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Age and Leadership:

The Moderating Role of Legacy Beliefs

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Age and Leadership:

The Moderating Role of Legacy Beliefs

Abstract

Age and age-related motivations have been neglected in leadership research. This study examined the moderating influence of legacy beliefs on the relationships between age and transformational, transactional, and passive-avoidant leadership behaviors. Legacy beliefs involve individuals' convictions about whether they and their actions will be remembered, have an enduring influence, and leave something behind after death. It was expected that at higher ages, low legacy beliefs impede transformational and transactional leadership behaviors and boost passive-avoidant leadership behaviors. 106 university professors, between 30 and 70 years old, provided ratings of their legacy beliefs; each professor's leadership behaviors were evaluated by one of his or her employees. Results confirmed the assumptions for overall transformational leadership and its charisma subdimension as well as for overall transactional leadership and its active management-by-exception subdimension, but not for passive-avoidant leadership.

Keywords: age; legacy beliefs; transformational, transactional, passive-avoidant leadership

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Leaders' age and age-related motivations are neglected variables in leadership research. An electronic literature search of studies published in *The Leadership Quarterly* over the past 20 years found only one study that treated leaders' age explicitly as a theoretically relevant concept and not merely as a control variable: Simonton (1998) investigated relationships between age and political performance of British monarchs reigning between 1066 and 1811 and found that age predicted performance indicators such as legislative activity and enforced reforms. While the aging of the workforces in most Western industrialized countries has led to an increased interest among organizational researchers in the relationships between age and employee attitudes and performance (Hedge, Borman, & Lammlein, 2006; Ng & Feldman, 2008; Shultz & Adams, 2007), leadership researchers have hardly considered age as a substantial concept. Similarly, the relevance of age-related motivations such as leaving a legacy and generativity (i.e., the concern for the next generation, McAdams & de St. Aubin, 1992) has so far only been discussed with regard to employee performance (Grant & Wade-Benzoni, in press; Kanfer & Ackerman, 2004), but not to leadership. Considering that an early review emphasized the importance of taking a life-span developmental perspective on leadership (Avolio & Gibbons, 1988), the lack of leadership studies on age and age-related motivations represents a significant gap in the literature.

The goal of this study, therefore, is to investigate the interplay between leaders' age and legacy beliefs in predicting transformational, transactional, and passive-avoidant leadership behaviors. We suggest that age and leadership behaviors may not be related per se. Similar to relationships between age and employee performance (Ng & Feldman, 2008; Warr, 1993), the relationships between age and leadership behaviors may be moderated by third variables. We focus in this study on the moderating influence of leaders' legacy beliefs.

Based on the literature on the concept of legacy (Hunter & Rowles, 2005; Kotre, 1999; McAdams & de St. Aubin, 1992), we define *legacy beliefs* as individuals' convictions about whether they and their actions will be remembered, have an enduring impact, and leave something behind after death. Individuals with high legacy beliefs think that their past and present actions and achievements will have a significant and positive impact in the future and that they will be remembered by other people for a long time after they die. In contrast, individuals with low legacy beliefs think that they will not have an enduring impact in the future and that they will not be remembered by other people for a long time after they die.

Several authors have linked the concepts of legacy and leadership. Numerous books with titles such as "The legacy leader" or "Your leadership legacy" have recently appeared in the popular management literature (Galford & Fazio Maruca, 2006; Humphreys, 2004; Kouzes & Posner, 2006; Lopez, 2003, 2005; McKenna, 2006). In the scientific realm, Erikson (1958; 1969) described in his biographical case studies of Martin Luther and Mahatma Ghandi how these extraordinary leaders had a lasting impact on their followers and future generations. More recently, Whittington, Pitts, Kageler, and Goodwin (2005) described the religious leader Apostle Paul as an example for their theoretical conceptualization of "legacy leadership," which includes leadership qualities such as being "worthy of imitation," "affectionate and emotional," and "authentic and sincere" (p. 754). However, despite the apparent theoretical overlap between the concepts of legacy and leadership, so far no empirical research on leaders' personal beliefs about their legacy and important leadership behavior exists.

We suggest in this study that legacy beliefs become more important for leadership behaviors as leaders grow older. Specifically, we argue that high legacy beliefs are an important psychological resource for leaders to maintain effective and avoid ineffective leadership behaviors at higher ages. Legacy beliefs provide older leaders with a sense of meaning and

purpose for their actions when motivators of earlier life stages (e.g., career opportunities) become less important. The growing importance of legacy for individuals over the life-span was first described by Erik Erikson in his seminal theory of adult development (Erikson, 1950). Based on Erikson's theory, researchers have suggested that age-related concerns about leaving a legacy evolve from individuals' desires to achieve "symbolic immortality" after death (Hunter & Rowles, 2005; McAdams & de St. Aubin, 1992). According to terror management theory (Solomon, Greenberg, & Pyszczynski, 1991), beliefs in symbolic immortality or personal legacy are important psychological resources for older individuals because they soothe fears triggered by age-related mortality cues. In a similar vein, Grant and Wade-Benzoni (in press) recently argued that the "desire to make lasting, self-transcendent contributions" (p. 9) is stimulated by death awareness and reflection and may have important implications in organizational settings.

We further argue that leaders with low legacy beliefs are not able to maintain high levels of engagement in the leadership role at higher ages. Leaders with low legacy beliefs may show effective and avoid ineffective leadership behaviors when they are younger because they are motivated to accomplish things at work and to move up the career ladder. At higher ages, however, these motivators become less important and need to be replaced by other motivators such as legacy beliefs to maintain effective and avoid ineffective leadership behaviors. We suggest that older leaders with low legacy beliefs expect that they will not have an enduring impact in the future anyhow and, due to this lack of a higher sense of meaning and purpose for their actions, will show less effective and more ineffective leadership behaviors.

Regarding our conceptualization of effective and ineffective leadership, we use the "full range of leadership" model by Bass and Avolio in this study (Bass, 1985, 1999; Bass & Avolio, 1994). This model includes three higher-order leadership dimensions (i.e., transformational, transactional, and passive-avoidant leadership) and six lower-order leadership dimensions

(Avolio, Bass, & Jung, 1999). Specifically, transformational leadership is composed of three subdimensions (i.e., charisma, intellectual stimulation, and individualized consideration) and transactional leadership is composed of two subdimensions (i.e., contingent reward and active management-by-exception). These leadership dimensions and behaviors can be defined as follows. First, *transformational leadership* involves that the leader moves his or her followers beyond immediate self-interests through charisma, intellectual stimulation, and individualized consideration (Bass, 1999). *Charisma* involves providing followers with an energizing sense of purpose, being a role model for performance and morale, and building identification with the leader and his or her communicated vision. *Intellectual stimulation* describes the encouragement of critical thinking and creativity among followers. *Individualized consideration* involves understanding the individual needs of followers and supporting their development. Second, *transactional leadership* involves the establishment of exchange relationships between the leader and his or her followers to meet their self-interests through contingent reward and active management-by-exception (Bass, 1999). *Contingent reward* involves clarifying followers' responsibilities, setting performance goals, and rewarding good performance. *Active management-by-exception* includes actively monitoring processes and goal attainment, and intervening before mistakes happen. Finally, *passive-avoidant leadership* is characterized by the leader avoiding important leadership tasks and being passive, inactive, and mostly absent. Meta-analytic studies have shown that transformational and transactional leadership behaviors are effective, and passive-avoidant leadership is ineffective (Judge & Piccolo, 2004; Lowe, Kroeck, & Sivasubramaniam, 1996).

Both transformational and transactional leadership behaviors necessitate an active involvement of the leader, and this active involvement requires strong motivators to lead. With increasing age, high legacy beliefs should more and more replace the motivators that were

relevant when leaders were younger (e.g. career aspirations). Thus, high legacy beliefs should become more important for maintaining transformational and transactional leadership behaviors at higher ages. In contrast, low legacy beliefs should impede transformational and transactional leadership behaviors at higher ages because previous motivators are not replaced by motivators relevant for the second half of the life-span. Based on these assumptions, we propose that the relationship between age and transformational leadership behavior is moderated by legacy beliefs, such that the relationship is more strongly negative for leaders with low legacy beliefs than for leaders with high legacy beliefs (Hypothesis 1). Similarly, we expect that the relationship between age and transactional leadership behavior is moderated by legacy beliefs, such that the relationship is more strongly negative for leaders with low legacy beliefs than for leaders with high legacy beliefs (Hypothesis 2).

Finally, passive-avoidant leadership is characterized by a withdrawal from leadership tasks. We suggest that this withdrawal becomes stronger at higher ages if the motivators of earlier points in the life-span are not replaced by high legacy beliefs. Thus, we propose that the relationship between age and passive-avoidant leadership behavior is moderated by legacy beliefs, such that the relationship is more strongly positive for leaders with low legacy beliefs than for leaders with high legacy beliefs (Hypothesis 3).

Method

Participants and Procedure

106 tenured university professors (i.e., assistant and full professors) from two medium-sized German universities and one scientific assistant of each of these professors participated in the study. In the German university system, individuals working towards obtaining a doctoral degree are employed by the university as scientific assistants and not considered students as in other countries such as the United States. We obtained leadership ratings from only one employee

of each professor, because virtually every professor in Germany has one scientific assistant but not necessarily more. 91 (86%) of the professors in the sample were male and the average age was 53 years (*SD* = 9.29). 57 (54%) of the employees were male and their average age was 33 years (*SD* = 6.49).

In total, we mailed 240 questionnaire packages to 240 tenured professors working at the two universities (120 questionnaire packages per university) who we randomly selected from university phone books. Questionnaires were sent to professors in all academic fields represented at the two universities, for example law, economics, physics, computer science, geography, medicine, biology, theology, philosophy, and history. However, to protect participants' anonymity, we were not able to assess academic field in the questionnaires. In the cover letter, professors were asked to answer the first questionnaire themselves and to give the second questionnaire to a scientific assistant. Professors and scientific assistants directly and independently mailed their questionnaires in prepaid envelopes back to us. Of the 240 questionnaires packages sent out, 106 complete sets were returned for a response rate of 44%. We combined the two university samples because there were no significant differences between them in any of the study variables.

Measures

Legacy beliefs of university professors were measured with the six self-report legacy items from McAdams and de St. Aubin's (1992) Loyola Generativity Scale (LGS), a scale widely used in generativity research (McAdams & Logan, 2004). The six legacy items tap individuals' self-assessments of whether their actions and achievements "will be remembered for a long time, will have a lasting impact, and will leave an enduring legacy" (McAdams & de St. Aubin, 1992; p. 1007). The legacy items are "I feel as though I have made a difference to many people," "I have made and created things that have had an impact on other people," "I think that I will be

remembered for a long time after I die," "Others would say that I have made unique contributions to society," "I feel that I have done nothing that will survive after I die" (reverse coded), and "In general, my actions do not have a positive effect on others" (reverse coded). The items were answered on 5-point scales ranging from 1 (*completely disagree*) to 5 (*completely agree*). Cronbach's alpha of the scale was .79.

Leadership behaviors of professors were rated by each professors' scientific assistant using the German short version of the Multifactor Leadership Questionnaire (Bass & Avolio, 1994). We measured charisma with the 12 items from the idealized influence and inspirational motivation scales; intellectual stimulation, individualized consideration, contingent reward, and active management-by-exception with four items each from the respective scales; and passive-avoidant leadership with eight items from the passive management-by-exception and laissez-faire leadership scales. The items were answered on 5-point scales ranging from 1 (*not at all*) to 5 (*frequently, if not always*). Cronbach's alphas of the scales were .87 for charisma, .83 for intellectual stimulation, .84 for individualized consideration, .81 for contingent reward, .84 for active management-by-exception, and .88 for passive-avoidant leadership. In addition, we created overall scores for transformational leadership (α = .91; composed of charisma, intellectual stimulation, and individualized consideration) and transactional leadership (α = .77; composed of contingent reward and active management-by-exception) by averaging the respective items.

Finally, professors and employees self-reported their gender (0 = *female*, 1 = *male*) and age. For age, we used ten 5-year-intervals ranging from 1 (*21-25 years*) to 10 (*66-70 years*) to comply with universities' demands for protection of data privacy. For descriptive purposes, the responses were later recoded by using the average age for each age interval (e.g., 23 for "21-25 years"). This recoding did not change the results in any way. We controlled for gender in the

analyses because research has shown that female leaders are somewhat more transformational and less passive-avoidant than male leaders (Eagly, Johannesen-Schmidt, & van Engen, 2003).

Results

Table 1 presents the descriptive statistics and zero-order correlations of the study variables. Age was positively and significantly correlated with legacy beliefs ($r = .22$, $p < .05$) and passive-avoidant leadership ($r = .27$, $p < .01$), but not with transformational and transactional leadership. Legacy beliefs were also positively and significantly correlated with overall transformational leadership ($r = .21$, $p < .05$) and the charisma subdimension ($r = .26$, $p < .01$). There were no significant gender differences in age or any of the leadership dimensions. However, the 15 female professors had significantly higher legacy beliefs ($M = 3.50$, $SD = .61$) than the 91 male professors ($M = 3.13$, $SD = .60$; $t[104] = 2.23$, $p < .05$).

Table 2 shows the results of the hierarchical moderated regression analyses to test our hypotheses. According to Hypothesis 1, legacy beliefs moderate the relationship between age and transformational leadership such that the relationship is more strongly negative for leaders with low legacy beliefs than for leaders with high legacy beliefs. As shown in Table 2, the interaction between age and legacy beliefs significantly predicted transformational leadership ($\beta = .20$) and explained incremental variance ($\Delta R^2 = .04$, $p < .05$). In addition, Table 2 shows that the interaction of age and legacy beliefs significantly predicted charisma ($\beta = .21$) and explained incremental variance beyond the main effects ($\Delta R^2 = .04$, $p < .05$). In contrast, the interaction of age and legacy beliefs did not significantly predict intellectual stimulation ($\beta = .10$, $\Delta R^2 = .01$, *ns.*) and individualized consideration ($\beta = .15$, $\Delta R^2 = .02$, *ns.*). Thus, the significant interaction effect of age and legacy beliefs on transformational leadership is mainly due to the effects of this interaction on charisma.

As recommended by Aiken and West (1991), we further probed the significant interaction effects by computing the simple slopes for high (i.e., one standard deviation above the mean) and low (i.e., one standard deviation below the mean) values of legacy beliefs. Consistent with expectations, age was negatively and significantly related to overall transformational leadership for leaders with low legacy beliefs (B = -.02, SE = .01, β = -.28, t = -2.13, $p < .05$), whereas the relationship between age and transformational leadership was weakly positive and non-significant for leaders with high legacy beliefs (B = .01, SE = .01, β = .10, t = .73, p = .47). In addition, age was negatively and significantly related to charisma for leaders with low legacy beliefs (B = -.02, SE = .01, β = -.27, t = -2.08, $p < .05$), whereas the relationship between age and charisma for leaders with high legacy beliefs was weakly positive and non-significant (B = .01, SE = .01, β = .13, t = .93, p = .36). The significant interaction between age and legacy beliefs predicting overall transformational leadership is displayed in Figure 1. The form of the interaction predicting charisma looked very similar to the one shown Figure 1. Thus, Hypothesis 1 was supported for overall transformational leadership as well as for the charisma subdimension. It has to be noted that neither age nor gender significantly predicted transformational leadership behaviors in the regression analyses (see Table 2), but legacy beliefs were significantly and positively related to overall transformational leadership (β = .25, $p < .05$), charisma (β = .27, $p <$ .01), and intellectual stimulation (β = .20, $p < .05$).

Hypothesis 2 states that legacy beliefs moderate the relationship between age and transactional leadership such that the relationship is more strongly negative for leaders with low legacy beliefs than for leaders with high legacy beliefs. Table 2 shows that the interaction of age and legacy beliefs significantly predicted transactional leadership (β = .26) and explained incremental variance (ΔR^2 = .08, $p < .01$). Table 2 also shows that this effect was mainly due to a significantly interaction effect of age and legacy beliefs on active management-by-exception (β =

.30, ΔR^2 = .09, p < .01), whereas there was no significant interaction effect of age and legacy beliefs on contingent reward (β = .14, ΔR^2 = .02, *ns.*).

Consistent with expectations, results of simple slope analyses indicated that age was negatively and significantly related to overall transactional leadership for leaders with low legacy beliefs (B = -.02, SE = .01, β = -.32, t = -2.47, p < .05), whereas the relationship between age and transactional leadership was weakly positive and non-significant for leaders with high legacy beliefs (B = .01, SE = .01, β = .16, t = 1.18, p = .24). In addition, the slope of regressing active management-by-exception on age was negative and significant for leaders with low legacy beliefs (B = -.03, SE = .01, β = -.29, t = 2.30, p < .05), and positive and significant for leaders with high legacy beliefs (B = .03, SE = .01, β = .27, t = 2.05, p < .05). The significant interaction between age and legacy beliefs predicting overall transactional leadership is shown in Figure 2. Again, the form of the interaction predicting active management-by-exception looked very similar to the one displayed in Figure 2. Age, gender, and legacy beliefs did not significantly predict transactional leadership behaviors in the regression analyses (Table 2).

According to Hypothesis 3, legacy beliefs moderate the relationship between age and passive-avoidant leadership such that the relationship is more strongly positive for leaders with low legacy beliefs than for leaders with high legacy beliefs. As shown in Table 2, the interaction of legacy beliefs and age did not significantly predict passive-avoidant leadership (β = .06, ΔR^2 = .00, *ns.*). Thus, Hypothesis 3 did not receive support. Finally, it is important to note that age was significantly and positively related to passive-avoidant leadership (β = .34, p < .01) and legacy beliefs were significantly and negatively related to passive-avoidant leadership (β = -.26, p < .01; cf. Table 2).

Discussion

The leadership literature has so far neglected investigating the relationships between age and leadership behaviors and potential moderating influences on these relationships. Our goal in this study was to investigate the interplay of leaders' age and legacy beliefs in predicting transformational, transactional, and passive-avoidant leadership behaviors. Consistent with our assumptions, we found that at higher ages, low legacy beliefs impede, and high legacy beliefs help maintain overall transformational and transactional leadership. We suggest that younger leaders derive the meaning and purpose for their active engagement in the leadership role from other sources than legacy beliefs, such as future career opportunities. However, as leaders grow older, these motivators become less important. Older leaders with low legacy beliefs lack an important motivator for showing active engagement in the leadership role. In contrast, older leaders with high legacy beliefs are able to maintain an active leadership engagement because they believe that their actions have a purpose as they will have an enduring impact in the future.

We found that some of the lower-order transformational and transactional leadership dimensions were more strongly influenced by the interaction between age and legacy beliefs than others. Specifically, our assumptions were supported for the transformational leadership subdimension of charisma but not for intellectual stimulation and individualized consideration. A possible explanation for this may be that the influential and inspiring leadership behaviors subsumed in the charisma dimension are easier to forego for older university professors with low legacy beliefs, whereas intellectual stimulation and individualized consideration are more strictly prescribed parts of their jobs. In contrast, when professors grow older not believing that they will have an impact in the future and leave a legacy, they will probably cease being inspiring and communicating a vision. Similarly, active management-by-exception behaviors may be easier to give up for older leaders with low-legacy beliefs than contingent reward. A leader may still acknowledge and reward performance even though he or she is not convinced that he or she will

leave a legacy, but actively monitoring and intervening requires legacy beliefs at higher ages. We did not find support for our assumption that low legacy beliefs lead to more passive-avoidant leadership at higher ages. A possible explanation for this may be that low legacy beliefs just lead to a neglect or abandonment of active and engaging leadership behaviors at higher ages, but not necessarily to an increase in passive-avoidant leadership behaviors.

The results further showed that there was a small and positive relationship between age and legacy beliefs. A possible explanation for this finding is that legacy beliefs increase at higher ages because they may soothe older individuals fears associated with mortality cues and thoughts of impending death (Grant & Wade-Benzoni, in press; Solomon et al., 1991). In addition, legacy beliefs were positively related to overall transformational leadership as well as the subdimensions of charisma and intellectual stimulation, and negatively related to passive-avoidant leadership. Three interpretations of these findings are possible. First, it may be that legacy beliefs motivate leaders to show more effective and less ineffective leadership behaviors. Second, it may be that effective leaders infer from their behavior that they will leave something behind after death. Finally, and most likely, legacy beliefs and leadership behaviors may influence each other reciprocally over time. Future longitudinal research is needed that investigates the causal mechanisms between legacy beliefs and leadership behaviors.

A number of additional noteworthy relationships emerged between our study variables. First, older university professors were rated by their scientific assistants as more passive-avoidant leaders. We speculate that older professors in Germany provide their scientific assistants with more discretion to make their own decisions than younger professors do, which in turn is interpreted as passive-avoidant leadership by the assistants. Another reason may be that older professors' tasks and interests change with age. For example, it may be that older professors serve in more committees which leaves less time available for their assistants. Finally, qualitative

research showed that older professors experience several changes in work-related motivations in the last years on the job, for example, a decreased intensity toward their research work and the development of an “exiting consciousness” (Karp, 1986). Future research might investigate these different work-related motivations, and how they related to age and leadership behaviors.

The second unexpected finding was that the female professors, on average, reported higher legacy beliefs than the male professors. Karp (1986) suggested that female professors are in a quite different situation when it comes to the timing of academic achievements, and this may influence their legacy beliefs. However, additional research is needed on this issue as the vast majority of our participants were male, making it difficult to draw definite conclusions.

This study has a number of limitations. First, cross-sectional designs do not allow definite conclusions about intraindividual processes over time (i.e., aging) because the results may also be influenced by cohort differences and selection effects. Longitudinal and cohort-sequential studies on legacy beliefs and leadership are needed to resolve these issues. However, as these designs are difficult to implement, future research on age and leadership might look at shorter time intervals between critical career stages such as the transition from middle adulthood to old age (Ng & Feldman, 2008). A second limitation is that, due to reasons of anonymity, we were not able to include potentially important control variables such as the amount of leadership activity, laboratory size, or academic field in our analyses. Third, another limitation of this study is that we relied solely on leadership ratings of scientific assistant and did not measure other potentially important leadership criteria of university professors such as research productivity or engagement in administrative activities. Finally, it may be considered a limitation that we used university professors as leaders. Future research needs to examine whether the present findings generalize to leaders in other occupational groups, for example in private industry. It is possible that legacy beliefs play a more important role in academia than in other industries, because professors may

generally have more possibilities to generate “legacy products” (Hunter & Rowles, 2005) such as successors, articles, and books. On the other hand, legacy beliefs may be particularly important among industry managers in terms of promoting effective leadership in times of fast economic changes. Future research is needed that examines the importance of legacy beliefs among leaders of different age groups in different industries.

The findings of this study have implications for theory development and organizational practice. Avolio and Gibbons (1988) suggested more than 20 years ago that the field of leadership would profit greatly from taking a life-span developmental perspective. This study is the first to provide empirical evidence for the importance of leaders’ legacy beliefs for leadership behaviors. Future theoretical work could identify additional age-related motivators that provide leaders with a sense of meaning and purpose for their actions, and in turn impact leadership behavior at different stages of the life-span. For example, important motivators for leadership in the early career stages may be career opportunities, whereas generativity (McAdams & de St. Aubin, 1992) and other pro-social motivations should become more important for leadership in the second half of life when the future time at work becomes limited.

Organizational practitioners might assist leaders in becoming better aware of their age-related motivations in seminars and find ways to enhance leaders’ legacy beliefs, especially at higher ages. For example, organizations may provide leaders with opportunities to work on their personal “legacy projects” and emphasize more often how leaders have already had an impact on the future of the organization. In addition, organizations might provide older leaders with more possibilities to act as mentors for the next generation or as organizational ambassadors (Calo, 2005). Such practices may increase leaders’ legacy beliefs, and, in turn, may help to maintain effective leadership behaviors at higher ages.

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Figure 1

Moderation of the Relationship between Age and Transformational Leadership by Legacy Beliefs

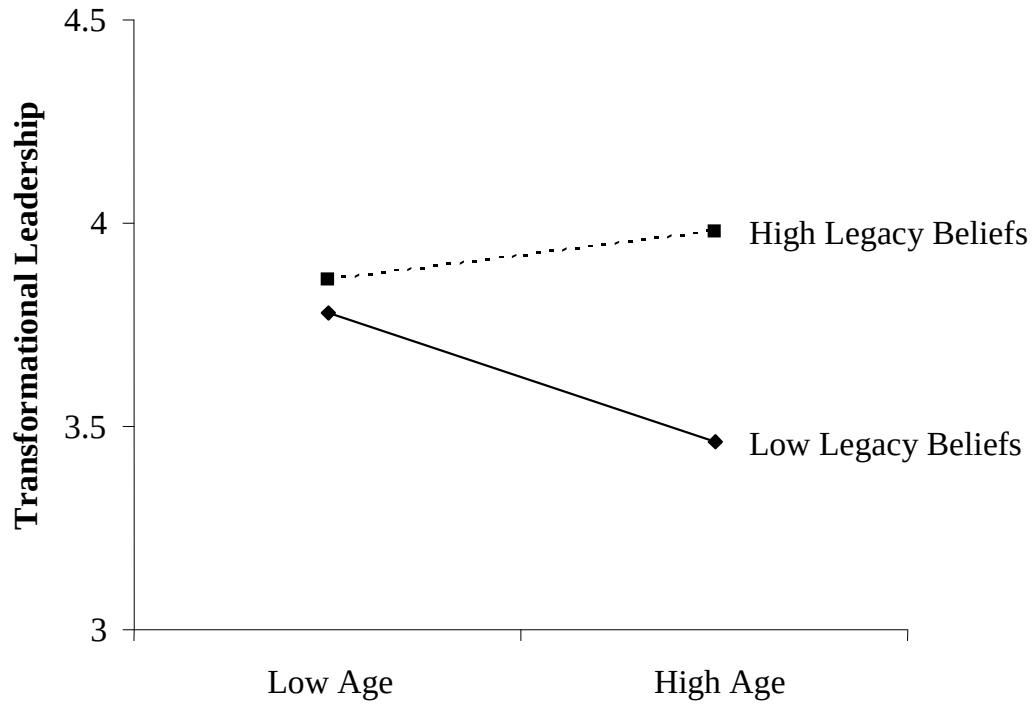

Figure 2

Moderation of the Relationship between Age and Transactional Leadership by Legacy Beliefs

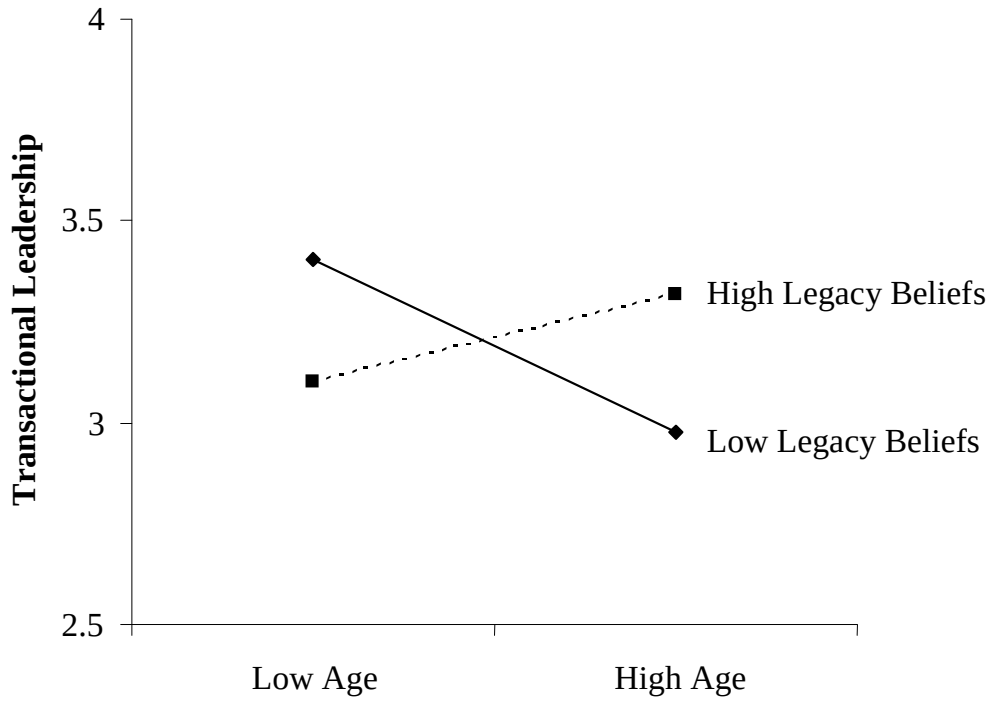

Table 1

Means (M), Standard Deviations (SD), and Intercorrelations of Variables

Variable[a]	*M*	*SD*	1	2	3	4	5	6	7	8	9	10
1. Age	51.68	9.29	-									
2. Legacy beliefs	3.18	.61	.22*	(.79)								
3. Transformational leadership[b]	3.80	.58	-.04	.21*	(.91)							
4. Charisma	3.71	.63	-.02	.26**	.95**	(.87)						
5. Intellectual stimulation	3.86	.70	-.11	.14	.78**	.61**	(.83)					
6. Individualized consideration	3.97	.73	.01	.06	.77**	.60**	.54**	(.84)				
7. Transactional leadership[c]	3.24	.66	-.10	-.01	.51**	.51**	.36**	.37**	(.77)			
8. Contingent reward	3.76	.80	-.06	.15	.69**	.65**	.54**	.56**	.73**	(.81)		
9. Active management-by-exception	2.67	.92	-.08	-.16	.08	.12	.02	-.01	.75**	.13	(.84)	
10. Passive-avoidant leadership	2.04	.78	.27**	-.15	-.44**	-.39**	-.44**	-.32**	-.23*	-.44**	.12	(.88)

Note. $N = 106$. [a]Answers to variables 1 and 2 were provided by university professors, answers to variables 3 to 10 were provided by scientific assistants. [b]Composite score of charisma, intellectual stimulation, and individualized consideration items. [c]Composite score of contingent reward and active management-by-exception items. Reliability estimates (α) are shown in parentheses on the diagonal.

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

Table 2

Hierarchical Moderated Regression Analyses Predicting Leadership Behaviors

Step / Predictor	*B*	*SE*	*β*	*ΔR²*
Effects on Transformational Leadership[a]				
1. Gender	.07	.17	.04	.06
Age	-.01	.01	-.10	
Legacy beliefs	.23	.10	.25*	
2. Age x Legacy beliefs	.02	.01	.20*	.04*
Effects on Charisma				
1. Gender	-.05	.18	-.03	.08*
Age	-.01	.01	-.08	
Legacy beliefs	.28	.10	.27**	
2. Age x Legacy beliefs	.02	.01	.21*	.04*
Effects on Intellectual Stimulation				
1. Gender	.26	.20	.13	.06
Age	-.01	.01	-.17	
Legacy beliefs	.23	.12	.20*	
2. Age x Legacy beliefs	.01	.01	.10	.01
Effects on Individualized Consideration				
1. Gender	.26	.21	.13	.02
Age	-.00	.01	-.01	
Legacy beliefs	.10	.12	.09	
2. Age x Legacy beliefs	.02	.01	.15	.02
Effects on Transactional Leadership[b]				
1. Gender	-.11	.19	-.06	.01
Age	-.01	.01	-.10	
Legacy beliefs	.00	.11	.00	
2. Age x Legacy beliefs	.03	.01	.26**	.07**
Effects on Contingent Reward				
1. Gender	.17	.23	.07	.04
Age	-.01	.01	-.11	

Legacy beliefs	.25	.13	.19	
2. Age x Legacy beliefs	.02	.01	.14	.02
Effects on Active Management-by-Exception				
1. Gender	-.45	.26	-.17	.06
Age	-.00	.01	-.03	
Legacy beliefs	-.29	.15	-.20	
2. Age x Legacy beliefs	.05	.01	.30**	.09**
Effects on Passive-avoidant Leadership				
1. Gender	-.36	.21	-.16	.14**
Age	.03	.01	.34**	
Legacy beliefs	-.33	.12	-.26**	
2. Age x Legacy beliefs	.01	.01	.06	.00

Note. $N = 106$. [a]Composite score of charisma, intellectual stimulation, and individualized consideration items. [b]Composite score of contingent reward and active management-by-exception items. All variables were mean-centered. For gender, 0 = female, 1 = male.
* $p < .05$. ** $p < .01$.