

**ARE OLDER LEADERS LESS TRANSFORMATIONAL?
THE ROLE OF AGE FOR TRANSFORMATIONAL LEADERSHIP FROM THE
PERSPECTIVE OF SOCIOEMOTIONAL SELECTIVITY THEORY**

S.W. VAN SOLINGE

Student number *1789708*

Zomerdijkstraat 17-2, 1079 WZ Amsterdam

Phone: +316 158 70 906

s.w.van.solinge@student.rug.nl

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University of Groningen, Faculty of Economics and Business

Supervisor: dr. F. Walter

Second supervisor: B.C.M. Voorn, MSc

ABSTRACT

The aim of this study is to aid in clarifying the link between age and transformational leadership. Although the relationship between age and transformational leadership has been studied before, so far results are ambiguous. This study uses socioemotional selectivity theory to identify two factors that influence the relationship between age and transformational leadership. First of all, occupational future time perspective is identified as a mediator in the relationship. Secondly, the use of selection, optimization, and compensation strategies is examined as a moderator on the relationship between age and future time perspective. Together these assumptions form a moderated mediation model. Hypotheses are tested in a sample of 403 store managers and 2608 of their subordinates of a large retailer in the Netherlands. Results partially support the proposed model, with future time perspective indeed serving as a mediator in the negative relationship between age and transformational leadership. The use of SOC strategies has no significant influence, however. All in all, this study adds to previous research an explanation of how age influences transformational leadership and answers calls of previous research to study this relationship based on a coherent underlying theory. Suggestions for further research and implications for practice are provided.

Keywords: age; future time perspective; transformational leadership; selection, optimization and compensation (SOC) strategies; socioemotional selectivity theory

Over the past decades, most Western societies have witnessed a shift in demographics (Weigl, Muller, Hornung, Zacher, & Angerer, 2013). In the European Union, for instance, the number of young adults (25-39 years old) has started to decrease, while the number of people aged 55 and above is expected to grow by almost 15% until 2030 (Schalk et al., 2010). Along with the prolonged labor participation required in many countries, this causes an increasingly aging workforce. Organizations will have to find ways to sustainably employ their people, to ensure they will be able to perform well throughout the years. Due to these developments, researchers recently have shown increased interest in studying the effects of age on work-related outcomes (Zacher & Frese, 2009). So far, these studies have focused mostly on relationships between age and employee attitudes and performance (e.g., Bal, de Lange, Zacher, & Van der Heijden, 2013; Kooij, de Lange, Jansen, & Dijkers, 2013; Zacher, Heusner, Schmitz, Zwierzanska, & Frese, 2010).

Although this is an important issue, a related issue that has not been studied extensively is how age influences leaders (e.g., Zacher & Bal, 2012; Zacher, Rosing, & Frese, 2011a). The focus on leadership in this context is important, because the increasing retirement ages cause leaders to stay in their position longer instead of leaving the company and paving the way for younger individuals (Zacher et al., 2011a). We can therefore expect an increase in older leaders in organizations, making it crucial for organizational success to understand how increasing age may influence leadership behaviors (Schalk et al., 2010).

Authors have started to recognize the need to study the relationship between age and leadership, which can be seen in the fact that multiple studies have been done into the topic over the past few years (e.g., Zacher et al., 2011a; Zacher et al., 2010). I will focus on research that has investigated the link between age and transformational leadership, because transformational

leadership is the most studied leadership style of the last decades (Judge & Piccolo, 2004). Transformational leaders can be defined as leaders that offer a purpose that transcends short-term goals and focuses on higher order intrinsic needs (Bass, 1985). Transformational leadership consists of four dimensions: idealized influence (i.e., acting as a role model), inspirational motivation (i.e., articulating an optimistic vision), intellectual stimulation (i.e., encouraging innovative behavior), and individualized consideration (i.e., acting as a mentor for followers) (Judge & Piccolo, 2004). Meta-analytic studies have shown that transformational leadership is an effective leadership style that ensures good outcomes, such as increased follower satisfaction and motivation, therefore making it a desirable leadership style for organizations (Judge & Piccolo, 2004; Zacher et al., 2011a).

The problem with previous research concerning age and transformational leadership (as well as related types of leadership behavior, such as change-oriented leadership) is that findings are quite fragmented and sometimes contradictory (e.g., Walter & Scheibe, 2013; Zacher et al., 2011a). Whereas several studies find that age has a negative relationship with these leadership behaviors (e.g., Doherty, 1997; Oshagbemi, 2004), others show non-significant (e.g., Gilbert, Collins, & Brenner, 1990; Vecchio, 1993; Zacher et al., 2011a) or positive relationships (e.g., Barbuto, Fritz, Matkin, & Marx, 2007; Hitt & Tyler, 1991; Ng & Sears, 2012). As Walter and Scheibe (2013) concluded, in general, negative or non-significant relations have been reported more frequently than positive ones. However, results are too inconsistent to draw unambiguous conclusions on the role of age for transformational leadership.

One possible cause for this inconsistent state of empirical research is that mediators have largely been neglected in previous work. Although some research can be found that includes a mediator in the relationship between age and leadership, none of these studies focused on

transformational leadership (Walter & Scheibe, 2013). Studying mediators related to this topic could help explain the previous ambiguous findings, because the role of age may be rather remote (Bal et al., 2013). Authors have agreed that age cannot be seen as a psychologically meaningful construct by itself, it can merely affect age-related psychological variables that in turn affect organizational outcomes (Bal et al., 2013; Ng & Feldman, 2008; Zacher & Bal, 2012). As such, a direct relationship between age and leadership may be rare and unstable, and it appears necessary to identify age-related changes in psychological variables that affect leadership outcomes to understand the underlying mechanisms between age and leadership behaviors (Schwall, 2012).

A second possible cause for the inconsistent findings is that the role of age for transformational leadership may not be the same among all individuals, meaning that there could be important moderators that qualify the relationship between age and leadership (Zacher et al., 2011a). Research on moderators has been slightly more extensive than the studies on mediators, however, most moderators seem to have been chosen rather arbitrarily (e.g., Zacher et al., 2011a; Zacher, Rosing, Henning, & Frese, 2011b; Vecchio, 1993). Instead of building on a clear, overarching theoretical framework from which moderators are derived, previous research has often selected moderators on a relatively ad-hoc theoretical basis. Therefore, it would be beneficial to include moderators that are derived from an overall theoretical framework (Walter & Scheibe, 2013).

This brings me to a third and overarching cause for the inconsistent findings so far. When reviewing the existing literature on age and transformational leadership, it seems that what is missing most of all is a sound theoretical framework that explains the inclusion of underlying mechanisms and boundary conditions (Walter & Scheibe, 2013). In this thesis, I propose

socioemotional selectivity theory (Carstensen, 1995) as one important underlying theory that could help explain the relationship between age and transformational leadership and that specifies key mediating and moderating factors that should be included in the model. Socioemotional selectivity theory argues that social contact is motivated by different sets of goals that change over one's lifetime, leading to changes in social behavior (Carstensen, 1995; Lang & Carstensen, 2002). I will identify both a mediator and a moderator that are grounded in socioemotional selectivity theory, to build a coherent conceptual framework explaining the relationship between age and transformational leadership behavior.

First of all, a relevant mediator for this framework is occupational future time perspective (FTP) (Zacher et al., 2010). Occupational FTP describes individuals' perceptions, beliefs, and expectations concerning their occupational future (Zacher & Frese, 2009). In line with socioemotional selectivity theory, research has shown that people who see their future as open-ended (expansive FTP) are more likely to focus on long-term goals and on acquiring new knowledge, while people who perceive their future time as running out (limited FTP) are more likely to focus on the short-term and immediate rewards (Lang & Cartensen, 2002). Studies have shown that this causes a difference in work performance and productivity for workers, such that an expansive FTP is generally more beneficial (e.g., Bal et al., 2013; Zacher & Frese 2009). This reasoning has not yet been applied in a leadership setting. I argue that occupational FTP could be an important determinant for transformational leadership behavior, given the focus on long-term, visionary goals, change and novelty, and specific social relationship that characterizes such leadership (Bass, 1985).

Secondly, I will address the gaps in the current literature on age and transformational leadership by examining a potential moderator. Future time perspective generally decreases with

age, but the subjective experience of how much time is left may also vary among people with the same age (Bal et al., 2013). According to socioemotional selectivity theory, aging individuals could influence their time horizons by using selection, optimization, and compensation (SOC) strategies (Baltes & Baltes, 1990; Baltes & Carstensen, 1996). The SOC model assumes that aging individuals can manage their lives successfully by the synchronized use of three action strategies – selection (narrowing one’s range of goals), optimization (of the means one uses to attain goals), and compensation (acquiring new means) – which support an efficient and adaptive use of available resources (Baltes & Baltes, 1990). These strategies can help older individuals deal with decreasing personal resources and changing environments (Freund & Baltes, 1998). The use of SOC strategies has been studied in a work context (e.g., Weigl et al, 2013), however, it has never been studied in a leadership context. I argue that leaders could benefit from the use of SOC strategies as well. The use of these strategies might enable older leaders to keep functioning in their position successfully despite age-based losses in capabilities, which may positively influence the future time they can see themselves remaining successful in their job. This may diminish the negative role of age for occupational FTP and, consequently, for leaders’ transformational behavior (see Figure 1).

Insert Figure 1 about here

I will test this moderated mediation model on a sample of leaders and their subordinates working for a large retailer in the Netherlands. With the results of this study I hope to contribute to the literature on transformational leadership first of all by explaining the ambiguous findings of previous research. Specifically, by including FTP in the relationship between age and transformational leadership I hope to explain *how* age influences this leadership behavior,

instead of only establishing the fact that it is so. Secondly, by introducing the concept of SOC strategies in a leadership context I hope to find *when* leaders are more or less prone to the negative effects of age on their FTP. Lastly, this study will answer calls of previous research (Walter & Scheibe, 2013) to build on a more theoretically coherent model linking age and leadership (i.e., socioemotional selectivity theory).

THEORETICAL FRAMEWORK

Age and Future Time Perspective: A Socioemotional Selectivity Perspective

Chronological age is an interesting demographic trait variable, since it affects everyone (Bal et al., 2012). Especially in the field of developmental psychology, many studies have been done into what changes are seen in aging individuals, focusing for instance on how their motivations and behaviors change with increasing age (e.g., Baltes, 1997; Carstensen, 2006; Carstensen, Fung, & Charles, 2003). Although these studies provide remarkable insights into human development, when trying to explain leadership phenomena it is generally not considered very meaningful to study the direct impact of age on leadership variables, because there are many other, more direct factors that influence leadership behavior (Bal et al., 2012). Therefore, when studying the relation between age and leadership, it is wise to look at variables closely related to age but more meaningful than the number itself (Ng & Feldman, 2008). One such variable that is closely related to age but still clearly a different construct is future time perspective (e.g., Cate & John, 2007; Lang & Carstensen, 2002; Zacher & Frese, 2009).

Future time perspective (FTP) is a ‘flexible, cognitive-motivational, and age-related construct that changes over time’ (Zacher & Frese, 2009: 487). It describes how much time individuals believe they have left in their future and how they perceive that time (Cate & John, 2007). Many scholars have conceptualized future time perspective as a one-dimensional

construct, ranging from limited future time to expansive future time (e.g., Lang & Carstensen, 2002; but see Zacher & Frese, 2009; Zacher et al., 2010). Furthermore, since this is a study into leadership behavior, I will follow Zacher and Frese's (2009) example of referring to *occupational* future time perspective only, meaning that I will focus on the future time perspective one has in his or her work environment, not in general life.

Future time perspective is rooted in the theory of socioemotional selectivity (Lang & Carstensen, 2002), which states that social contact is motivated by a variety of goals (Carstensen, 1995). Although individuals have similar sets of goals throughout life, the salience of specific goals varies over a lifetime (Carstensen, 1995; Lang & Carstensen, 2002). Through this different salience of goals, time horizons play a key role in motivation (Carstensen, 1996). Socioemotional selectivity theory argues that when people grow older, they increasingly experience time as running out (Bal et al., 2013; Carstensen, 2006). Essentially, two broad categories of goals therefore shift in importance over one's lifetime: the motivation to derive emotional meaning from life, or security motivations, and the motivation to expand one's horizon, or growth motivations (Carstensen et al., 2003; Kooij et al., 2013). While the importance of the first motivation increases over one's lifetime, the importance of the second motivation decreases (Carstensen, 1995). Specifically, this means that individuals who experience their future time as limited will focus on goals that are emotionally more meaningful and bring more short-term benefits (Lang & Carstensen, 2002). For instance, these individuals will favor contact with close family members and immediate rewards at work. On the other hand, individuals who experience time as expansive prioritize goals that are aimed at optimizing the future (Lang & Carstensen, 2002). These goals could include the acquisition of new information and knowledge, the desire

affiliate with new people, and a general aspiration to experience novelty (Carstensen, 1995, 2006).

Because chronological age is logically related to time left to live, age is likely to negatively associate with one's future time perspective. Although FTP has been studied in psychological research, it has not been studied often in a work setting, let alone a leadership setting. Zacher and Frese (2009) found that age and sense of remaining time were strongly negatively related among university students. In addition, Lang and Carstensen (2002) found the same results among randomly selected inhabitants of Berlin. Bal et al. (2012) did study FTP in a work setting, and found negatively correlations between age and future time perspective as well. I expect the same reasoning can be applied in a leadership setting, when substituting time left to live with time left before retirement. Aging leaders will experience shortening time horizons of the time they have left until retirement (Zacher & Frese, 2009), changing their occupational future time perspective in correspondence with their age (Bal et al., 2013). Therefore, Hypothesis 1 is:

Hypothesis 1: Older leaders have a more limited occupational future time perspective than younger leaders.

Future Time Perspective and Transformational Leadership

The consequences of future time perspective have not often been studied in a work context. Of the authors who did examine this, only one study has considered the impact of FTP on leaders (Thoms & Greenberger, 1998). Thoms and Greenberger (1998) found that FTP has a significant positive relationship with the visioning ability of leaders, and that trainings that were given to leaders to improve their visioning ability were most successful among leaders with an expansive FTP (Thoms & Greenberger, 1998). Other authors that studied FTP in a work context

are for instance Bal et al. (2012), who found that differences in FTP had an indirect impact on organizational commitment among employees of telecom and transportation companies. Furthermore, Zacher et al. (2010) found that FTP positively influenced work performance among a broad array of employees with different functions. Lastly, Kooij et al. (2013) found significant correlations between FTP and work engagement.

I argue that FTP could have an important role for leadership behavior and therefore should be studied in this context. Specifically, I assume that occupational FTP is an important determinant of transformational leadership. As mentioned above, transformational leaders engage in four different types of behavior. Firstly, idealized influence is the degree to which a leader acts as a role model for followers. Leaders that show this kind of behavior appeal to followers on an emotional level, through acting in admirable ways that cause followers to identify with the leader (Judge & Piccolo, 2004). Second, inspirational motivation entails that leaders articulate a vision that depicts an optimistic view of the future and that is appealing and inspiring to followers. These first two dimensions together are often referred to as charisma because they describe similar behavior (Avolio, Bass, & Jung, 1999). Therefore, I will follow this and refer to charisma as well. Third, intellectual stimulation reflects the degree to which a leader encourages innovative behavior and is willing to take risks. Lastly, individualized consideration is the degree to which a leader acts as a mentor or coach for followers, and to which extent a leader makes an effort to develop followers (Judge & Piccolo, 2004; Zacher et al., 2011a). I expect that leaders with an expansive future time perspective will, through the mediators explicated by socioemotional selectivity theory, prioritize goals that will motivate them to engage in these transformational leadership behaviors more frequently.

First of all, leaders with an expansive occupational FTP may act more charismatically than leaders with a limited occupational FTP. The essence of the charisma dimension of transformational leadership is that leaders articulate a vision that is inspiring and optimistic about the future, and through that serve as a role model for followers (Judge & Piccolo, 2004). A vision can be defined as an ideal and unique image of the future that reflects the values of an organization and contains enough information to provide direction for future behavior (Kouzes & Posner, 1995). As stated by Thoms and Greenberger (1998), the definition of a vision suggests that a leader must have an orientation towards the future. Leaders with an expansive future time perspective have exactly that, and even more, they are not only future oriented, but they look at the future with optimism (Lang & Carstensen, 2002). This makes it more likely that they will articulate an optimistic vision. Leaders with a limited occupational FTP, on the contrary, will be more oriented on short-term gains (Carstensen, 2006). They will therefore try to make most out of the status quo and will focus on the here and now. They are thus less likely to articulate an inspiring vision for the future.

Secondly, leaders with an expansive occupational FTP may engage in more intellectual stimulation than leaders with a limited occupational FTP. Intellectual stimulation reflects the degree to which a leader encourages innovative behavior and is willing to take risks (Zacher et al., 2011a). Innovative behavior entails the adoption and implementation of novel and useful ideas (Scott & Bruce, 1994). As discussed above, individuals with an expansive FTP prioritize goals that are oriented at experiencing novelty, acquiring new information, and expanding breadth of knowledge (Carstensen, 1995, 2006). Leaders with an expansive FTP are thus likely to stimulate innovative behavior, since they themselves also aspire to experience novelty and search for new knowledge. Leaders with a limited FTP, however, are less interested in novelty and

prefer having security over taking risks (Carstensen, 2006). Therefore, they are less likely to engage in intellectual stimulation.

Thirdly, leaders with an expansive occupational FTP may show more individualized consideration than leaders with a limited occupational FTP. This dimension of transformational leadership entails acting as a mentor or coach for followers and making an effort to develop them (Judge & Piccolo, 2004). In essence, this means that a leader develops skills and knowledge in followers to prepare them for the future. This type of behavior is related to the notion of legacy beliefs that has been described in previous research (e.g., Zacher et al., 2011a). Legacy beliefs can be defined as leaders' beliefs that they and their actions will be remembered and have an enduring influence (Zacher et al., 2011a). Leaders with an expansive FTP are oriented towards the future and therefore would like to ensure their legacy will be build on after they leave the organization. To achieve this, they need to coach and develop new employees, share their knowledge and skills with them, and make an effort to ensure their successors will follow their lead. Leaders with a limited FTP do not look that far into the future and may only view their actions as important for the organization until their retirement, attaching less value to a possible legacy. Therefore, they are less likely to engage in individualized consideration behaviors.

Concluding, leaders with an expansive occupational FTP are likely to show more charismatic behavior, more intellectual stimulation, and more idealized influence behavior than leaders with a limited occupational FTP through their long-term orientation, interest in new knowledge and information, and desire to leave a legacy. Therefore, Hypothesis 2 is the following:

Hypothesis 2: Leaders' occupational future time perspective will positively relate to their transformational leadership behavior.

As outlined above, I first predicted a negative relationship between age and occupational FTP (Hypothesis 1). Second, I predicted a positive relationship between occupational FTP and transformational leadership behavior (Hypothesis 2). Taken together, these hypotheses predict a mediation model. As leaders age, they gradually approach the retirement age, meaning that their actual time left at work decreases. Logically, it follows that their perceived future time at work decreases as well (Zacher & Frese, 2009). Furthermore, by building on socioemotional selectivity theory I explained that leaders with an expansive FTP have different motivational goals than leaders with a limited FTP (Bal et al., 2013; Lang & Carstensen, 2002). By their focus on the future and interest in new information and knowledge, leaders with an expansive FTP are more likely to engage in transformational leadership behavior, which requires a future-orientation and desire for new knowledge as well, than leaders with a limited FTP. Concluding, aging leaders are likely to experience a more limited future time perspective, which in turn should negatively relate with their transformational leadership behavior. Therefore, Hypothesis 3 is:

Hypothesis 3: Leaders' occupational future time perspective mediates the indirect, negative relationship between age and transformational leadership behavior.

The Role of Selection, Optimization & Compensation Strategies

Socioemotional selectivity theory holds that the salience of goals changes over one's lifetime according to shifting time horizons (Carstensen, 1995). Although the most direct and logical reason of a shifting time horizon is age, socioemotional selectivity theory does not state that this is necessarily the only factor that impacts how one looks at his or her future (Carstensen, 2006). While age is an important determinant of perceived future time, there are also other factors that have an impact on this and that therefore can change the relationship between age

and future time perspective (Carstensen et al., 2003). Experimental studies have shown, accordingly, that when future time perspective is manipulated, age differences can diminish or disappear in this respect (Carstensen, 2006; Carstensen, Isaacowitz, & Charles, 1999). For instance, when younger people imagined they were faced with a geographical relocation, their future time perspective became more limited and the goals they prioritized showed similarity with goals typically prioritized by those of older age (Lang & Carstensen, 2002). Furthermore, older people who were asked to imagine that a life-extending medical advance was available to them experienced a time perspective that was more expansive and goals that were similar to those of younger age (Lang & Carstensen, 2002). So, when younger people perceive their future as limited, they will also focus on the short-term and prefer connections with emotionally close partners, while older people who perceive their future as expansive will have more focus on the long-term and interest in gaining new knowledge and meeting new people (Carstensen, 2006).

Previous research has thus shown that the negative role of age for future time perspective can be influenced by external cues (Lang & Carstensen, 2002; Carstensen, 2006). I argue that this relationship could also be influenced by internal factors. Accordingly, socioemotional selectivity theory posits that the use of selection, optimization, and compensation (SOC) strategies could help individuals compensate for age-related losses in capabilities (Baltes & Carstensen, 1996). The SOC strategies model was developed to provide a model of successful aging (Bajor & Baltes, 2003; Baltes & Baltes, 1990), defined as maximization and attainment of positive outcomes and the minimization and avoidance of negative outcomes (Freund & Baltes, 1998). The SOC model is based on the proposition that individuals' resources are generally limited and that resource losses (e.g., in cognitive flexibility) outweigh gains (e.g., in experience) more and more as one ages (Zacher & Frese, 2011). The use of SOC strategies aids individuals

in minimizing such losses and maximizing gains related with age, through the synchronized use of three components: selection, optimization, and compensation (Freund & Baltes, 1998; Jopp & Smith, 2006).

First of all, selection refers to strategies that narrow one's range of goals of performance because not all opportunities can be pursued (Freund & Baltes, 1998). Two types of selection can be distinguished: elective selection and loss-based selection (Baltes, 1997). Elective selection refers to those selections where an individual can choose to pursue a goal out of a pool of available options without being limited by any constraints, while loss-based selection refers to those selection choices that have to be made because a person experiences a loss of resources (Yeung & Fung, 2009). Selection strategy behaviors include for example setting up a goal hierarchy or focusing on the most important goals (Baltes, 1997). For instance, one could choose to quit one's job in order to focus on setting up an own company. Secondly, optimization refers to the means or strategies one uses to achieve desired outcomes (Bajor & Baltes, 2003). Optimization behaviors include modeling successful others or acquiring new skills (Baltes, 1997), for instance through spending more time practicing a skill to become more successful at it. Lastly, compensation strategies come into play when original means are not sufficient anymore, either because of direct losses of those means, incompatibility between goals, or new limiting constraints on time (Baltes, 1997). Compensation behaviors include increased attentional focus or use of external aids or help of others (Baltes, 1997), for instance by asking a coworker for help when faced with a difficult task (Yeung & Fung, 2009). Although each component clearly serves a different function, an inherent assumption of the SOC model is that these strategies have to be used in a synchronized manner to achieve full impact (Baltes, 1997; Jopp & Smith, 2006). This means that the use of any strategy should always be accompanied by

use of another strategy and little use of one strategy of the SOC model can be compensated by a higher use of another strategy (Zacher & Frese, 2011). Furthermore, the SOC model is a metamodel, meaning that it is quite general and does not explicate specific criteria or goals that should be focused on to (Baltes & Carstensen, 1996; Freund & Baltes, 2002). This is left to domain-specific theories, such as socioemotional selectivity theory, which predicts increasing importance of social and emotional goals over time (Carstensen et al., 1999).

Research that focuses on SOC strategies in a work setting is limited (Schmitt, Zacher, & Frese, 2012). Some authors have reviewed the effect of SOC strategies on work performance, but mixed results are reported (Bajor & Baltes, 2003; Weigl et al., 2013). However, some evidence for the impact of SOC strategies in a work context has been found. For instance, Zacher and Frese (2011) studied the use of SOC strategies in a manufacturing company. They found that older employees with high use of SOC strategies were better able to maintain a focus on opportunities than older employees with low use of SOC strategies (Zacher & Frese, 2011). Focus on opportunities is a construct closely related to future time perspective, but refers more specifically to the perceived number of new goals, options, and possibilities one has in their personal future at work (Cate & John, 2007; Zacher & Frese, 2009). Results of this study thus indicate the importance of including SOC strategies in research that deals with age-related changes in a work setting. Although no previous research included SOC strategies in a leadership setting, I argue that this is an important step to make. The use of SOC strategies entails setting goals autonomously, dividing time and effort into achieving your goals, and being flexible enough to adjust goals if the environment requires this (Freund & Baltes, 1998; Zacher & Frese, 2011). Leaders are often in a position where they can do exactly that. Therefore, I argue that

especially in a leadership setting, there are two reasons why the use of SOC strategies could help maintain an expansive occupational FTP despite increasing age.

First of all, when using SOC strategies, older leaders will be more able to adapt to changes in personal resources (Zacher & Frese, 2011). When facing decreased personal capacity, older leaders that use SOC strategies could chose to focus on fewer goals or allocate more time to a certain task, such that they can keep functioning in their position successfully (Abraham & Hansson, 1995). Consequently, they can keep doing their job and will not feel like they are 'losing it'. In a leadership position, often not much support or guidance is provided, especially not in a senior management position in which older leaders are likely to be. Therefore, it is of utmost importance that older leaders recognize their decreasing capabilities themselves and act accordingly by using SOC strategies to compensate for potential age-related losses. Specifically, the use of SOC strategies may give older leaders the confidence that they will be able to cope with age-related losses they might experience in the future, because they know they are capable of finding ways to counteract potential negative effects of aging (Weigl et al., 2013). This, in turn, positively influences the way they feel about the future and the amount of time they can still see themselves being successful in their position, diminishing the negative impact of age on their occupational FTP. On the contrary, leaders who do not use SOC strategies may not be able to change their behavior in accordance with decreasing personal resources (Baltes, 1997). This may cause older leaders to feel incapable of doing their job, therefore limiting the future time they can see themselves being successful in it, strengthening the negative relationship between age and occupational FTP.

Secondly, older leaders that use SOC strategies will be better able to adapt to changes in environmental demands (Zacher & Frese, 2011). Changes at work could for instance require that

leaders obtain new skills or adjust their behavior to new policies and guidelines. For older leaders, this could be challenging since they may learn less fast than younger leaders or are so used to the way of working that adaptations take much effort (Baltes & Carstensen, 1996). These demands could therefore overwhelm them and make older leaders doubt about the future of their career. The use of SOC strategies could aid older leaders in adapting to these changes because leaders that use these strategies will be more successful in managing the different demands they face (Carstensen, 2006). For example, when having difficulty with a new operating system, older leaders that use SOC strategies will compensate their potential lack of knowledge by increasing their attentional focus on it or asking others for help (Baltes, 1997). Through this, older leaders may feel that they are flexible enough to deal with changing environments, giving them confidence that they can also do this in the future. Therefore, using SOC strategies decreases the negative impact of age on occupational FTP. On the contrary, older leaders that do not use SOC strategies may simply experience helplessness or frustration when faced with yet another change that they do not possess the right skills for. This may strengthen their idea of becoming too old for their job and give them reason to doubt the future of their career. This in turn may lead to a more limited occupational FTP.

Concluding, leaders that use SOC strategies will experience less negative impact of age on future time perspective than leaders who do not use SOC strategies. The use of SOC strategies thus diminishes the negative effect of age on occupational future time perspective. This line of thought is stated in Hypothesis 4:

Hypothesis 4: The negative relation between age and occupational future time perspective is moderated by the use of SOC strategies, such that the use of SOC strategies diminishes the negative role of age.

When integrating the above hypotheses, a moderated mediation model emerges. Overall, older leaders should have a more limited occupational FTP than younger leaders (Hypothesis 1), which negatively impacts their transformational leadership behavior (Hypothesis 2). As such, leaders' occupational FTP mediates the indirect, negative relationship between age and transformational leadership behavior (Hypothesis 3). However, through the use of SOC strategies, leaders can reduce this negative influence of age on their occupational FTP (Hypothesis 4), thereby being able to remain transformational leaders throughout their careers. Thus, hypothesis 5 for the overall model is as follows:

Hypothesis 5: The negative, indirect relationship between age and transformational leadership (through future time perspective) is stronger for leaders who use SOC strategies less frequently than for leaders who use SOC strategies more frequently.

METHODS

Participants and Procedure

Data for this study came from store managers and their subordinates from a food retailer in the Netherlands. This retailer is part of an international retailing group with strong local consumer brands in Europe and the United States. The surveys were distributed to 582 store managers, further referred to as leaders, and their subordinates. Subordinates of the leaders included assistant store managers, team leaders and sales employees. As an incentive to participate, leaders received a 360 degree feedback report on their leadership skills when they and their subordinates completed the survey. A total of 419 leaders (72% of the total) filled out the survey.

In order to minimize common source variance, I measured the variables using two different sources (Podsakoff, Mackenzi, Lee, & Podsakoff, 2003). Leaders rated themselves on

future time perspective and SOC strategies, while subordinates rated leaders on their transformational leadership behavior. The leader and subordinate surveys were later matched on store number.

To be included in the study, a leader had to satisfy three criteria (cf. Rubin, Munz, & Bommer, 2005): (1) leaders needed to complete the survey themselves, (2) per leader at least two subordinates had to have completed the survey, (3) the subordinates that completed the survey had to have worked with their leader for at least 3 months. Of the participating leaders, 403 met these criteria (69% response rate). The average age of the leaders was 43.71 years old ($SD = 9.24$), ranging from 25 to 62 years. Their average organizational tenure was 18.56 years ($SD = 11.73$). Of the participating leaders, 87% were male. Furthermore, 2608 subordinates completed the survey, out of a possible 5359 (49% response rate). The average age of participating subordinates was 30.82 years old ($SD = 11.85$) and 41% were male. Their average tenure with the organization was 11.32 years ($SD = 9.36$) and the average tenure with their leader was 2.20 years ($SD = 1.70$). Per leader on average 6.45 subordinates completed the survey (min. = 2, max. = 12).

Leaders were informed of the coming data collection via a message on the Intranet of the organization, as well as via emails. Leaders first received an email informing them about the procedure, second they received an email with the link to the leader survey. For each leader, between 7 and 12 randomly selected subordinates (depending on store size) received an email with explanation and a link to the subordinate survey (cf. Voorn, Walter, & Stoker, 2013). Confidentiality was guaranteed to all respondents. Subordinates were ensured that their responses would only be reported back to the leader in aggregated form.

Measures

Because not all respondents were fluent in English, all survey items were translated from the original items into Dutch according to the double-blind back-translation procedure. This procedure is similar to those used in other studies (e.g., Zacher & De Lange, 2011).

Transformational leadership. Subordinates rated their leaders on the measure of transformational leadership behavior developed by Podsakoff, MacKenzie, and Bommer (1996). This measure consists of 23 items on a 5-point response scale, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). A sample item is ‘Encourages employees to be team players’. Cronbach’s alpha was .94. In order to perform further analyses, I aggregated multiple subordinate ratings referring to the same leader (e.g., Peterson, Walumba, Byron, & Myrowitz, 2009). To ensure correctness of this aggregation, I calculated interrater agreement (r_{wg}) and interrater reliability (ICC) statistics. The resulting values showed support for aggregating the variables to store level, with median $r_{wg} = .90$, $ICC_1 = .21$ ($p < .01$), and $ICC_2 = .67$.

Age. Chronological age was operationalized as calendar age. Leaders were asked to report their age in years.

Future time perspective. Previously used future time perspective measures often consist of only a few items (e.g., Lang & Carstensen, 2002; Cate & John, 2007; Zacher & Frese, 2009). Zacher and Frese (2009) recognized the limitations that come from this and advised future research to use a more elaborate scale. Since for this thesis I wanted to ensure sufficient content coverage of the concept of FTP, I followed their advice and combined the three future time perspective items of Zacher and Frese (2009) with the three future time perspective items of Cate and John (2007). This resulted in a six-item measure of future time perspective. Respondents were informed that the statements applied to their work life. Example items include ‘I have the

sense that time is running out' and 'My occupational future seems infinite to me.' Answers were given on a 5-point scale ranging from 1 (*does not apply at all*) to 5 (*applies completely*). The FTP scale is keyed so that high scores indicate an expansive view of the future, whereas low scores indicate that the individual has a limited view of the future. Cronbach's alpha was .74.

Selection, optimization, and compensation strategies. The use of SOC strategies was measured using Zacher and Frese's (2011) adapted and shortened version of the original 12-item SOC scale (Baltes et al., 1999). The items were answered on a 5-point scale ranging from 1 (*does not apply at all*) to 5 (*applies completely*). Each of the different SOC strategies (elective selection, loss-based selection, optimization, and compensation) was measured with three items. Example items include 'At work, I commit myself to one or two important goals' and 'When something at work isn't working as well as it used to, I ask others for advice or help'. As mentioned in the introduction, the theory behind SOC strategies states that they should be used as a functional set (e.g., Baltes & Heydens-Gahir, 2003; Jopp & Smith, 2006). Therefore, I used the average score on the overall SOC scale¹. Previous research has shown this measure to be valid (e.g., Baltes et al., 1999; Zacher & Frese, 2011). Cronbach's alpha was .66 in the present study.

Control variables. Leaders were asked to report their gender and their tenure with the organization in years. Furthermore, they were asked to report their number of subordinates. Gender was controlled for because previous research has shown that female leaders are somewhat more transformational than male leaders (Eagly, Johannesen-Schmidt, & Van Engen, 2003). Tenure was included because this is also time-related variable that could impact the

¹ To ensure no interesting results were lost when averaging all SOC strategies, I performed additional analyses using the separate strategies of the SOC model. Neither strategy showed significant moderating results.

perspective one has about their future career (Zacher et al., 2011b). Number of subordinates was included as a proxy to control for store size (Zacher et al., 2011b).

RESULTS

Descriptive Statistics and Correlations

Descriptive statistics for each variable measured in this study, as well as their correlations, are presented in Table 1. As expected, bivariate correlations showed that age was significantly associated with future time perspective ($r = -.52, p < .01$) and future time perspective was significantly associated with transformational leadership behavior ($r = .23, p < .01$). Hypotheses were tested both controlling for gender, tenure, and number of employees and without these controls (Becker, 2005). Results were robust to inclusion or exclusion of the control variables.

 Insert Table 1 about here

Hypotheses Testing

I tested the hypotheses using hierarchical multiple regression analysis. Before performing the analyses, I standardized all variables to improve interpretability of the results. First, I performed the regression analysis on future time perspective. I entered the control variables (gender, organization tenure, and number of employees) at step 1, age and SOC strategies at step 2, and the interaction term between age and SOC strategies at step 3. Second, I performed the regression analysis on transformational leadership. Here I entered the same variables, but added future time perspective. Table 2 summarizes the results.

 Insert Table 2 about here

Hypothesis 1 predicted that age negatively influences future time perspective. Results showed a significant negative association between age and future time perspective ($B = -.43, p < .01$), even after considering control variables and SOC strategies, supporting Hypothesis 1. Hypothesis 2 suggested that future time perspective has a positive relationship with transformational leadership behavior, which the results confirm ($B = .19, p < .01$). Hypothesis 2 is thus supported.

Hypothesis 3 predicts a mediation effect of age on transformational leadership behavior through future time perspective. Bootstrap results (cf. Preacher & Hayes, 2004) confirmed the mediation effect, since the bootstrap 95% confidence interval around this indirect relationship did not contain zero (CI = $-.15, -.02$). The effect size of the indirect relationship was $-.08$. Hypothesis 3 is therefore supported. Figure 2 depicts the results of the mediation analysis.

Insert Figure 2 about here

Hypothesis 4 predicted an interaction effect of age and SOC strategies on future time perspective. Results did not show a significant interactive relation ($B = -.08, p = \text{n.s.}$), however, rejecting Hypothesis 4. Hypothesis 5 predicted a moderated mediation effect of age and SOC strategies on transformational leadership behavior through future time perspective. Since the moderation effect was not found (Hypothesis 4 was rejected), moderated mediation is not possible. Therefore, hypothesis 5 is rejected.

DISCUSSION

The main purpose of this research was to study the relationship between age and transformational leadership and to clarify their link using underlying mechanisms and boundary conditions based on a coherent underlying theory, namely socioemotional selectivity theory. Results illustrated future time perspective as a mediator in the negative, indirect relationship

between age and transformational leadership. Moreover, the model of selection, optimization, and compensation strategies was identified as a potential moderator on the relationship between age and future time perspective, which the results did not confirm. Notwithstanding this, these outcomes make several theoretical contributions.

First of all, this study adds to previous research by offering a potential explanation for how age influences transformational leadership behavior. As mentioned above, results of previous research on the link between age and transformational leadership are quite fragmented and ambiguous (e.g., Barbuto et al., 2007; Doherty, 1997; Zacher et al., 2011a). By including the concept of future time perspective, confusing results of previous research could partially be explained. While age has a negative association with occupational FTP, FTP in turn positively relates with transformational leadership behavior. It could thus be the case that previous studies did not find consistent relationships between age and transformational leadership behavior because they failed to take into account more proximal, psychological mediating mechanisms. Since the results are also robust when including organizational tenure, it can be concluded that FTP is an interesting factor that should be taken into account not only in a general work setting but also in a leadership context. Results confirm that for leaders, the way they perceive their occupational future is influential for how they behave toward followers.

Secondly, this study answers calls of previous research to use a more coherent framework to study the relationship between age and leadership (Walter & Scheibe, 2013; Zacher & Bal, 2012). By using socioemotional selectivity theory as an underlying framework, I built a coherent model that attempts to provide more understanding into the relationship between age and transformational leadership.

Contrary to expectations, I did not find a moderating effect of SOC strategies on the relationship between age and future time perspective. There are several potential explanations for this. First of all, some authors have argued that SOC strategies can only work when organizational structures and policies allow for them to work (Bal, Kooij, & De Jong, 2013). The use of SOC strategies entails prioritizing goals and focusing on the ones you can still achieve. Thus, if a leader wants to use SOC strategies, some level of autonomy or job control is needed (Kanfer & Ackerman, 2004). If the contextual resources at work in terms of for instance job control are not present, leaders gain nothing with the use of SOC strategies. It could be that in the organization used for data collection, organizational policies do not allow for much flexibility from leaders and therefore inhibit the use of SOC strategies. Since the studied organization is a large retailer where strict goals and targets are one of the most important factors in steering the individual stores, this is not unlikely. Goals and procedures are normally strictly imposed from the top down, resulting in low flexibility and space for own interpretations of leaders.

Furthermore, problems could have arisen due to the somewhat vague nature of SOC strategies. The SOC strategies model is a highly general theory, and the strategies do not have to be used intentionally and rationally (Baltes, 1997). Respondents may not have recognized the behavior presented in the items as behavior they engage in themselves, while they may do so unintentionally. An issue probably related to this is the fact that the reliability of the scale was fairly low. Although previous authors have used the measure successfully (e.g., Zacher & Frese, 2011), there has also been research that found the measure only worked well for highly educated people (Kooij et al., 2013). Kooij et al. (2013) for instance found no results for the SOC measure among nurses, but did find significant results among university workers. Leaders in this sample

on average had obtained a higher vocational education, however, only a small percentage had obtained a university degree.

Practical Implications

The results of this study have important practical implications. First of all, the findings indicate that there is a tendency for older leaders to be less transformational. In general, this could be an important factor to take into account for organizations as they might have preferences for certain types of leadership in different kinds of leadership positions. Although this negative relation may be the general tendency, this study also showed that there are factors between age and leadership that could diminish the negative role of age for transformational leadership. A second implication therefore is that the mediation effect of future time perspective clearly shows that older leaders are not necessarily less transformational. It is thus important for organizations to recognize that not age per se, but age-related psychological factors such as future time perspective, influence how leaders behave. HR directors would thus do well to recognize this and design policies and procedures accordingly. Although beyond the scope of this research, future time perspective could potentially be influenced directly by implementing policies that focus on expanding the occupational future time leaders experience. For instance, instead of reminding older leaders about their approaching retirement, it could be more valuable to provide them with trainings that emphasize how their work can still contribute to a better future for the company.

Limitations and Future Research

Although this study has multiple strengths, which are among others the use of multiple sources for data collection (both leaders and followers) and the use of a large field-sample, results should be interpreted with limitations in mind. A major limitation of this study is that all

data were collected at one point in time, making it impossible to separate age from cohort effects (Smola & Sutton, 2002). This may limit the validity of the results. Although previous research on age has often used this methodology, longitudinal research is necessary to be able to separate the effect of actual physical aging processes from more social, generational differences between birth cohorts (Smola & Sutton, 2002; Zacher & Frese, 2011). Another limitation that stems from the research design is that it does not allow for establishing causality. Again, longitudinal data or an experimental design is necessary to establish the direction of the proposed relationships with certainty. However, the strong theoretical background for the tested hypotheses provides some confidence in the proposed directions of the relationships. Third, although I used a different source to measure the dependent variable, all other variables in the model were self-rated by the leader. This could cause common method bias (Podsakoff, MacKenzie, & Podsakoff, 2012). Lastly, a limitation of the study is that data was collected in one specific industry (retail) and in one country (the Netherlands) only. For the purpose of generalizability it would be better to repeat the study in different industries and across different cultures.

Apart from addressing the above-mentioned limitations, future research could build on this study first of all by investigating further the possible moderators between age and future time perspective, because knowing how an expansive future time perspective can be maintained with increasing age could be beneficial for both research and practice (Zacher et al., 2010). Since not much research has been done into the subject of FTP in a leadership setting, there are still many avenues to pursue. For instance, emotional aging literature suggests positive affect could influence how individuals see the future (Hicks, Trent, Davis, & King, 2011). It could be that leaders who experience positive affect are less influenced by the negative effects of age on future time perspective than leaders who do not experience positive affect. Another possible factor that

influences the role of age for FTP is physical health (Walter & Scheibe, 2013). It has been found that poor physical health diminishes potential positive effects of aging (Piazza, Charles, & Almeida, 2007), therefore making it likely that it also strengthens the potential negative effects of aging, thus increasing the negative influence of age on leaders' FTP. Apart from these person-related characteristics, the relationship between age and FTP could also be influenced by contextual factors (Charles, 2010). For instance, the amount of family or subordinate support leaders perceive could interact such that perceived support diminishes the negative role of age for FTP (Gielnik, Zacher, & Frese, 2012). Furthermore, the negative effect of aging on FTP is likely to be more pronounced for leaders working in highly volatile environments compared to environments where tasks are more routine (McClelland & O'Brien, 2011). In highly dynamic and complex environments, the age-related capability losses leaders might experience are likely to be more evident. Lastly, it could also be interesting to study factors that might have a direct effect on FTP instead of an interacting effect with age. Previous research has found that through time perspective intervention sessions, future orientation of college students was increased (Marko & Savickas, 1998). It could be worthwhile to study whether leaders could also expand their future time perspective through training sessions.

Secondly, further research should be done into the use of SOC strategies. Although in this study no significance influence was found, previous research did find that SOC strategies are beneficial for aging individuals in a work context (e.g., Yeung & Fung, 2009). It could be particularly interesting to study SOC strategies in relation with job control or autonomy, to determine how these factors prohibit or facilitate the use of SOC strategies (Kanfer & Ackerman, 2004). Lastly, socioemotional selectivity theory is probably not the only theory underlying the relationship between age and leadership. Therefore, future research should continue studying the

relationship between age and leadership with different theoretical backgrounds in mind. For instance, considering attributional mechanisms of followers or peers for how leaders perceive their future could be relevant (Walter & Scheibe, 2013). Factors like age stereotypes and status differences could determine how older leaders experience their occupational FTP and thus how they behave (Berger, Cohen, & Zelditch, 1972; Posthuma & Campion, 2009).

Concluding, by using socioemotional selectivity theory as a theoretical background, this study developed a coherent model that aids in explaining how age relates with transformational leadership through future time perspective. Through this, this study sheds a new light on the relationship between age and leadership and contributes to previous fragmented findings. I believe that this study could serve as a good base for further research on the subject and I hope it provides authors with fruitful ideas for further studies, in order to take the field to the next level.

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FIGURE 1
Conceptual Model

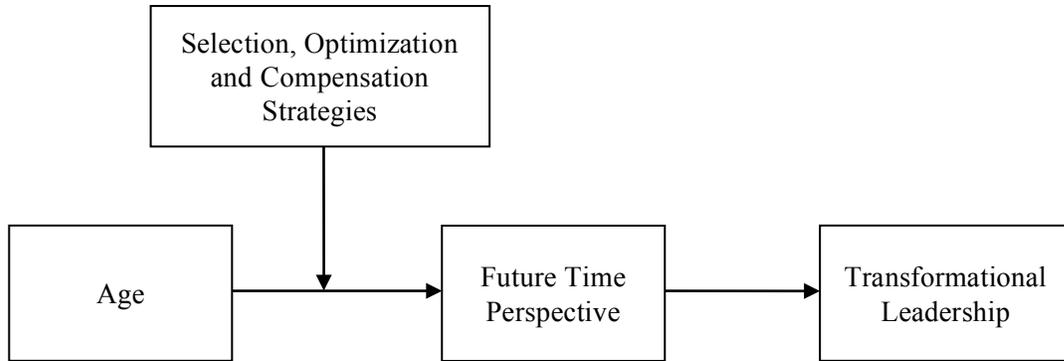
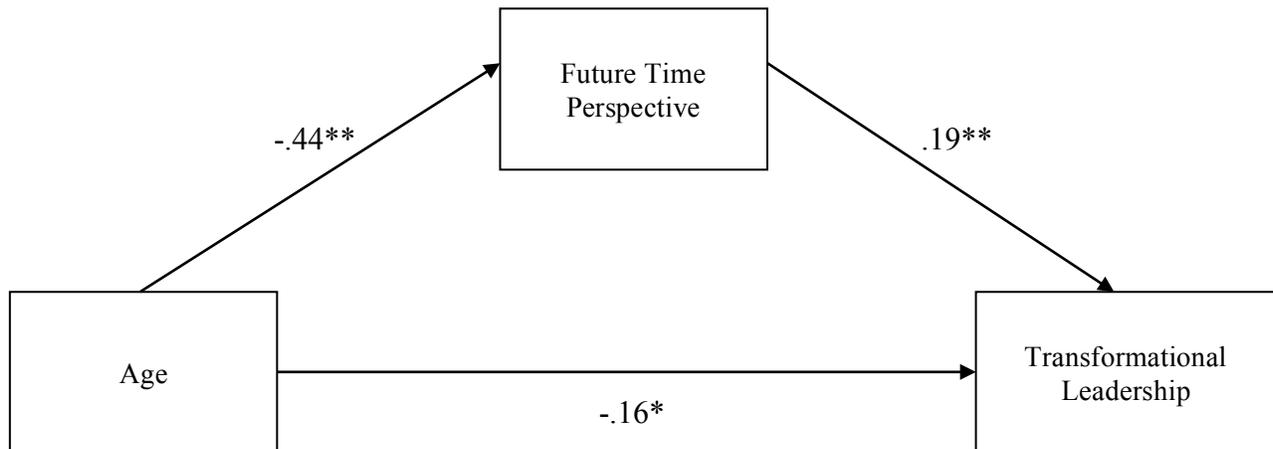


FIGURE 2
Results of Mediation Analysis



Note. $n = 402$. $* p < .05$, $** p < .01$. All variables were standardized prior to analyses. Unstandardized coefficients are reported.

TABLE 1
Means, Standard Deviations, and Intercorrelations

<i>Variable</i>	<i>M</i>	<i>SD</i>	<i>1.</i>	<i>2.</i>	<i>3.</i>	<i>4.</i>	<i>5.</i>	<i>6.</i>	<i>7.</i>
1. Age	43.71	9.24							
2. FTP	3.41	0.72	-.52**						
3. TFL	3.72	0.32	-.18**	.23**					
4. SOC strategies	3.46	0.40	-.02	-.05	.05				
5. Gender	1.13	0.34	-.27**	.21**	.13**	-.05			
6. Organization tenure	18.56	11.73	.63**	-.38**	-.05	-.10	.20**		
7. Number of subordinates	139.52	55.04	.17**	-.10	.19**	-.07	-.11*	.19**	

Note. n = 402. * $p < .05$, ** $p < .01$. FTP = Future time perspective, TFL = Transformational leadership behavior, SOC = Selection, optimization, and compensation strategies.

TABLE 2

Results of Hierarchical Regression Analyses for Future Time Perspective and Transformational Leadership Behavior

	Future Time Perspective			Transformational Leadership Behavior	
	Model 1 <i>b</i> (s.e.b)	Model 2 <i>b</i> (s.e.b)	Model 3 <i>b</i> (s.e.b)	Model 1 <i>b</i> (s.e.b)	Model 2 <i>b</i> (s.e.b)
<i>Control variables</i>					
Gender	.14** (.05)	.07 (.04)	.07 (.04)	.14** (.05)	.10* (.05)
Organization tenure	-.35** (.05)	-.10 (.06)	-.11 (.06)	-.07 (.05)	.11 (.06)
Number of subordinates	.01 (.05)	.00 (.04)	.01 (.04)	.21** (.05)	.23** (.05)
<i>Independent variables</i>					
Age		-.43** (.06)	-.43** (.06)		-.16* (.07)
SOC strategies		-.06 (.04)	-.07 (.04)		.09 (.05)
Future Time Perspective					.19** (.06)
<i>Interaction</i>					
Age x SOC strategies			-.08 (.04)		
R^2 (adjusted R^2)	.17 (.16)	.28 (.28)	.29 (.28)	.06 (.06)	.13 (.11)
ΔR^2		.12**	.01		.07**

Note. n = 402. * $p < .05$, ** $p < .01$. SOC = Selection, optimization, and compensation strategies. All variables were standardized prior to analysis.