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THE MODERATING EFFECT OF EMPLOYEE AGE ON THE ASSOCIATION
BETWEEN AFFECTIVE COMMITMENT AND HUMAN RESOURCE PRACTICES

by

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A Dissertation

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Abstract

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Drawing hypotheses from a theory of lifespan development called *selective optimization with compensation* (SOC, Baltes & Baltes, 1990; Baltes, Staudinger, & Lindenberger, 1999), the study explored the degree to which employee age moderates the relationship between employee affective commitment and satisfaction with various high commitment human resource practices (HCHRP; e.g., providing training, opportunity for advancement, work/life balance). In addition, as exploratory hypotheses, the study also tested whether other employee-level variables such as gender, job tenure, and job type also serve as moderators of the HCHRP-affective commitment relationship. Customer-facing employees ($N = 6,360$) representing three job types (O*NET titles: Shipping, Receiving, and Traffic Clerks; Truck and Delivery Services Drivers; Couriers and Messengers) from an international transportation company completed an eight-item version of the Organizational Commitment Questionnaire (OCQ, Mowday, Steers, & Porter, 1979) and a questionnaire assessing their satisfaction with various HCHRPs offered by their organization. Path analyses assessed the significance of two-way interactions concerning age (i.e., age-by-HCHRP) and job tenure (i.e., tenure-by-HCHRP), as well as three way interactions concerning gender (i.e., gender-by-age-by-HCHRP) and job type (i.e., job type-by-age-by-HCHRP). Results show that, although there was a strong overall correlation between affective commitment and satisfaction with HCHRPs ($r = .66$), employee age was a significant moderator of only the relationships between affective commitment and maintenance-related HCHRPs (e.g.,

life/work balance, job security) and not of development-related HCHRPS (e.g., training opportunities, opportunities for advancement). More importantly, although the moderation effects were statistically significant, the effect size of every moderation was small, suggesting from a practical perspective that employee age is not a characteristic that organizations need to consider when making strategic decisions about HCHRPs.

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The Moderating Effect of Employee Age on the Association between Affective Commitment and Human Resource Practices

Affective commitment, defined as an employee's emotional attachment to his or her organization (Allen & Meyer, 1990; Mowday, Porter, & Steers, 1982) has been linked to a number of positive organizational outcomes such as job performance, organizational citizenship behavior, absenteeism, and turnover (Mathieu & Zajac, 1990; Meyer & Allen, 1997; Meyer, Stanley, Herscovitch, & Topolnytsky, 2002). As a result, organizations make efforts to foster their employees' affective commitment through *high commitment human resource practices* (HCHRP; Conway, 2004; Kooij, Jansen, Dikkers, & De Lange, 2010; Wood & Menezes, 1998), such as offering free training, providing job security, having competitive benefits and performance-based incentives, or establishing opportunities for advancement within the organization.

The traditional view of HCHRP takes a best-practice perspective, suggesting that there exists a universal set of practices that any organization can use to foster the affective commitment of employees (Pfeffer, 1994; Walton, 1985; Wright & Boswell 2002). It is a one-size-fits-all approach that makes no differentiations at the level of the organization or the individual employee. Recent research has begun to question the validity of this view. Studies show that the ability of HCHRP to promote affective commitment is affected by various moderating variables such as an employee's intrinsic motivation (Dysvik & Kuvaas, 2008; Kuvaas & Dysvik, 2010), the quality of the employee-organization relationship (Kuvaas, 2008), and even an employee's family responsibilities (Scandura & Lankau, 1997). Additionally, a supervisor's ability to promote and communicate HCHRP to his or her employees also acts as a moderator

(Wright & Haggerty 2005), suggesting that employee *perceptions* of the availability of HCHRP differs from the objective *presence* of HCHRP (Allen, Shore, & Griffeth, 2003; Truss, 2001). Taken together, these findings show that the effectiveness of HCHRP depends on various employee characteristics and that a single best-practice perspective to HCHRP may be inappropriate. As summarized by Lepak and Snell (1999), "...just as there may be no universal best set of HR practices for every firm...there may be no one best set of practices for every employee within a firm" (p. 45).

Accordingly, the purpose of this study was to examine if another employee characteristic, chronological age, moderates the relationship between HCHRP and affective commitment. The present study applied tenets from behaviorism (Baum, 1994; Daniels, 1989, 2000; Skinner, 1969) and a theory of lifespan development called *selective optimization with compensation* (SOC; Baltes & Baltes, 1990; Baltes, Staudinger, & Lindenberger, 1999) to argue that chronological age is a proxy for the ever-changing array of reinforcers that guide individuals' behavior. In other words, the types of things that younger employees tend to find reinforcing (e.g., career development) differ from the reinforcers of older employees (e.g., job security). From this perspective, an organization's HCHRP serve as incentives whose goal is to maintain and enhance employees' performance. Given that incentives and reinforcers must be tailored to the unique individual receiving them, the implication is that certain HCHRP (e.g., job flexibility, work/life balance) may be more attractive to older employees, whereas other HCHRP (e.g., ongoing training, opportunity for promotion and advancement) may be

more important for younger employees. Consequently, the ability of HCHRP to promote affective commitment may be moderated by age.

Given that incentives and reinforcers must be tailored to the unique individual receiving them, the study also explored (without specific hypotheses) the extent to which other employee-level characteristics such as gender, job tenure, and job type also serve as moderators of the HCHRP-affective commitment relationship. The following sections review research on affective commitment and its antecedents, introduce SOC theory and describe how SOC tenets have been applied to organizational research, and outline the specific hypotheses of the present study.

Affective Commitment

Allen and Meyer's three-component model of organizational commitment (Allen & Meyer, 1990; Meyer & Allen, 1984, 1997) proposes that employees have three types of commitment towards their organizations: normative, continuance, and affective commitment. Normative commitment concerns the extent to which employees feel they *ought* to stay with their organizations due to obligations, social norms, and expectations. Continuance commitment concerns the extent to which employees stay with an organization due to the perceived costs of leaving and the lack of attractive alternatives. Lastly, affective commitment refers to employees' emotional attachment to, identification with, and involvement in their organization (Meyer & Allen, 1997; Mowday et al., 1982; Solinger, Van Olffen, & Roe, 2008). From the behavioral perspective (Baum, 1994; Daniels, 2000; Skinner, 1969), although these three components of commitment differ from each other, they are ultimately rooted in and linked to employees' expectations of reinforcers. For example, continuance commitment drives employees to stay with their

organization due to the negative reinforcer of not finding a more suitable alternative organization, whereas affective commitment drives employees to stay with their organization due to expected positive reinforcers such as favorable working conditions and the availability of ongoing training.

The three-component model has become the prevailing approach to the study of organizational commitment (for meta-analyses see Jackson, Meyer, & Wang, 2013; Meyer et al., 2002; Riketta, 2002); however, recently some researchers have begun to question the model's validity. Solinger and coauthors (2008) contend that affective commitment ought to be considered as the sole organizational commitment because it is the only form of commitment directed *at* one's organization. Normative and continuance commitment focus on the behavior of staying with or leaving one's organization, and not the organization itself and are, therefore, qualitatively different from affective commitment. Support for this view is garnered by the fact that, of the three forms of commitment, affective commitment is conceptually closest to original conceptualizations of organizational commitment (see Porter, Steers, Mowday, & Boulian, 1974; Mowday et al., 1982).

More importantly, of the three, affective commitment is also the best predictor of important organizational outcomes such as job performance, extra-role behavior (i.e., organizational citizenship behavior), absenteeism, turnover and turnover cognitions, as well as measures of employee well-being such as health, stress, and work-family conflict (LePine, Erez, & Johnson, 2002; Mathieu & Zajac, 1990; Meyer & Allen, 1997; Meyer et al., 2002; Solinger et al., 2008). The link between affective commitment and job performance also appears robust and independent of whether job performance is

measured through self-report, supervisory ratings, or through objective performance indicators (Meyer, Allen, & Smith, 1993; Meyer et al., 2002; Riketta, 2002).

Interestingly, research suggests that affective commitment is more strongly related to extra-role behavior (i.e., discretionary behavior, organizational citizenship behavior) than to job performance. Meta-analytic estimates of the correlation between affective commitment and job performance range from .13 (Mathieu & Zajac, 1990) to .18 (Riketta, 2002), whereas the correlation between affective commitment and extra-role performance lies somewhere between .25 (Riketta, 2002) and .30 (Organ & Ryan, 1995). This difference most likely stems from the fact that extra-role behavior is not a formal requirement of the job, but rather a matter of personal choice and, consequently, more likely to be influenced by the level of an employee's commitment (Organ, 1988).

In sum, of the different forms of organizational commitment that have been proposed, affective commitment is the best predictor of positive organizational outcomes such as extra-role performance. Measured at the level of the individual employee, extra-role performance ultimately translates to increased productivity and performance at the organizational level (Chun, Shin, Choi, & Kim, 2013). Organizations thus seek to have highly committed employees, which has led organizational researchers to search for antecedents of affective commitment that could be influenced to foster commitment.

Antecedents of Affective Commitment

Dispositional antecedents. Research suggests relatively few personality-based variables predict which employees are likely to exhibit high affective commitment. Erdheim, Wang, and Zickar (2006) found it to correlate with conscientiousness ($r = .18$) and extraversion ($r = .20$). The relationship with conscientiousness is purported to stem

from the fact that the dutiful aspect of conscientiousness reinforces norm adherence and thereby hastens the adoption of organizational values and goals (Goldberg, 1990). The relationship with extraversion, on the other hand, is linked to the positive emotionality that is central to the extraversion construct (Erdheim et al., 2006). A meta-analysis by Thoresen and coauthors (2003) supports this view, showing that affective commitment correlates with positive affectivity ($\rho = .35$) and, as would be expected, inversely with negative affectivity ($\rho = -.27$). Meta-analytic estimates also show that general self-efficacy ($\rho = .11$) and internal locus of control ($\rho = .29$; Meyer et al., 2002) predict affective commitment. Taken together, research on dispositional antecedents of affective commitment describes a highly committed employee as an individual who is upbeat, dutiful, and has confidence in his or her ability to successfully perform the job.

Organizational antecedents. Whereas researchers have found relatively few dispositional antecedents, numerous organizational variables appear to promote affective commitment. Meta-analytic estimates by Meyer and coauthors (2002) show that both role conflict ($\rho = -.30$), defined as the presence of incompatible and conflicting work requests, and role ambiguity ($\rho = -.39$), defined as the absence of the necessary information to carry out one's job tasks serve as antecedents. Other meta-analyses suggest that employees who work under a transformational/charismatic leader exhibit higher commitment ($\rho = .45$; Jackson et al., 2013). Transformational or charismatic leaders are able to share an organization's vision and enthuse employees to develop a collective identity, which in turn facilitates affective commitment (Meyer, Becker, & van Dick, 2006).

Studies also show it is not just the quality of the leader that counts, but also the quality of the relationship between a leader and a particular employee (Liden, Sparrowe, & Wayne, 1997; Wayne et al., 2009). Leaders who devote time and resources to their employees promote relationships characterized by trust, liking, and respect, and employees in these types of relationships show higher commitment (Liden, Wayne, & Sparrowe, 2000).

Though these variables point to leaders and their relationships with employees as antecedents of affective commitment, the most established antecedent deals with the way employees view their relationship with the overall organization, not just their immediate leader. Numerous studies have shown that perceived organizational support, defined as the extent to which employees feel their organization values them and cares about their well-being (Eisenberger, Huntington, Hutchison, & Sowa, 1986) is a strong predictor of affective commitment (e.g., Eisenberger, Fasolo, & Davis-LaMastro, 1990; Mathieu & Zajac, 1990; Shore & Wayne, 1993; for a review see Rhoades & Eisenberger, 2002). In fact, Meyer and coauthors' (2002) meta-analytic estimate ($\rho = .63$) was stronger than that of any other antecedent, suggesting that perceived organizational support is one of the most important precursors to affective commitment.

Due to the fact that the causal pathway between perceived organizational support and affective commitment is debatable (i.e., it is possible that high affective commitment causes high perceptions of organizational support rather than vice-versa), Rhoades, Eisenberger, and Armeli (2001) conducted a cross-lagged design study and, using two samples and two- and three-year measurement intervals, found that perceived organizational support at time one was related to affective commitment at time two, but

not the reverse; thus, providing evidence that the causal pathway indeed goes from perceived organizational support to affective commitment.

In sum, research suggests various organizational variables predict affective commitment, ranging from the characteristics regarding the jobs themselves (e.g., role conflict) to qualities of leaders and/or their relationships with employees. Out of all of these, however, it appears as though perceived organizational support is not only the most robust predictor, but that it can also be considered a legitimate antecedent in the chronological sense.

High Commitment Human Resource Practices. In addition to dispositional and organizational variables, research has also examined the degree to which human resource practices that are intended to increase affective commitment (i.e., HCHRP) are indeed correlated with commitment. A number of studies suggest that, in general, the correlations between affective commitment and employees' satisfaction with various HCHRP are in the .3 to .5 range (e.g., Conway, 2004; Kooij et al., 2013) and that they are prevalent across the globe (e.g., Lew, 2008; Patrick & Sonia, 2012). Meta-analytic estimates provided by Kooij and coauthors (2010) show that employees experience higher commitment if they believe their organizations have HCHRP oriented around ongoing training ($\rho = .42$), opportunity for promotion and advancement ($\rho = .52$), availability of flexible work schedules ($\rho = .35$), job security ($\rho = .28$), ongoing performance management ($\rho = .38$), encouragement of teamwork and cooperation ($\rho = .42$), open communication from management ($\rho = .40$), mechanisms for providing feedback to management ($\rho = .52$), and fair rewards and compensation ($\rho = .49$). Similar

relationships were reported by earlier meta-analyses (Mathieu & Zajac, 1990; Meyer et al., 2002).

It is important to highlight that these studies generally do not assess the objective presence of HCHRP's but rather employees' beliefs about the availability of HCHRP's. As mentioned previously, studies show there is incongruence between the actual HCHRP's offered by an organization and employees' perceptions of the presence of HCHRP's, making it important for researchers to focus their studies on employee perceptions rather than on objective availability of HCHRP's (Allen et al., 2003; Truss, 2001; Wright & Haggerty, 2005).

The explanation for the link between employee satisfaction with HCHRP's and affective commitment is grounded in social exchange theory (Eisenberger et al., 1986) and the norm of reciprocity (Gouldner, 1960). Social exchange theory suggests that employees see HCHRP's as an investment in them, which results in feelings of obligation toward the organization and a desire to reciprocate through increased performance (Coyle-Shapiro, Kessler, & Purcell, 2004; Hannah & Iverson, 2004; Kooij et al., 2010). In other words, the presence of HCHRP's leads to perceptions of organizational support, which, as mentioned previously, is one of the strongest antecedents of affective commitment (Allen et al., 2003; Rhoades et al., 2001). Recent empirical evidence confirms this view, showing that the relationship between HCHRP's and affective commitment is mediated by perceived organizational support (Chiang, Han, & Chuang, 2011).

Collectively, research on the antecedents of affective commitment has confirmed that HCHRP's (their very name suggests a link to affective commitment) do indeed predict

affective commitment levels in employees. Furthermore, it appears as though they exert their effect via perceived organizational support, which has been shown to be a strong chronological antecedent of affective commitment. The correlations between satisfaction with various HCHRP and commitment are not very strong (.3 to .5), suggesting the possible presence of moderating variables (Hunter & Schmidt, 2004). Discovering moderators of the HCHRP-affective commitment relationship is of interest to researchers because it identifies conditions under which HCHRP will exert their maximum effect.

The present study examined the degree to which another employee characteristic, chronological age, moderates the relationship between employee satisfaction with HCHRP and affective commitment. Drawing hypotheses from SOC theory (Baltes & Baltes, 1990; Baltes & Carstensen, 1996; Baltes et al., 1999), the study tested whether HCHRP aimed at maintenance and regulation (e.g., job security, work/life balance) are more strongly linked to affective commitment in older employees, whereas HCHRP aimed at growth and development (e.g., training, opportunity for advancement) are more strongly linked to affective commitment in younger employees. In addition, the study also explored the extent to which the employee-level variables of gender, job tenure, and job type also serve as moderators of the HCHRP-affective commitment relationship. The next section introduces the basic tenets of SOC, describes how SOC has been applied to organizational research, and specifies the hypotheses of the present study.

Selective Optimization with Compensation Theory

According to SOC (Baltes & Baltes, 1990; Baltes & Carstensen, 1996; Baltes et al., 1999), successful lifespan development entails the minimization of age-related losses. As individuals age, they experience gradual declines in physical, cognitive, and sensory

abilities (Baltes et al., 1999; Schaie, 1994). Internal and external resources become increasingly restricted and losses begin to outweigh gains. This, in turn, causes a motivational shift, with individuals becoming oriented around the maintenance of abilities and prevention of further losses as opposed to the development of new capacities. Applied to the context of organizational research, the occurrence of this motivational shift suggests that with increasing age, development-related work motives (e.g., further training) will decline whereas maintenance-related work motives (e.g., job security) will strengthen. From the perspective of SOC, this motivational shift is a necessary and adaptive response that signifies successful aging.

According to SOC, there are three strategies individuals employ to minimize age-related losses: selection, optimization, and compensation (Baltes & Baltes, 1990; Baltes & Carstensen, 1996). *Selection* refers to the need to choose which goals to pursue and which to abandon in the face of diminishing energy and restricted resources. Individuals select fewer and more personally meaningful goals to maximize the return on their efforts. Applied to the context of organizational research, employees utilizing selection strategies may choose to work on fewer projects, particularly ones they consider most important to the organization, and abandon other non-essential tasks. *Optimization* refers to the desire to maximize performance and success in the goals an individual has selected to pursue. An example of optimization is the investment of one's energy into activities that will help achieve selected goals, or the deliberate practice of skills that ensure success in selected goals. Applied to the work context, an employee engaging in optimization may choose to work on projects that are similar to each other and require the same skillset because this maximizes the potential for success. Lastly, *compensation*

entails the use of alternative means to reach selected goals. Individuals facing diminished internal and external resources find new ways to achieve goals and thereby maintain functioning. For example, an employee experiencing loss in physical strength may choose to take longer to complete a physical task, taking breaks as he or she desires.

In sum, SOC theory proposes that the key to successful lifespan development lies in the minimization of age-related losses, which individuals accomplish by selecting fewer but more meaningful goals, focusing on the skills and activities that ensure success in the chosen goals, and finding alternative ways to meet those goals. The three strategies are employed simultaneously and comprise a “single ‘integrative’ process of adaptive mastery” that ensures successful aging (Freund & Baltes, 1998, p. 532). From the perspective of behaviorism (Baum, 1994; Daniels, 2000; Skinner, 1969), engaging in these strategies is tied to successful aging because these strategies help individuals avoid negative reinforcers such as goal failure and diminished functioning.

Research supports the tenets of SOC, showing that increasing age is indeed accompanied by a motivational shift from development and growth to maintenance and regulation. Across four studies, Ebner, Freund, and Baltes, (2006) showed that younger adults are more likely to rate their personal goals as being development-related whereas older adults rate their goals as being oriented around maintenance. Similar findings were reported by Heckhausen (1997), who found that younger adults list more growth-oriented goals and older adults list goals related to preventing losses.

In addition to showing that age does indeed bring a shift in motivations, studies also show that older individuals actually use more compensatory strategies. For example, visually impaired older adults are able to maintain the amount of time they spend reading

by adopting compensatory measures such as using large-print media, talking books, or computer technology (Ryan, Anas, Beamer, & Bajorek, 2003). Using an experimental design, Freund (2006) showed that older adults are more likely to persist on a task if it focuses on the compensation of losses whereas younger adults persist longer on a task oriented around maximizing performance.

Perhaps most importantly, the use of these strategies appears to be linked to well-being, suggesting SOC truly is a theory of successful lifespan development. Ebner and coauthors (2006) found that older adults who use compensatory strategies and express maintenance motivations also have higher well-being. The opposite appears to be true for younger adults: those with maintenance motivations (instead of development motivations) exhibited poorer well-being. The causal pathway of this association is unknown, and it is likely that lower well-being changes people's orientation towards loss prevention, not vice-versa. In other words, the younger adults who expressed maintenance motivations may have done so because they were in poorer health in the first place.

In sum, SOC theory has garnered empirical support from multiple avenues of research. Results show that adults do indeed experience a motivational shift from development towards maintenance and loss prevention, that this shift is accompanied by the increased use of compensatory strategies, and that the use of these strategies is actually linked to higher levels of well-being. It appears as though SOC is a robust theory of successful lifespan development.

SOC Theory Applied to Vocational Behavior. A number of studies have brought ideas from SOC into the realm of organizational research. Kooij and coauthors (2011)

showed that, in line with SOC tenets, motivation regarding obtaining training and promotions (i.e., development-related motives) does indeed decrease with age. Interestingly, a more complex relationship was found for motivation regarding job security (i.e., a maintenance-related work motive): it increased with age for white-collar workers, as SOC would predict, but not for blue-collar workers. The authors suggested this finding may be grounded in the fact that blue-collar jobs are more physically or psychologically demanding, and employees who have these jobs may have high security motives irrespective of age.

Studies also show the use of SOC strategies is related to job performance in older employees. Yeung and Fung (2009) showed that, for employees aged 40 and above, those who were more likely to use compensatory strategies were better able to maintain their level of performance. Similar findings were echoed by Abraham and Hansson (1995), who found the same relationship using self-ratings of performance, and by Bajor and Baltes (2003), who showed the relationship also exists using supervisory ratings of performance.

There appear to be many other positive outcomes of the use of SOC strategies. Studies have shown that older individuals who use SOC strategies at work perceive that they have more job-related opportunities (Zacher & Frese, 2011). Use of SOC strategies also appears to predict work-related well-being (i.e., satisfaction with work, emotional balance regarding work), assessed using both cross-sectional (Wiese, Freund, & Baltes, 2000) and longitudinal methodologies (Wiese, Freund, & Baltes, 2002). In sum, the introduction of SOC theory into organizational research has met success, with studies showing that work-related motivations change with age and that the use of SOC

strategies predicts a number of positive outcomes such as the maintenance of job performance and work-related well-being.

Age Moderates the Relationship between Affective Commitment and HCHRP

As outlined above, research has demonstrated a relationship between affective commitment and employee satisfaction with various HCHRP (Kooij, 2010; Mathieu & Zajac, 1990; Meyer et al., 2002). The correlations are not very strong, rarely larger than .5, suggesting the possible presence of moderating variables. The tenets of SOC suggest it is likely that employee age acts as a moderator of this relationship. Considering that increasing age brings a motivational shift from development and growth to maintenance and regulation (Ebner et al., 2006; Heckhausen, 1997), SOC suggests that younger and older employees will respond differently to the presence of various HCHRP. In other words, even though an overall positive relationship exists between affective commitment and employee satisfaction with HCHRP, its strength will vary across age: some HCHRP will be better predictors of affective commitment in older employees whereas other HCHRP will have higher associations in younger employees. This line of thinking culminated in the following study hypotheses.

Overall relationship between HCHRP and affective commitment. A number of studies have shown that when employees are satisfied with organizational HCHRP, they are more loyal and committed to their organization (e.g., Kooij, 2010; Mathieu & Zajac, 1990; Meyer et al., 2002). Research suggests HCHRP make employees feel cared for and supported by their organizations, which leads to a desire to reciprocate and increases feelings of obligation and commitment toward the organization (Chiang, et al., 2011;

Coyle-Shapiro et al., 2004; Eisenberger et al., 1986; Hannah & Iverson, 2004). In line with this research:

Hypothesis 1: There will be a positive relationship between employees' affective commitment and their overall satisfaction with their organization's HCHRP.

Employee Age as a Moderator of Maintenance-Related HCHRP. The present study regarded maintenance-related HCHRP to be organizational practices and policies aimed at ensuring employees' safety, well-being, and continued job performance. In line with previous research (Bal, Kooij, & De Jong, 2013; Conway, 2004; Kooij et al., 2013), these include HCHRP oriented around providing job security, job flexibility, opportunities for providing feedback, and work-life balance. Considering the motivational shift that occurs as a result of aging (Ebner et al., 2006; Heckhausen, 1997), these maintenance-related HCHRP will become increasingly appealing as individuals age. Consequently, the link between affective commitment and employees' satisfaction with these HCHRP will be stronger in older employees. Specifically, the following was hypothesized:

Hypothesis 2: Employee age will moderate the relationship between affective commitment and satisfaction with *work/life balance* (Hypothesis 2a), *job security* (Hypothesis 2b), *job flexibility* (Hypothesis 2c) and *feedback opportunities* (Hypothesis 2d) insofar as the strength of the relationship will increase with age.

There are very few studies that have specifically tested similar hypotheses, and they have met with mixed success. Kooij and coauthors (2013) found that the link between

maintenance-related HCHRP and affective commitment was stronger for older employees; however, other studies present mixed or contradicting results (e.g., Conway, 2004; Finegold, Mohrman, & Spreitzer, 2002; Kooij et al., 2010). The lack of agreement among the studies may stem from a number of sources, including different study populations and construct validity issues (i.e., varying ways of assessing HCHRP).

Employee Age as a Moderator of Development-Related HCHRP. The present study defined development-related HCHRP as organizational practices and policies aimed at encouraging employee development and accomplishment so that employees achieve higher levels of work-related functioning and job performance. In line with previous research (Bal et al., 2013; Conway, 2004; Kooij et al., 2013), these include HCHRP practices that encourage formal training, opportunity for advancement, the full use of one's skills and abilities, and challenging and interesting work. Unlike with maintenance-related HCHRP, the shift in motivation that occurs with increasing age will make this set of HCHRP less appealing. As a result, the link between affective commitment and employees' satisfaction with these HCHRP will be stronger in younger employees. Specifically, the following was hypothesized:

Hypothesis 3: Employee age will moderate the relationship between affective commitment and satisfaction with *training opportunities* (Hypothesis 3a), *advancement opportunities* (Hypothesis 3b), *full use of one's skills and abilities* (Hypothesis 3c) and *level of challenge in one's job* (Hypothesis 3d) insofar as the strength of the relationship will decrease with age.

As with studies that examined the degree to which age moderates the relationship between affective commitment and maintenance-related HCHRP, research on age's moderation of the relationship between affective commitment and development-related HCHRP is equally inconsistent. Kooij and coauthors (2013) showed that the correlations between affective commitment and various development-related HR practices were higher for younger employees. Other research has found that desire to learn new skills is significantly lower among older adults compared to younger adults (Kanfer & Ackerman, 2000). On the other hand, some studies find no moderating effects of employee age (Conway, 2004; Finegold et al., 2002) or curvilinear age effects (Kooij et al., 2010). As with maintenance-related HCHRP, the inconsistency of results may be attributable to issues regarding study methodology, such as the variability in methods of assessment or the specific sample of employees used in the study.

Considering that studies have shown other employee-level variables to moderate the affective commitment-HCHRP relationship, such as employee's intrinsic motivation (Dysvik & Kuvaas, 2008; Kuvaas & Dysvik, 2010) or job tenure (Conway, 2004), the present study also explored, without specific hypotheses, the extent to which gender, job tenure, and job type also moderate the HCHRP-affective commitment relationship. Specifically, the study explored the significance of the two-way interaction concerning job tenure (i.e., tenure-by-HCHRP), as well as three-way interactions concerning gender (i.e., gender-by-age-by-HCHRP) and job type (i.e., job type-by-age-by-HCHRP).

Method

Participants

Participants were randomly selected from a pool of customer-facing employees of a multinational transportation company headquartered in the U.S. Participants were contacted via a company email which explained the purpose of the study and provided information on how to access and complete the survey. Of the 9,022 employees invited to participate, 6,360 volunteered to take part in the study (70.1% response rate). Sixty-eight percent were male. The sample was geographically diverse, representing over 100 cities throughout the U.S. The ethnic distribution was 66.2% Caucasian, 19.6% African American, 11.0% Hispanic, and 2.6% Asian. Participant age ranged from 19 to 70 with a mean age of 45.51 years ($SD = 9.15$). Average tenure was 7.21 years ($SD = 5.66$). Participants represented three broad job categories with the following O*Net titles (National Center for O*NET Development, 2013): Shipping, Receiving, and Traffic Clerks ($N = 1646$), Truck or Delivery Services Drivers ($N = 1619$), and Couriers and Messengers ($N = 3095$).

Measures

Study instruments were embedded in a broader organizational survey (53 items total) assessing variables such as employee commitment, well-being, customer-related satisfaction, and marketing effectiveness. Only measures relevant to the present research questions are described below.

Affective Commitment. A shortened version (eight items) of the Organizational Commitment Questionnaire (OCQ, Mowday et al., 1979; Porter et al., 1974) was used to assess employees' affective commitment. The OCQ is a one-factor scale that assesses

employees' feelings of loyalty, value congruence, and willingness to exert extra effort on behalf of their organization. It is accepted as a measure of attitudinal commitment and correlates highly ($\rho = .88$) with Meyer and Allen's (1991, 1997) affective commitment subscale of the Three Component Scale. Prior to implementation, the OCQ items were modified by substituting the word "organization" with the actual name of the participants' employer. For example, the item "I really care about the fate of this organization" was altered to "I really care about the fate of [ORGANIZATION NAME]." Furthermore, in accordance with research showing that reverse-worded survey items can create spurious secondary scale factors (e.g., Greenberger, Chen, Dmitrieva, & Farruggia, 2003; Merritt, 2012), negatively-valenced items were reworded in the positive direction. For example, the item "Deciding to work for this organization was a definite mistake on my part" was altered to "Deciding to work for [ORGANIZATION NAME] was a good decision." Each item is anchored on a 5-point Likert-type format with response options ranging from (1) *Strongly Disagree* to (5) *Strongly Agree*. Cronbach's alpha for the scale was .94, indicating that changes made to the scale (i.e., inserting the name of the organization and rewording negatively phrased items) did not affect scale reliability. Scale items are presented in Appendix A.

Attitudes towards HCHRP practices. Employees' perceptions of various HCHPRs were assessed using an eight-item measure. Scale items were derived by examining content of the original version of the Job Description Index (JDI, Smith, Kendall, & Hulin, 1969) and by identifying other HCHPRs discussed in the high commitment management literature. The scale assessed employees' satisfaction with the eight HCHPRs related to Hypotheses 2 to 9. Items are presented in Appendix B. Each

item is anchored on a 5-point Likert-type scale with response options ranging from (1) *Very Dissatisfied* to (5) *Very Satisfied*. The straightforward wording of the items gives the scale high face validity and provides assurance that the scale is a legitimate measure of employees' satisfaction with the eight HCHRP.

Procedure

Data collection occurred at three different time points: January 2 - January 17 of 2007 (1,513 employees), February 12 - February 28 of 2009 (2,327 employees), and March 1 -16 of 2011 (2,530 employees). Data collection procedures and materials were identical across the three administrations. The survey was hosted on the Internet and employees who volunteered to participate were provided access via an Internet link/address. Participation was voluntary and the surveys were completed during work hours. Upon accessing the survey, participants were taken to an instruction page that explained the purpose of the questionnaire, assured confidentiality of responses, and described where collected data would be stored. The verbatim instructions are presented in Appendix C. Although study instruments were embedded in a broader organizational survey, participants first completed the affective commitment scale (OCQ) and then the scale assessing satisfaction with various HCHRP. The completion of the entire survey took about 20 minutes. Demographic data were collected separately by the researchers at the culmination of the study by accessing the organization's HR databases. Included demographic variables were age, gender, ethnicity, job tenure, and job location.

Statistical Analyses

Hypotheses were tested using path analyses conducted in AMOS nested within SPSS 22 (IBM Corp., 2013). Following Aiken and West (1991) and Dawson (2013),

predictor variables were standardized before calculating interaction terms and interactions were plotted using points representing one standard deviation above and below the mean. A separate analysis was conducted for each hypothesis. In each analysis, affective commitment served as the outcome variable. Employee age, satisfaction with one of the specific HCHRP, and the age-by-HCHRP interaction term served as the predictors of primary interest given the study's hypotheses. Due to the fact that some studies (e.g., Conway, 2004) have found tenure to also moderate the affective commitment-HCHRP relationship, tenure and the tenure-by-HCHRP interaction term were also included as predictors. Additionally, to examine whether gender and job type (Shipping, Receiving, and Traffic Clerks vs. Truck or Delivery Services Drivers vs. Couriers and Messengers) affect the ability of age to moderate the affective commitment-HCHRP relationships, multiple-group analyses were performed for each hypothesis (i.e., three-way interactions were also tested). Covariances were drawn between all predictors.

As an example, Figure 1 shows the path model testing Hypothesis 2a. Before estimating final regression weights, each model was first trimmed by removing non-significant paths and the model was re-run. The significance of three-way interaction effects (i.e., multi-group analyses of gender and job type) was examined by computing Chi-square difference tests comparing unconstrained (i.e., all paths free to estimate) to unconstrained models (i.e., the age-by-HCHRP interaction term was fixed across groups).

Results

Descriptive Statistics

Table 1 presents means and standard deviations for affective commitment and each HCHRP item, as well as the HCHRP composite (i.e., all HCHRP combined).

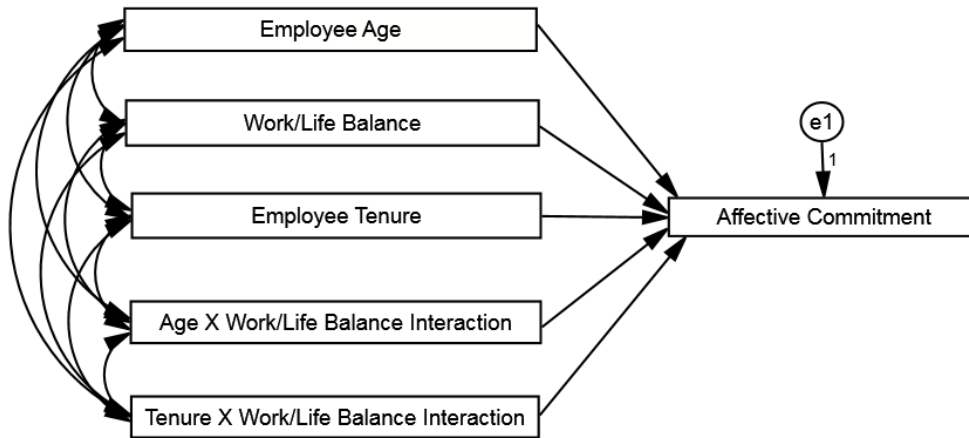


Figure 1. Path model testing Hypothesis 2a.

Overall, employees reported high levels of commitment, averaging 4.21 on a 5-point scale, with the most frequent answer being “Strongly Agree.” Employees also scored highly on the HCHRP items, with item means ranging from 3.60 to 4.00. The composite HCHRP mean was 3.84, with the typical answer being “Satisfied.”

Table 2 shows relationships among study variables. The correlation between

Table 1

Descriptive Statistics for Affective Commitment and HCHPRs

Measure	Mean	SD
Affective Commitment	4.21	.26
HCHPRs		
Work/Life Balance	3.78	1.07
Job Security	3.91	1.10
Job Flexibility	3.87	1.15
Feedback Opportunities	3.85	1.13
Training Opportunities	3.77	1.08
Advancement Opportunities	3.60	1.17
Use of Skills and Abilities	4.00	1.03
Level of Challenge	3.98	.94
HCHRP Composite	3.84	.84

affective commitment and the composite HCHRP variable was .66 ($p < .01$); thus, Hypothesis 1, stating that a positive relationship would be found between employees' affective commitment and overall satisfaction with HCHRP, was confirmed.

Correlations between affective commitment and individual HCHRP items were all statistically significant and ranged from .49 to .56, which is slightly higher than reported by previous research (e.g., Conway, 2004; Kooij et al, 2013). These results indicate that, overall, satisfaction with HCHRP is indeed associated with higher levels of employee commitment. Of note, the correlation between affective commitment and age was not significant ($r = -.01$), nor was the correlation between commitment and tenure ($r = -.02$).

Table 2

Correlations between Affective Commitment, HCHRP, Age, and Tenure

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
1. Affective Commitment	--	.50**	.52**	.51**	.50**	.51**	.49**	.56**	.53**	.66**	-.01	-.02
2. Work/Life Balance		--	.47**	.50**	.47**	.52**	.51**	.52**	.51**	.72**	.04**	.03*
3. Job Security			--	.52**	.55**	.49**	.50**	.53**	.47**	.73**	-.07**	-.04**
4. Job Flexibility				--	.59**	.57**	.54**	.76**	.49**	.80**	-.06**	-.03**
5. Feedback Opportunities					--	.58**	.54**	.60**	.51**	.78**	-.06**	-.05**
6. Training Opportunities						--	.71**	.62**	.58**	.82**	-.04**	-.03**
7. Advancement Opportunities							--	.61**	.54**	.80**	-.05**	-.02
8. Use of Skills and Abilities								--	.62**	.84**	-.03*	-.01
9. Level of Challenge									--	.75**	-.01	-.03*
10. HCHRP Composite										--	-.05**	-.03*
11. Age											--	.36**
12. Tenure												--

Note. **Correlation significant at the 0.01 level (2-tailed); *Correlation significant at the 0.05 level (2-tailed)

Tests of Moderation of Maintenance-Related HCHRP (Hypotheses 2a to 2d)

Hypothesis 2a. Hypothesis 2a examined the extent to which the relationship between affective commitment and the HCHRP regarding work/life balance is moderated by age. The final trimmed path model explained 25.7% of variance in affective commitment and, as shown in Table 3, contained three significant predictors: work/life balance was by far the strongest predictor ($\beta = .51, p = .001$), followed by the age-work/life balance interaction term ($\beta = .06, p = .001$) and tenure ($\beta = -.03, p = .021$). It is noteworthy that, although the interaction was statistically significant, it added only .3% of explanatory variance to the overall model and represents a weak effect. Multi-group analyses produced no significant effects: the analysis across the gender variable revealed that the three-way interaction among gender, age, and work/life balance HCHRP was not significant, $\chi^2(3) = 4.81, p = .251$; the analysis across the job type variable revealed that the three-way interaction among job type, age, and work/life balance was also not significant, $\chi^2(8) = 5.63, p = .689$.

Table 3

Test of Moderation for Work/Life Balance HCHRP

Predictor	β	C.R.	p	Model R^2
Work/Life Balance	.51	46.58	.001	.253
Tenure	-.03	-2.79	.021	.257
Age Interaction Term	.06	5.15	.001	.257

Figure 1 shows a plot of the age by work/life balance HCHRP interaction. The interaction is present in the hypothesized direction, with the slope being slightly higher

for the high age group than for the low age group. In other words, the correlation between affective commitment and the work/life balance HCHRP was stronger in older employees than in younger employees.

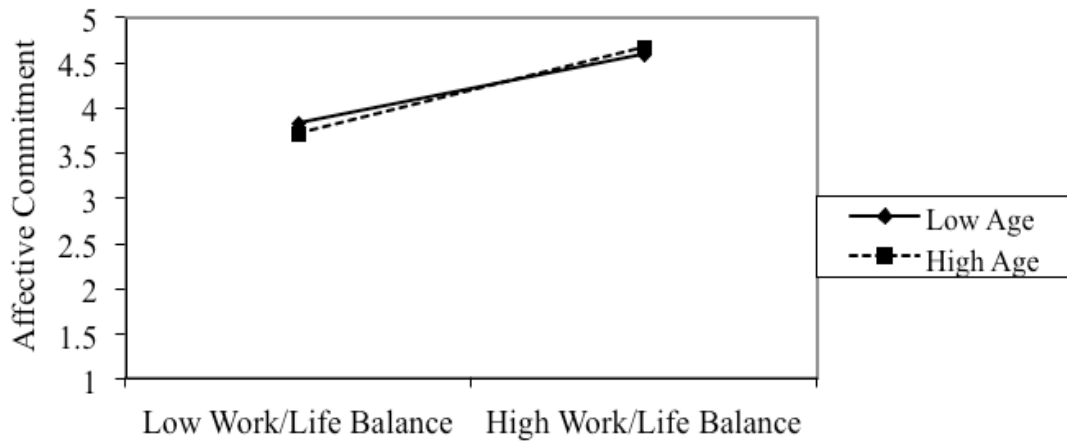


Figure 2. Moderation of the affective commitment-work/life balance relationship.

Hypothesis 2b. Hypothesis 2b examined to the extent to which the relationship between affective commitment and the HCHRP regarding job security is moderated by age. Similar to the analysis exploring work/life balance, the final trimmed path model explained 27.5% of variance in affective commitment. Table 4 shows the model's significant predictors: satisfaction with the job security HCHRP was the strongest predictor ($\beta = .52, p = .001$), followed by the age-job security interaction term ($\beta = .06, p = .001$) and employee age ($\beta = .03, p = .013$). Similar to the analyses examining work/life balance, the age-job security interaction was significant but added only .3% explanatory variance in affective commitment.

Table 4

Test of Moderation for Job Security HCHRP

Predictor	β	C.R.	p	Model R^2
Job Security	.52	48.32	.001	.271
Age	.03	2.47	.013	.272
Age Interaction Term	.06	5.12	.001	.275

Figure 3 shows a plot of the affective commitment-job security interaction with employee age. As hypothesized, the slope is higher for the high age group than for the low age group, indicating that the correlation between affective commitment and the job security HCHRP was stronger for older employees.

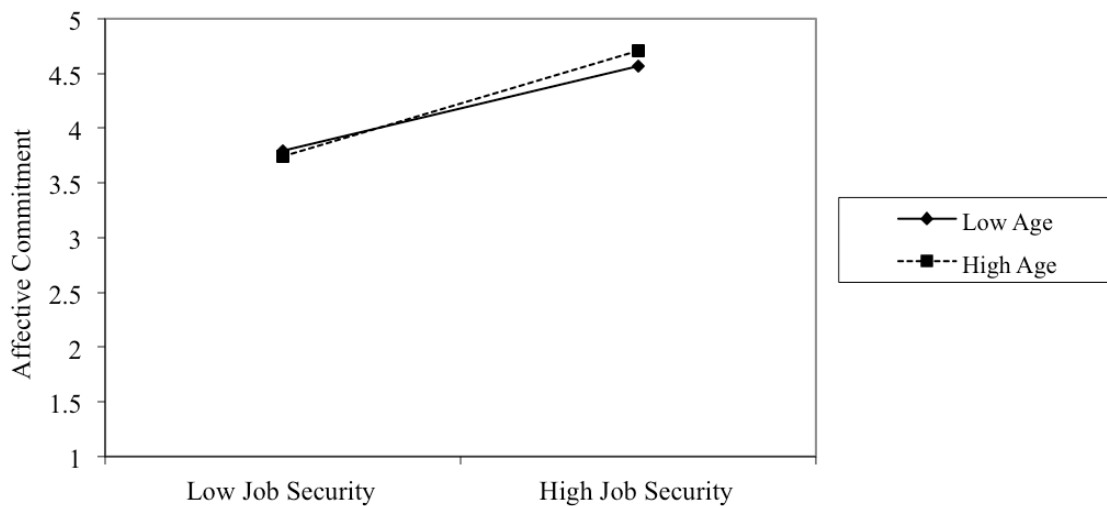


Figure 3. Moderation of the affective commitment-job security relationship.

Of note, multi-group analyses revealed a significant three-way interaction among gender, age, and job security, $\chi^2(1) = 4.81, p = .028$. As Figure 4 shows, the age by job security interaction was significant in the male group ($\beta = .08, p = .001$), but not in the female group ($\beta = .02, p = .342$).

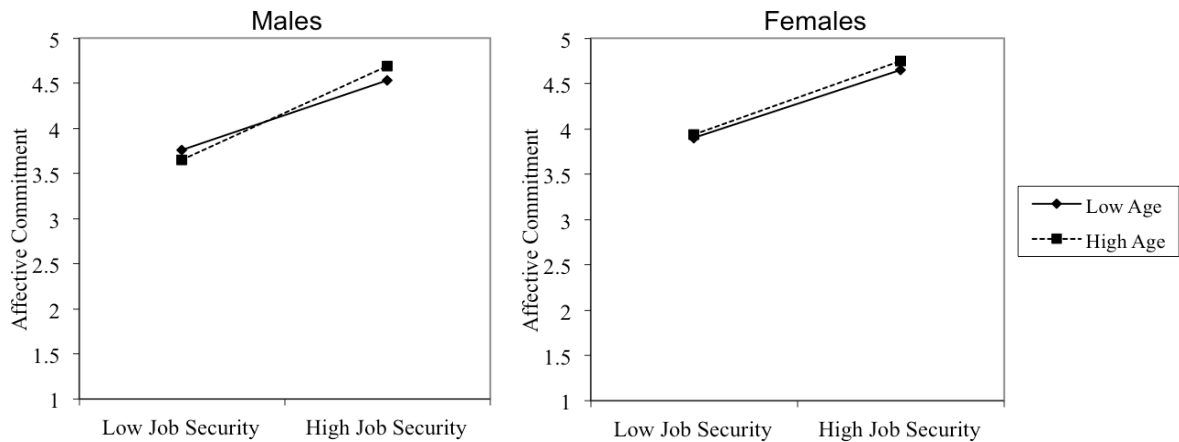


Figure 4. Three-way interaction among gender, age, and job security.

The multi-group analysis across the job type variable also revealed a significant three-way interaction among job type, age, and job security, $\chi^2(2) = 7.61, p = .022$. As Figure 5 shows, the age by job security interaction was significant for couriers and messengers ($\beta = .09, p = .001$) and for truck or delivery services ($\beta = .05, p = .018$) but not for shipping, receiving, and traffic clerks ($\beta = .01, p = .731$).

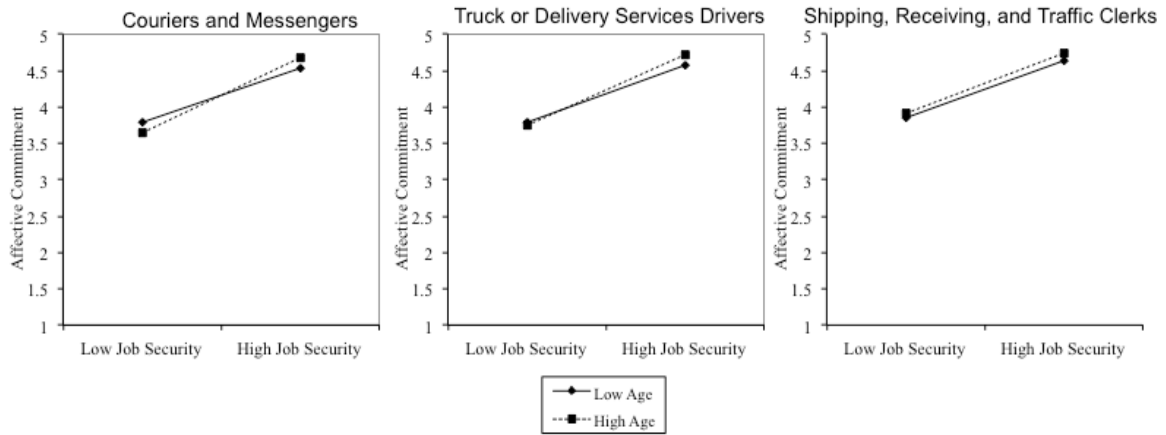


Figure 5. Three-way interaction among job type, age, and job security.

Hypothesis 2c. Hypothesis 2c tested whether employee age moderates the relationship between affective commitment and the job flexibility HCHRP. Table 5 shows the final trimmed path model explained 26.0% of variance in affective commitment. The model’s significant predictors were satisfaction with job flexibility ($\beta = .51, p = .001$), employee age ($\beta = .03, p = .011$), and the age-job flexibility interaction ($\beta = .03, p = .008$). As with the analyses above, although the interaction effect was statistically significant, it was small and added less than one-tenth of a percent in explanatory variance in affective commitment (see Figure 6). The three-way interaction among gender, age, and job flexibility HCHRP was not significant, $\chi^2(1) = .06, p = .801$,

Table 5

Test of Moderation for Job Flexibility HCHRP

Predictor	β	C.R.	p	Model R^2
Job Flexibility	.51	46.84	.001	.259
Age	.03	2.54	.011	.260
Age Interaction Term	.03	2.64	.008	.260

and neither was the three-way interaction among job type, age, and job flexibility, $\chi^2(2) = 4.36, p = .113$.

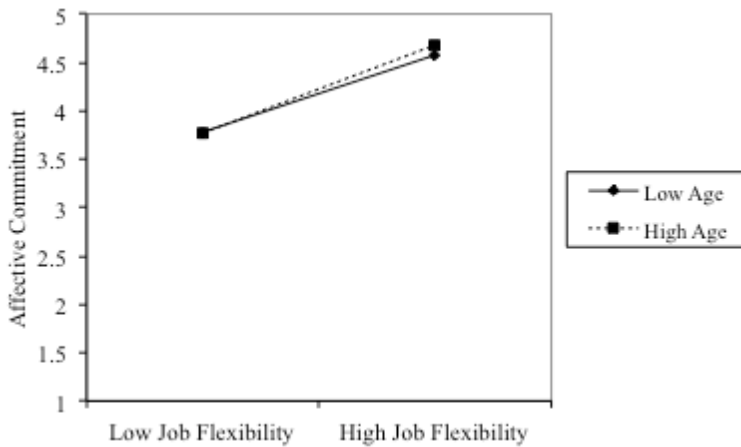


Figure 6. Moderation of the affective commitment-job flexibility relationship.

Hypothesis 2d. Hypothesis 2d examined whether the relationship between affective commitment and the HCHRP regarding feedback opportunities will increase with employee age. Table 6 presents the results of the final trimmed model: there were only two statistically significant predictors of affective commitment, the feedback opportunity HCHRP ($\beta = .52, p = .001$) and the age by feedback opportunity interaction ($\beta = .05, p = .001$). The main effect of age was not significant ($\beta = -.01, p = .601$). The model predicted 26.5% of variance in affective commitment. As with the analyses above, it is notable that the interaction effect was small and added only .2% of explanatory variance to the model; however, the interaction was present in the hypothesized direction, with the slope being higher for the older employees (see Figure 7).

Table 6

Test of Moderation for Feedback Opportunities HCHRP

Predictor	β	C.R.	p	Model R^2
Feedback Opportunities	.52	33.03	.001	.262
Age Interaction Term	.05	3.251	.001	.265

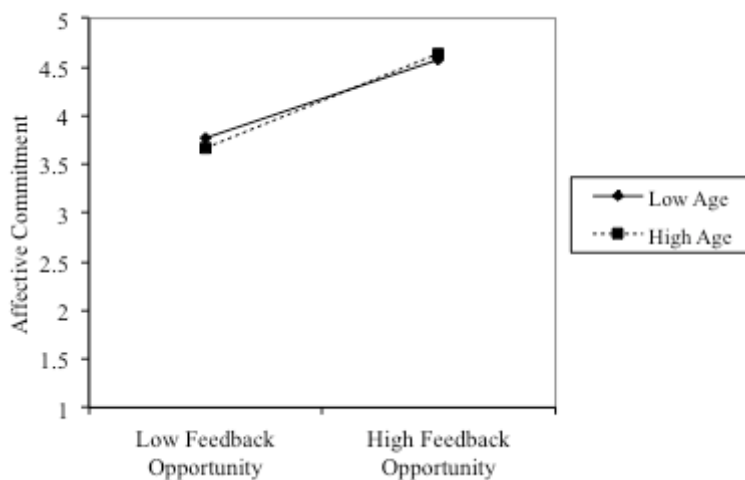


Figure 7. Moderation of affective commitment-feedback opportunity.

Multi-group analyses produced no significant effects: the three-way interaction among gender, age, and feedback opportunities was not significant, $\chi^2(5) = 1.81, p = .874$; and neither was the job type by age by feedback opportunities interaction, $\chi^2(8) = 7.64, p = .465$.

Tests of Moderation of Development-Related HCRPs (Hypotheses 3a to 3d)

Hypotheses 3a to 3d were tested using the same procedure as used for Hypotheses 2a to 2d. Whereas Hypotheses 2a to 2d predicted that age would positively moderate the relationship between affective commitment and maintenance-related HCRPs,

Hypotheses 3a through 3d predicted negative moderation. In other words, the hypotheses stated that the strength of the correlations between commitment and the development-related HCHRP would decrease with employee age.

Hypothesis 3a. Hypothesis 3a examined the moderation of the affective commitment-training opportunities HCHRP relationship. As shown in Table 7, the final trimmed model explained 26.6% of variance in affective commitment and comprised only one significant predictor, the training opportunities HCHRP ($\beta = .52, p = .001$). The age by training opportunity interaction ($\beta = .02, p = .078$) was not significant. These results have two implications: 1) in line with the HCHRP tested in hypotheses 2a to 2d, satisfaction with training opportunities is a strong predictor of affective commitment, and 2) unlike the other HCHRP, the relationship between affective commitment and the training opportunities HCHRP is not moderated by employee age.

Table 7

Test of Moderation for Training Opportunities HCHRP

Predictor	β	C.R.	p	Model R^2
Training Opportunities	.52	47.74	.001	.265
Age Interaction Term	.02	1.76	.078	.266

Multi-group analyses produced no significant effects: the three-way interaction among gender, age, and the training opportunity HCHRP was not significant, $\chi^2(5) = 3.69, p = .751$. The analysis across the job type variable revealed that the three-way

interaction among job type, age, and the training opportunity HCHRP was also not significant, $\chi^2(8) = 3.74, p = .880$.

Hypothesis 3b. Hypothesis 3b tested if age moderates the relationship between affective commitment and satisfaction with advancement opportunities. Table 8 shows that two predictors were included in the final trimmed model, the advancement opportunities HCHRP ($\beta = .49, p = .001$) and the age by advancement opportunities interaction term ($\beta = .02, p = .036$). The model explained 24.4% of variance in affective commitment.

Table 8

Test of Moderation for Advancement Opportunities HCHRP

Predictor	β	C.R.	p	Model R^2
Advancement Opportunities	.49	45.06	.001	.243
Age Interaction Term	.02	2.09	.036	.244

Of note, the interaction was not in the hypothesized direction. Figure 8 shows that the slope was higher for older, not younger, employees. In other words, the relationship between satisfaction with advancement opportunities and affective commitment was not stronger in younger workers, as hypothesized. It is important to highlight that, similar to the other significant age interactions, although the age by advancement opportunity interaction was statistically significant (and opposite to the hypothesized direction), it was trivial and explained only .1% of additional variance in commitment.

Multi-group analyses revealed that the gender by age by advancement opportunities HCHRP interaction was not significant, $\chi^2(1) = 2.14, p = .143$. Similarly,

the analysis examining the three-way interaction among job type, age, and advancement opportunities was also not significant, $\chi^2(2) = 2.45, p = .294$.

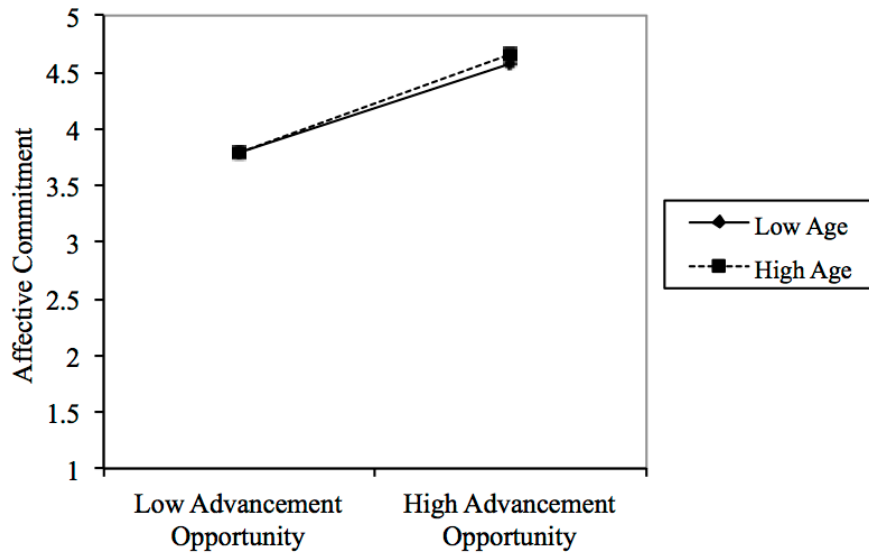


Figure 8. Moderation of affective commitment-advancement opportunity.

Hypothesis 3c. Hypothesis 3c examined whether the strength of the correlation between affective commitment and the HCHRP regarding full use of skills and abilities decreases with employee age. The final trimmed model explained 31.7% of variance in affective commitment, with the HCHRP regarding full use of skills and abilities being a much stronger predictor ($\beta = .56, p = .001$) than the age by skills and abilities interaction term ($\beta = .03, p = .009$).

Table 9

Test of Moderation for HCHRP Regarding Full Use of Skills and Abilities

Predictor	β	C.R.	p	Model R^2
Full Use of Skills and Abilities	.56	53.87	.001	.316
Age Interaction Term	.03	2.63	.009	.317

Similar to the results of Hypothesis 3b, although the interaction was statistically significant, it was both small (adding .1% of explanatory variance) and opposite to the hypothesized direction. Figure 9 shows that the slope was slightly higher for older employees, indicating that the correlation between affective commitment and the HCHRP regarding full use of one’s skills was weaker, not stronger, in younger employees.

Multi-group analyses revealed that neither the three-way interaction with gender [$\chi^2(5) = 6.07, p = .300$] nor the three-way interaction with job type were statistically significant [$\chi^2(8) = 11.55, p = .172$].

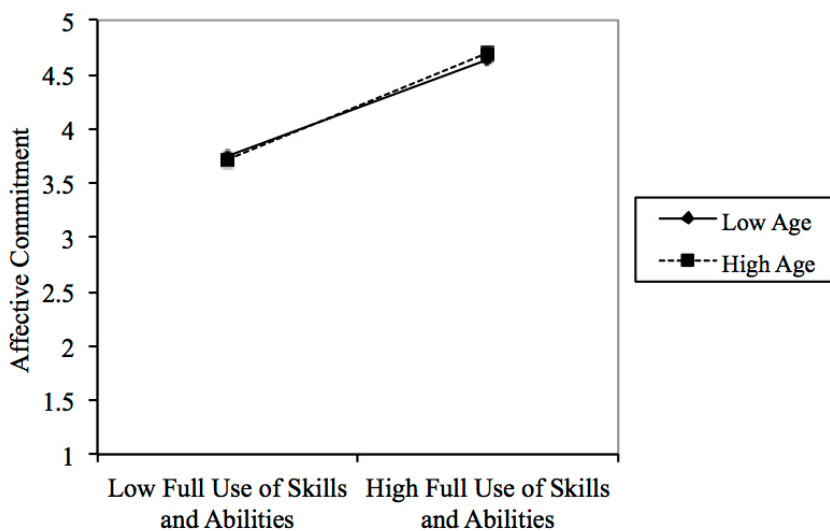


Figure 9. Moderation of affective commitment-full use of skills/abilities.

Hypothesis 3d. Hypothesis 3d examined whether the relationship between affective commitment and the HCHRP regarding level of challenge in one’s job is moderated by employee age. As shown in Table 10, the final trimmed model explained 29.0% of variance in affective commitment and comprised two significant predictors, the level of challenge HCHRP ($\beta = .54, p = .001$) and the age by level of challenge interaction ($\beta = .06, p = .001$). As with previous analyses, the interaction added very little additional explanatory variance in affective commitment (.3%).

Table 10

Test of Moderation for HCHRP Regarding Level of Challenge in Job

Predictor	β	C.R.	p	Model R^2
Level of Challenge in Job	.54	50.45	.001	.287
Age Interaction Term	.06	5.25	.001	.290

Also in accordance with previous analyses, the interaction was opposite to the hypothesized direction. Figure 10 shows that the slope was higher, albeit very slightly, for older employees. In other words, the strength of the correlation between affective commitment and the HCHRP related to level of challenge was stronger in older, not younger workers.

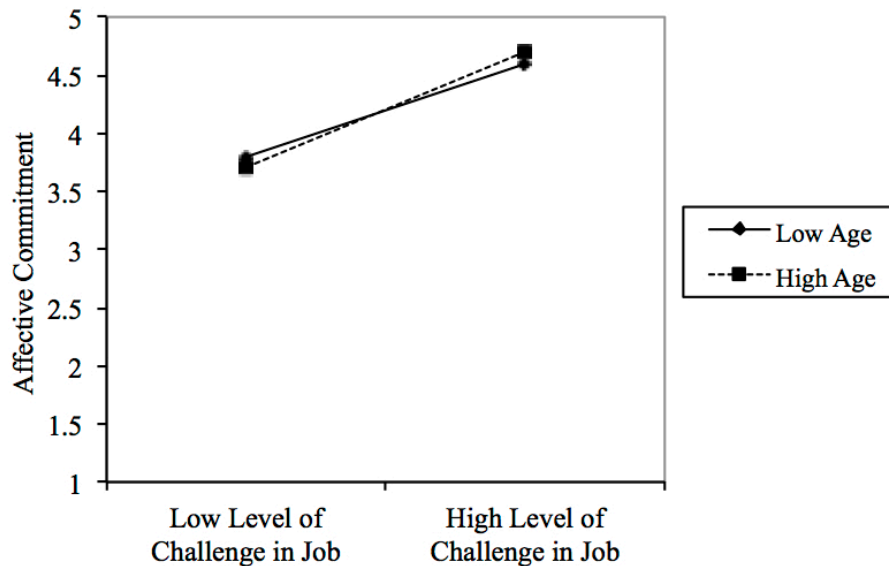


Figure 10. Moderation of the affective commitment-level of challenge in job.

Multi-group analyses produced no significant effects: the three-way interaction among gender, age, and the HCHRP regarding level of challenge in one’s job was not significant, $\chi^2(5) = 4.60, p = .466$. The analysis across the job type variable revealed that the three-way interaction among job type, age, and the HCHRP regarding level of challenge in one’s job was also not significant, $\chi^2(8) = 10.23, p = .250$.

Discussion

The present study examined the degree to which employee age moderates the relationship between employee satisfaction with various HCHRP and affective commitment. The study proposed that a overall significant positive correlation would be found between affective commitment and satisfaction with HCHRP; however, this correlation would be moderated by age insofar as satisfaction with HCHRP aimed at maintenance and regulation (e.g., job security, work/life balance) would be more strongly linked to affective commitment in older employees, whereas satisfaction with HCHRP

aimed at growth and development (e.g., training, opportunity for advancement) would be more strongly linked to affective commitment in younger employees. The results provide partial support for the hypotheses, which are summarized below.

Overall Relationship between HCHRP and Affective Commitment (Hypothesis 1)

There was a strong correlation between affective commitment and the composite HCHRP variable ($r = .66$), providing support for Hypothesis 1. Furthermore, individual correlations between affective commitment and each HCHRP ranged from .49 to .56, adding further evidence that employees' satisfaction with HCHRP are indeed linked to their feelings of loyalty and commitment. These results corroborate existing research (e.g., Kooij et al, 2013; Meyer et al., 2002) and offer support for the idea that organizations seeking to foster commitment and loyalty in their employees ought to focus on providing HCHRP. It is important to point out, however, that the correlational nature of the data cannot make a statement about the direction of the relationship and readers should hesitate to conclude that HCHRP lead to higher affective commitment. This issue is discussed in more detail in the limitations section below.

Tests of Moderation of Maintenance-Related HCHRP (Hypotheses 2a to 2d)

Four analyses examined if employee age moderated the relationships between affective commitment and maintenance-related HCHRP related to work/life balance (Hypothesis 2a), job security (Hypothesis 2b), job flexibility (Hypothesis 2c), and the availability of feedback opportunities (Hypothesis 2d). Each hypothesis proposed that the strength of the relationship between affective commitment and the maintenance-related HCHRP would increase with age. The results provide support for the hypotheses, as significant interactions were found in all four analyses. Furthermore, all interactions were

in the hypothesized direction, with the correlations between affective commitment and the HCHRP's increasing with age. The findings thus indicate that, as predicted by SOC theory, maintenance-related HCHRP's are more important to and sought out by older employees.

It is important to note, however, that although the analyses produced statistically significant interactions, the size of the effects was very small, adding only .1% to .3% of explanatory variance in affective commitment. From an applied perspective, these are trivial R-square changes. The reason these interactions were statistically significant probably lies in the fact that the study used a large sample size (over 6000 employees), which resulted in small standard errors during hypothesis testing. In sum, although the results show that age significantly moderated the affective commitment-maintenance HCHRP relationships, the strength of the moderation is not impressive and ought to be interpreted with caution. This sentiment is shared by Finegold and coauthors (2002), who after finding weak moderation age effects concluded that attention devoted to employee age differences has been exaggerated.

It is noteworthy that the analysis regarding job security (Hypothesis 2b) uncovered two three-way interactions. First, the age by job security interaction was significant for males but not for females. In other words, it appears as though job security is especially important (and leads to higher commitment) in older male workers, but not necessarily for older female workers. Given the weak effect size of the interaction (β was .09 in males and .02 in females), this finding does not carry important practical implications. Furthermore, the direction of the interaction was the same for both males

and females (i.e., the relationship became stronger with age), but the female group simply failed to reach statistical significance ($p = .342$).

Second, a three-way interaction was found among job type, age, and job security. The interaction was significant for two of the three job types (couriers and messengers; truck or delivery services drivers) but not for the third (shipping, receiving, and traffic clerks). A possible reason for this finding may lie in the fact that the first two job types are more physically demanding and may cause older workers to worry about maintaining adequate job performance with increasing age. For these employees, the presence of HCHRP that assure job security may be especially important and, consequently, lead to higher levels of commitment. The same may not be true for shipping, receiving, and traffic clerks who have less physically demanding jobs that they feel they'll be able to perform adequately with increasing age. That said, as with the three-way gender interaction discussed above, the effect size of the interaction is quite small and any interpretation ought to be done with caution.

Tests of Moderation of Development-Related HCHRP (Hypotheses 3a to 3d)

Four analyses examined the degree to which employee age moderated the relationships between affective commitment and development-related HCHRP related to training opportunities (Hypothesis 3a), advancement opportunities (Hypothesis 3b), the full use of one's skills and abilities (Hypothesis 3c), and level of challenge in one's job (Hypothesis 3d). Each hypothesis proposed that the strength of the relationship between affective commitment and the maintenance-related HCHRP would decrease with age.

The results fail to provide support for the hypotheses: although significant age interactions were found in three of the four analyses (i.e., no interaction was found for

training opportunities), the interactions were opposite to the hypothesized direction. In other words, the correlations between affective commitment and these development-related HCHRP increased, not decreased, with age. The findings thus indicate that, contrary to predictions of SOC theory, development-related HCHRP are not especially important to and sought out by younger employees. In fact, it appears as though they are more sought out by older employees. Similar to the results of hypotheses 2a to 2d, the effect sizes of these interactions were very small, adding between .1% to .3% of explanatory variance in affective commitment. From a practical standpoint, these interactions are not robust enough for organizations to take them into account when making HR decisions.

It is also noteworthy that, despite being included in every model, tenure was a significant predictor of affective commitment in only one analysis (Hypothesis 2b regarding work/life balance), and no analysis revealed a significant tenure by HCHRP interaction. Furthermore, the correlation between affective commitment and tenure was non-significant ($r = -.02$). These findings suggest the amount of time an employee has worked in an organization has little bearing on the relationships between commitment and satisfaction with various HCHRP.

In sum, the results provide partial support for the study's nine hypotheses. A strong correlation was found between affective commitment and employees' satisfaction with HCHRP, supporting Hypothesis 1. Age was found to significantly moderate the relationship between affective commitment and the four maintenance-related HCHRP, supporting hypotheses 2a to 2d. No support was found for Hypotheses 3a to 3d, which examined age's moderation of the relationship between affective commitment and

development-related HCHRP. In fact, for three of the four hypotheses (3b to 3d), results revealed a significant moderation opposite to the hypothesized direction. The relationship between affective commitment and satisfaction with these development-related HCHRP increased with age.

In all, results show that for seven out of the eight HCHRP examined in the present study, the strength of the relationship between affective commitment and the HCHRP *increased* with age. More importantly, the effect sizes of all interactions were small enough to be considered trivial. The results do not provide empirical support for SOC theory. If, as purported by SOC, increasing age brings a motivational shift toward maintenance and away from development, this shift is either slight or it does not manifest itself in the workplace, at least for the types of employees who participated in this study. Similar conclusions can be made from the results of other studies that also failed to find across-the-board moderating age effects (e.g., Conway, 2004; Finegold et al., 2002; Kooij et al., 2010). Thus, although SOC theory has garnered a lot of empirical support outside of organizational research, it remains to be seen whether its tenets can be applied to explain vocational behavior.

Practical Implications

The traditional perspective regarding HCHRP posits that there exists a universal set of best practices that any organization can use to foster commitment and loyalty in its employees (Pfeffer, 1994; Walton, 1985; Wright & Boswell 2002). The present study was designed to provide empirical evidence as to whether a more nuanced approach, one that takes into account employee age, may be more appropriate for organizations attempting to foster commitment in their employees. Taking all the findings into

consideration, the results do not provide convincing evidence that the correlations between affective commitment and employee satisfaction with HCHRP vary strongly with age and, consequently, that the traditional best-practice view of HCHRP is shortsighted. The lack of moderating age effects found in the present study suggest that organizations need not take into account employee age when making strategic decisions about HCHRP.

That said, it is important to point out that the study's inability to find moderating effects does not necessarily lend support to the best-practice view of HCHRP. As mentioned previously, existing research has shown that the affective commitment-HCHRP relationship is moderated by variables such as employee intrinsic motivation (Dysvik & Kuvaas, 2008; Kuvaas & Dysvik, 2010), the quality of the employee-organization relationship (Kuvaas, 2008), and an employee's family responsibilities (Scandura & Lankau, 1997). Thus, although the present study does not offer evidence that organizations should consider employee age when making strategic HCHRP decisions, organizations would likely benefit from focusing on these other employee-level variables because they identify conditions under which specific HCHRP will exert their maximum effect.

Limitations

Although the results of the present study have important implications for organizations seeking to foster affective commitment, the study has a few notable limitations. First, as mentioned previously, the correlational nature of the collected data cannot address the direction of the relationship between affective commitment and employee satisfaction with HCHRP. It is intuitive that employees' satisfaction with

HCHPRs causes higher loyalty and commitment to their organization. However, it is also foreseeable that employees who find themselves loyal to their organization will provide higher HCHRP ratings. According to self-perception theory of attitude formation (Bem, 1972) and cognitive dissonance theory (Festinger, 1957), individuals are motivated to find reasons for their attitudes. An employee who feels loyal to an organization could therefore justify his or her attitude by giving high HCHRP ratings. Thus, the strong correlation between affective commitment and employee satisfaction with HCHRP does not necessarily mean that organizations that promote HCHRP will see equally strong increases in employee commitment. As mentioned previously, cross-lagged longitudinal research has attempted to tease apart a similar issue and found evidence that perceived organizational support chronologically precedes affective commitment (Rhoades, Eisenberger, & Armeli, 2001). Thus, it is likely that satisfaction with an organization's HCHRP leads to employee commitment and loyalty rather than the reverse.

Regardless, although the issue of directionality is legitimate in the context of the present study, it is also somewhat of a moot point. Aside from Hypothesis 1, the rest of the study's hypotheses focused on the moderation of the affective commitment-HCHRP relationship. Whether or not satisfaction with HCHRP leads to increased commitment, or vice versa, does not affect the analyses examining the presence of moderation by employee age.

The study's second limitation pertains to the fact that collected data come from self-report measures, which suggests that common method bias (e.g., response bias or social desirability bias) may have inflated the relationships between affective commitment and employee satisfaction with HCHRP. Previous research has

demonstrated inflation in self-ratings of job performance (Harris & Schaubroeck, 1988) and organizational citizenship behavior (Organ & Ryan, 1995). It is likely that in the present study the high correlations between employee satisfaction with HCHRP and affective commitment are partly attributable this bias. However, similar to the issue of directionality discussed above, this limitation is minor in the context of the current study because the study's primary goal was to test the moderation effects of employee age rather than to provide estimates of the strength of the affective commitment-HCHRP relationship. In other words, even if common method bias resulted in inflated ratings, there is no reason to believe that this bias would influence the presence of moderating age effects.

A third limitation of the study pertains to the possibility of cohort effects. Older and younger individuals not only differ in age, but also in the cultural and societal context in which they formed their values. As suggested by Scandura and Lankau (1997), two-career and single parent families are more common and accepted in recent generations, which could lead younger employees to have different views regarding HCHRP from employees from previous generations. The significant interactions found in the current study may thus be attributable to generational differences rather than to actual employee age. Future research should examine whether chronological age or other generational differences are driving these interactions.

Lastly, it has to be noted that the generalizability of the study's findings may be limited. Study participants were employees of a single transportation company headquartered in the U.S. Although the sample was large ($N = 6,360$) and geographically represented over 100 U.S. cities, it is unknown whether the results generalize to non-

transportation companies or to organizations located outside of the United States. Furthermore, study participants represented mostly blue-collar job types (e.g., delivery drivers, messengers, shipping clerks). Future studies ought to determine whether the results generated using this sample would hold had the sample comprised white-collar employees.

Conclusion

The present study examined the degree to which employee age moderates the relationship between employee satisfaction with various HCHRP and affective commitment. Results indicated that, although there was a strong overall correlation between affective commitment and satisfaction with HCHRP, employee age was a significant moderator of only the relationships between affective commitment and maintenance-related HCHRP. More importantly, the effect sizes the moderations were small, suggesting from a practical perspective that employee age is not a characteristic that organizations need to take into when making strategic decisions about HCHRP.

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Appendix A

Affective Commitment Scale Items

Please indicate your level of agreement with each statement by selecting one of the alternatives to the right of each statement. Use the following scale in making your ratings:

1 = *Strongly Disagree*

2 = *Disagree*

3 = *Neither Agree nor Disagree*

4 = *Agree*

5 = *Strongly Agree*

1. I am proud to tell others that I am part of [ORGANIZATION NAME].
2. [ORGANIZATION NAME] inspires the very best in me in the way of job performance.
3. I really care about the fate of [ORGANIZATION NAME].
4. I am willing to put in a great deal of extra effort in order to help [ORGANIZATION NAME] be successful.
5. I am extremely glad that I chose [ORGANIZATION NAME] to work for over other companies I have considered in the past.
6. I find that my values and the values of [ORGANIZATION NAME] are very similar.
7. For me [ORGANIZATION NAME] is the best of all possible organizations for which to work.
8. Deciding to work for [ORGANIZATION NAME] was a good decision.

Appendix B

Items assessing satisfaction with various HCHRP

How satisfied are you with the following aspects of your employment? To answer, please use the scale below:

1 = *Very Dissatisfied*

2 = *Dissatisfied*

3 = *Neither Satisfied nor Dissatisfied*

4 = *Satisfied*

5 = *Very Satisfied*

1. Your job security.
2. Your work/life balance.
3. Your flexibility to choose your own approach to how best to perform your job.
4. Your opportunity to give feedback and make suggestions to management
5. The level of challenge in your job.
6. Your training opportunities to improve your skills or learn new skills.
7. Your opportunity to fully use your skills and abilities in your job.
8. Your opportunity to advance to other jobs.

Appendix C

Survey Instruction Page

Dear Survey Participant,

You have been randomly selected to participate in an important online survey, approved by your senior Operations management team. Because of the small number of employees selected, your participation is very important.

The goal of the survey is to assess employee loyalty and organizational commitment at [ORGANIZATION NAME]. The survey results will be provided to executive management with recommendations for improving loyalty.

Your responses to these questions are confidential. Your data will be stored in a secure database and no member of management will have access to your individual responses. Responses will be summarized and reported at the group/job level only.

The survey will take approximately 20 minutes to complete. Please complete the survey by [DATE]. If you have any questions please contact [HR REPRESENTATIVE NAME AND CONTACT INFORMATION]. Thank you in advance for your participation.

Please enter your Employee Number: _____

Click "**NEXT**" to go to the next page