers	• How do age stereotypes affect the expectations of an older or younger leaders and followers? • Do age stereotypes affect LMX once leaders and subordinates work with each other over time and come to know each other (cf., Harrison et al., 2002)? • How do "meta-stereotypes" regarding age affect the LMX relationship? • What is "old" or "young" for a leader in one profession versus another?
Organizational climate and age	• What are the effects of group or organizational age climate on the leader–member relationship?
Teams and age diversity	• What are the moderators that determine when age differences affect LMX? • Can organizations encourage positive intergenerational contact? Can we develop successful interventions?
Relative age and career timetables	• What are the career timetables for different jobs and how does this affect expectations of leader age and appropriate age differences between members and followers (including direction), and the LMX dyad? • Are career timetables changing? • Are there cultural differences in terms of career timetables and leader age expectations?

there is still considerable variability in personality for a given age group. Interestingly, research has also found that older and younger people (e.g., Wood & Roberts, 2006) and older workers specifically (Bertolino, Truxillo, & Fraccaroli, 2013; Truxillo, McCune, Bertolino, & Fraccaroli, 2012) are actually perceived to differ in terms of their personality. An important research issue, then, is whether these personality differences may better prepare older and younger people for their roles as leaders and followers, and what is expected of different age groups in these roles. Whether such differences result in the development of differential relationships between subordinates and leaders in different age groups is another issue to explore: deep-level differences such as personality that covary with age may

better explain differences in leader behavior than a surface-level characteristic such as age by itself (see Klein & Wang, 2010).

Age-Related Changes in Motivation

The relationship between age and work motivation is complex, with increases in some types of motivation and decreases in others. In one study, Kanfer and Ackerman (2000) found that for 228 adults completing the Motivational Trait Questionnaire, age had a negative relationship with task mastery, other-referenced goals, and competitiveness. However, there were several motivational constructs such as emotionality, job absorption, and social potency that did not carry this negative relationship. Although some research has uncovered little to no variation across age groups in terms of work motivation (e.g., Jurkiewicz & Brown, 1998; Wong, Gardiner, Lang, & Coulon, 2008), a recent meta-analysis identified some differences across different age groups. Kooij et al. (2011) found that age was positively related to intrinsic motives (e.g., accomplishment, autonomy), but negatively related to extrinsic motives (e.g., compensation, promotion). Although such differences may be due to the development and experiences of older workers, other research by Twenge, Campbell, Hoffman, and Lance (2010) also suggests the existence of generational differences, with baby boomers (those born between 1946 and 1964) endorsing more intrinsic values and millennials (those born after 1982) endorsing more extrinsic values. The effects of any differences in generational values should be examined for effects on LMX.

Kanfer and Ackerman (2004) developed a model of aging and motivation that may help to explain age-related changes in motivation. They posited that as individuals age they experience loss, growth, reorganization, and exchange. Older adults may lose fluid intelligence abilities that allow them to quickly retain new information, but they tend to gain crystallized intelligence through their knowledge and experience. These losses and gains likely influence how individuals direct and focus their efforts (reorganization and exchange), such that older employees may have different motivations than their younger counterparts. Moreover, Kanfer and Ackerman point out that generativity motives (McAdams, St. Aubin, & Logan, 1993), or a focus on the next generation, begins in middle age. (Subsequent sections of this chapter will describe developmental theories that explain specifically how motivation changes across the lifespan.)

Although few studies have empirically explored the link between work motivation, age, and LMX, motivation differences may help explain the development of the LMX dyad. For example, Social Identity Theory (Brown, 2000; Tajfel & Turner, 1986) suggests that individuals have better attitudes and outcomes when working with someone with whom they relate, including the sharing of similar values. Because individuals' motivation changes over the lifespan, it is possible that wide variations in age within the leader–member dyad will negatively affect perceptions of LMX. Indeed, Ellemers, de Gilder, and Haslam (2004) proposed that factors that set a leader apart from his or her followers are likely to undermine leadership effectiveness and spur negative follower attitudes. In short, however, more research is needed to uncover whether age-related differences in motivation impact the LMX relationship. The previously mentioned study conducted by Zacher et al. (2011) shows the promise of this approach: Older leaders were able to maintain their leadership success when they had high generativity motives, and LMX actually mediated this effect.

Lifespan Development Theories

Lifespan development theories have developed to explain how people adapt to age-related changes, such as losses and gains, over time. These theories have also been applied to the workplace and may help to explain how age can factor into the dyadic relationship.

Selection, optimization, and compensation. Selection, optimization, and compensation theory (SOC theory; Baltes & Baltes, 1990; Baltes, 1987; 1997) suggests that as individuals age, they experience losses that compel them to reorganize their goal structures and behave in ways that allow them to select, optimize, and compensate according to these goal structures (Baltes & Baltes, 1990; Baltes, 1997). An individual that engages in *selection* chooses the direction of his or her goals and efforts in a systematic way, whether this decision is impacted by preference (elective selection) or necessitated by loss of resources (loss-based selection). An individual engaging in *optimization* allocates internal and external resources toward achieving improved functioning in those selected goals. An individual engaging in *compensation* substitutes processes to counteract losses impacting functioning in selected goals (Baltes & Heydens-Gahir, 2003; Freund & Baltes, 1998). An individual engaging in all three strategies will adaptively select goal structures, direct effort, and maintain functioning in

the domains they perceive as important and most likely to lead to success (Freund & Baltes, 1998). As a simplified example, an aging construction worker might decide to focus on skills at which he can still maintain peak performance such as supervisory (nonphysical) skills (selection), look to ways to maximize his supervisory skills such as through development opportunities (optimization), and find ways to deal with any physical limitations, such as the use of special equipment (compensation).

Research has shown support for SOC theory. Indeed, with the exception of much older adults who likely have less control over biological and physical losses, individuals tend to exhibit more SOC behaviors as they age (Freund & Baltes, 1998; Freund & Baltes, 2002). Research has also shown that effective use of SOC behaviors and strategies is associated with more successful aging. For instance, Freund and Baltes (1998; 2002) showed that individuals engaging in SOC behaviors tend to have greater subjective well-being, more positive emotions, and a greater absence of loneliness than individuals not engaging in these behaviors.

Individuals who effectively use SOC strategies are able to engage in goal management activities that allow them to better adapt to change and workplace environmental constraints as they age (Zacher & Frese, 2011). Environmental and social constraints in the workplace are particularly salient for aging employees as they are consistently called upon to manage work and family responsibilities along with physical, cognitive, and health declines (Baltes & Heydens-Gahir, 2003; Ng & Feldman, 2008; 2010). Behaviors indicating effective use of SOC strategies at work (e.g., adapting to change, scheduling of time and energy, or using the help of others) predict a wealth of positive work- and relationship-related outcomes. Baltes and Heydens-Gahir (2003) found that the use of SOC strategies in both the work and family domains tended to lower stress in each domain, reducing work–family conflict. Research has also shown that SOC behaviors predicted unique variance in job performance (Bajor & Baltes, 2003) and global and work-specific well-being (e.g., Weise, Freund, & Baltes, 2000; Weise, Freund, & Baltes, 2002). SOC behaviors have also been shown to influence work motivation, with use of SOC strategies predicting greater focus on new goals, options, and possibilities ("focus on opportunities") in one's career, particularly for older adults (Zacher & Frese, 2011). Interestingly, research has found SOC strategies among older workers do not seem to negatively affect coworkers (i.e., by forcing them to take on additional tasks) but may have a positive impact on older workers' task performance (Weigl, Mueller, & Paoli, 2013).

Although some researchers have explored the possibility of applying SOC theory to leadership training and development (e.g., Mumford, Hunter, Eubanks, Bedell, & Murphy, 2007; Mumford & Manley, 2003), virtually no research has examined the link between SOC behaviors and the LMX dyad. However, given the positive outcomes for workers applying SOC strategies at work (e.g., Bajor & Baltes, 2003; Weise et al., 2000; Weise et al., 2002; Zacher & Frese, 2011), further research should examine how such strategies on the part of leaders and followers might enhance the LMX relationship, as well as how SOC-oriented interventions might improve the leader–member dyad, particularly for older leaders.

Socioemotional selectivity theory. While the validity of SOC theory has been demonstrated, the theory does little to explain or predict the types of goals older versus younger individuals will select. Socioemotional Selectivity Theory (SST; Carstensen, 1991; 1992) utilizes a time perspective framework to explain why older individuals are likely to select goals that create positive emotions and stronger social bonds, while younger individuals are likely to select goals centered around learning and future opportunities. Specifically, SST suggests that individuals tend to perceive time according to how much time they believe they have left in life. Younger individuals, who perceive time to be open-ended, tend to adopt a future-oriented perspective and focus on goals that promote their learning and advancement. Conversely, older adults, who perceive less time remaining, tend to adopt a present-focused perspective and focus on emotional regulation and the development and maintenance of meaningful social relationships.

Organizational studies have shown evidence of SST in the workplace, with older employees tending to exhibit more organizational citizenship behavior (Ng & Feldman, 2008) and generally exhibiting better attitudes toward others at work and work in general (Ng & Feldman, 2010). In the service industry, older workers have been found to use more "deep acting" and expression of felt emotions in dealing with customers, partially due to their increased likelihood to have greater trait positive affect than their younger counterparts (Dahling & Perez, 2010). In their comprehensive meta-analysis, Kooji, de Lange, Jansen, Kanfer, and Dikkers (2011) found

a positive relationship between employee age and intrinsic work motivations, and a negative relationship between employee age and growth and extrinsic work motivations. Taken together, these studies indicate that individuals who are closer to the end of their working lives tend to exhibit the emotionally and socially focused goals of older individuals as posited by SST.

Very little research has examined the impact of socioemotional goals on the functioning and quality of a leader–subordinate relationship. However, as previously mentioned, some work has been done on investigating the impact of leader generativity on the LMX relationship (Zacher et al., 2011). While these findings offer some insight into how the aspirations of older leaders may impact LMX, much more is needed on SST behaviors and their effects within the supervisor–subordinate dyad. For example, little is known about how the aspirations of younger leaders (e.g., toward advancement) may affect their subordinates and the quality of the leader–member relationship, or how age differences within a dyad (with corresponding differences in the goals) may affect LMX relationships. An interesting research question, then, is how differences in SST behaviors might affect LMX quality and its outcomes.

Stereotyping and Other Age-Related Perceptions

Stereotypes of older and younger workers. One of the larger areas of research on the aging workforce is the examination of stereotypes of older and younger workers. A number of negative stereotypes have been attributed to older workers, including the pervasive idea that they are resistant to change and are more costly than their younger counterparts (e.g., Posthuma & Campion, 2009). This may lead to more negative HR decisions about them (Bal, Reiss, Baltes, & Rudolph, 2011). In addition, younger raters may hold more negative stereotypes of the performance of older workers (Finkelstein, Burke, & Raju, 1995). However, except for a decreased desire to learn, most negative older worker stereotypes have been shown to be untrue (Ng & Feldman, 2012). In addition, the stereotypes of older workers are sometimes positive and may be changing: Whereas earlier studies generally found more negative older worker stereotypes (e.g., Rosen & Jerdee, 1976), recent replications have found that there can be some positive older worker stereotypes as well (Weiss & Maurer, 2004), perhaps due to the aging of the baby boomer generation and greater familiarity with older people in the workplace. Moreover, raters of all ages view older workers to be more conscientious, less neurotic, and higher in OCBs than younger workers (e.g., Bertolino et al., 2013; Truxillo et al., 2012), although the age of the evaluator plays a moderating role as well, which they explained as a type of intergroup bias. For example, Bertolino et al. (2013) found that while all respondents perceived older workers as more conscientious than younger workers, this was especially pronounced among older respondents. Finally, jobs can carry their own age stereotypes, such that certain types of jobs and professions are associated with certain age groups (e.g., older persons selling stamps and coins versus younger persons selling CDs, records, and tapes; Perry, Kulik, & Bourhis, 1996).

A recent topic with potential relevance to perceptions of older and younger leaders and their effects on leader behavior is the examination of meta-stereotypes (Vorauer & Kumhyr, 2001), or how different age groups perceive that that are seen by other age groups. Finkelstein, Ryan, and King (2012) found evidence that workers of different age groups may believe (often inaccurately) that coworkers in other age groups hold negative perceptions about them. Although the study of meta-stereotypes is relatively new in the context of the workplace, it raises another factor that may affect relations among different age groups at work.

At this point, there has been little research that directly addresses the effects of age stereotypes on LMX relationships. However, given the different ways older and younger workers may be perceived, there may be considerable differences in the expectations of an older or younger leader. Moreover, leaders themselves may hold different stereotypes of older and younger subordinates, leading to differential relationship quality and outcomes. However, one question that remains is the lasting effects of such age stereotypes once leaders and subordinates work with each other over time and come to know each other (cf., Harrison et al., 2002). In addition, what is considered "old" or "young" in one profession may not be in another (Perry et al., 1996.) For this reason, any examination of how age differences within a dyad affect LMX should consider the particular profession as a boundary condition.

Organizational climate and age. Another factor that may impact how employees perceive and react to age diversity within their own organizations is age climate. Organizational climate in general refers to shared perceptions among employees

regarding some aspect of organizational functioning. Diversity climate in particular has been noted as an important area of study as the demographic composition of the workforce shifts (Kossek & Zonia, 1993). Diversity climate refers to shared perceptions among workers regarding the value the organization places on diversity, or the extent to which its policies and procedures fairly integrate underrepresented employees (McKay, Avery, & Morris, 2008). Research has shown that positive diversity climate promotes positive diversity-focused attitudes, and vice versa (McKay et al., 2008).

Pertinent to the LMX dyad, researchers have explored age diversity climate in particular as a predictor for age-related outcomes at work. Age diversity climate refers broadly to employees' shared perceptions of the value organizations place on different ages in the workforce, or perceptions of the fairness of organizational actions, procedures, and behaviors toward different age groups (Kunze et al., 2011). Organizations that send positive messages regarding the collaboration of individuals of different ages (through, for instance, job assignments, and performance evaluations) are likely to see better age-related outcomes and attitudes from their employees. However, these organizations will need to overcome significant challenges in employee perceptions and cognitions. Hertel and colleagues (2013) suggested that organizations need to develop processes to address ingroup favoritism, age norms, age discrimination, differences in communication styles, and age diversity attitudes in order to benefit from greater age diversity within teams. Indeed, Kunze and colleagues (2011) found that greater age diversity in organizations tends to predict greater age discrimination among employees, subsequently resulting in reduced affective commitment and firm performance. More recently, Boehm and colleagues (in press) examined the effects of age diversity climate across 93 German organizations and using multisource data. They found that age diversity in terms of perceived support for workers of all ages affected both organizational performance and turnover intentions through its effects on the collective perceptions of social exchange.

Although researchers have examined the impact of support climate, innovation climate (Tordera, Gonzalez-Roma, & Peiro, 2008), safety climate (Hofmann, Morgeson, & Gerras, 2003), empowerment climate (Chen, Lam, & Zhong, 2007), and affective climate (Tse, Dasborough, & Ashkanasy, 2008) and on LMX, very little research has examined age climate in particular as an important leader–member relationship construct. Studies have shown that leaders can impact diverse work groups through LMX, such that leaders promoting higher LMX among their diverse work teams can impact lower turnover rates (Nishii & Mayer, 2009) and better performance (Stewart & Johnson, 2009). However, no research to date has examined the opposite path, namely, the direct impact of age climate on the development and maintenance of LMX relationships. It is possible that in conjunction with the processes described in the developmental theories described in the preceding sections, age climate—either within the group or within the larger organization—has a strong effect on the extent to which individuals perceive a differently aged supervisor either negatively or as a valuable interpersonal asset.

Teams and age diversity. As mentioned earlier, one area that offers insights for understanding age and LMX is the examination of age and other team demographics and how these impact team effectiveness and functioning. First, individuals' age-based attitudes toward coworkers may mirror their age-based attitudes toward their supervisors to some extent (e.g., Liden, Wayne, & Sparrowe, 2000). Second, in many industries and organizations the concept of "leader" is changing—project managers, matrix managers, and emergent leaders can all be conceptualized as leaders in the LMX framework (Day, Gronn, & Salas, 2006) and work has begun to examine the role of having multiple leaders under such situations (Vidyarthi, Erdogan, Anand, Liden, & Chaudhry, in press).

Demographically based team research has sometimes used the lens of relational demography, based on the attraction–similarity paradigm, which suggests that the more similar people are, the higher the degree of attraction between them (Riordan, 2000). This suggests that people who are more similar to their coworkers in terms of demographic attributes such as age should have more positive attitudes toward those coworkers. A number of studies have found that increased group diversity in terms of age, tenure, education, sex, and race was associated with negative outcomes such as lower group attachment and perceived productivity and increased conflict and aggression (e.g., Drach-Zachary & Trogan, 2013; Pelled, 1996; Tsui, Egan, & O'Reilly, 1992).

As noted earlier, the evidence for the leader–subordinate dyad is mixed. Dyadic differences in factors such as age, gender, race, education, and company and job tenure have been linked to lower supervisor-administered performance ratings

and supervisor liking of employees and higher employee role ambiguity (Tsui & O'Reilly, 1989), and decreased employee trust (Farh, Tsui, Xin, & Cheng, 1998). However, Perry et al. (1996) found that subordinates who were older than their immediate supervisor exhibited lower turnover and higher OCBs. Indeed, the relationship between demography and attitudinal outcomes may be more complex than simple similarities and differences (e.g., Geddes & Konrad, 2003; Lawrence, 1984; Tsui et al., 1992), and the negative effects of demographic differences may be reduced over time as team members come to know each other (Harrison et al., 1998; 2002).

Some team research has shown that while demographic similarity is important in predicting individual attitudes, this may be more or less salient depending on the situation. For instance, Timmerman (2000) examined the relationship between age diversity, racial diversity, and team performance in two settings with very different requirements for member interaction—basketball teams, requiring high interdependence for task completion, and baseball teams, requiring relatively low interdependence. Using archival data, this study showed that after controlling for team ability, age and racial diversity were negatively associated with team performance only when interdependence was high. These demographic disparities were unrelated to team performance when team interdependence was low. In their meta-analytic review, Bell, Villardo, Lukasik, Belau, and Briggs (2011) found that age diversity did not predict team performance when other demographic variables, such as functional and educational background, were taken into account.

Taken together, these studies indicate that researchers have not thoroughly plumbed the impact that age diversity has on work teams or on leader–member relationships. However, the relational demography literature does indicate the possibility of negative LMX outcomes in age-disparate leader–member dyads, at least under certain circumstances. One area for future research would be to examine *when* leader–member age differences affect outcomes. For example, it has been noted that demographic "faultlines" within teams may develop depending on the task at hand or during a task when a demographic difference is particularly salient (e.g., Jackson & Joshi, 2011.) The development of negative outcomes as a result of age differences between leaders and followers should be examined for moderators, that is, when such age differences may lead to positive or negative outcomes. Iweins, Desmette, Yzerbyt, and Stinglhamber (2013) note that the encouragement of positive intergenerational contact within organizations may help to reduce negative results of in-group–out-group differences. The Iweins et al. study provides hope for interventions that may reduce the negative effects of age differences, both within a leader–member dyad and within organizations as a whole—a fruitful avenue for future research.

Relative age and career timetables. Inconsistent findings in relational demography research (e.g., Epitropaki & Martin, 1999; Perry et al., 1999; Schaffer & Riordan, 2013) have led to the examination of other ways in which demography impacts workplace outcomes. Such research has been extended to account for the possibility that demographic differences *in a certain direction* may have greater effects on individual attitudes and outcomes than general demographic differences.

Lawrence (1984) suggested that people form implicit timetables of normal career progression and tend to judge careers as being on or off schedule according to these perceptions. While these perceptions are not always accurate, they have been shown to influence employee work attitudes. For instance, perceptions of the adequacy of one's career stage have been linked to career and work motivation (Noe, Noe, & Bachhuber, 1990) and job satisfaction (Lawrence, 1984). Lawrence (1984) found that managers who perceived themselves as being "behind" in terms of their career progression experienced more negative work attitudes and were less oriented toward work, regardless of the accuracy of those perceptions. Not surprisingly, the most common marker by which people determine normal career progression is chronological age (Lawrence, 1984; Sofer, 1970), and research has shown that jobs often have an "age norm" associated with them (Perry et al., 1999). Further, Implicit Leadership Theories (ILT), which states that people possess implicit ideas of what a leader should be (Lord, DeVader, & Alliger, 1986; Lord, Foti, & DeVader, 1984; Offermann, Kennedy, & Wirtz, 1994), may also help to explain and predict how relatively younger or older supervisors will impact LMX.

For these reasons, researchers have begun focusing more directly on directional age differences within supervisor–subordinate dyads. Where the study of general age differences calls for an examination of the degree of difference or similarity in supervisor and subordinate ages (operationalized, for instance, as the absolute value of the difference

between the two ages, e.g., Perry et al., 1999; Turban & Jones, 1988), studies examining directional age differences have operationalized these by explicitly asking employees to indicate whether they perceive their supervisor as being younger or older than themselves, or by subtracting supervisor chronological age from employee age and exploring patterns occurring on the positive and negative side of the difference (e.g., Perry et al., 1999; Shore, Cleveland, & Goldberg, 2003; Vecchio, 1993). The idea in this line of research is that if people use age as a marker for determining their place on their implicit career timetable, having a younger supervisor in particular should represent a violation thus should result in poorer employee outcomes.

Empirical evidence has largely supported this notion. Shore and colleagues (2003) found that employees who were older than their managers received more negative performance evaluations and fewer opportunities for training and development. Employees with younger managers were also found to have less favorable work attitudes (Shore et al., 2003), despite the generally positive relationship between employee age and job attitudes (Ng & Feldman, 2010). Collins and colleagues (2009) found that across various organizations and industries, older workers tended to have lower expectations of their younger supervisors, and in turn tended to rate younger supervisors' leadership behaviors lower. Although one study suggested that older employees reported better working relationships with younger supervisors and evaluated those supervisors more favorably (Vecchio, 1993), this study was conducted using a sample entirely comprised of high school faculty members, an occupational group in which career progression is not necessarily demarked by age (i.e., having the training and education necessary to become a teacher is not the same as what is necessary to become a principal or superintendent, so career progression does not occur linearly here). Perry and colleagues (1999) found that directional age differences in the dyad (i.e., having a younger supervisor in particular) were associated with greater OCBs and reduced absenteeism. Thus, although the research supports the idea that employees possess implicit age-driven expectations about career progression (Lawrence, 1984) and having a younger supervisor generally violates these expectations, this very likely depends on the type of job and other contextual issues, which is a useful path for future research. We also suggest that as the age diversity of the workplace as well as stereotypes of younger and older workers evolve (e.g., Weiss & Maurer, 2004), the effects of such career timetables and expected age of the leader may evolve over time, and that the LMX literature should examine such changes. Finally research should examine cultural differences in whether age differences in the dyad may affect outcomes.

Conclusion

This is the point in most chapters where authors make recommendations for research and practice. As noted, we have made a number of recommendations for future research, as highlighted throughout our review and shown in Table 1. However, we find it difficult to make confident recommendations for practice at this point given the relatively scant research on the topic of age and LMX. Nevertheless, we do note that to really understand how leader and subordinate age differences may affect LMX, the literature needs to develop a model that specifically addresses not only *if* age differences affect LMX and its outcomes, but *when* (e.g., Zacher et al., 2011) and *why*. In this chapter we have reviewed the literature on age and LMX and a number of theories that may explain how age differences could affect the dyadic relationship and that may help us to uncover when age differences matter in the leader relationship and the underlying mechanisms. We suspect that the growing interest in the aging workforce will continue to spur interest in age as a focal variable in understanding LMX.

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