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# Does Employee Age Moderate the Association Between HR Practices and Organizational Commitment? An Application of SOC Theory to Organizational Behavior

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## ABSTRACT

Drawing hypotheses from Selective Optimization with Compensation theory (SOC), we explored the degree to which employee age moderates the relationship between employees' satisfaction with high-commitment human resource practices (HCHRP; e.g., providing training, work–life balance) and organizational commitment. Customer-facing employees ( $N = 6,360$ ) from an international transportation company completed the Organizational Commitment Questionnaire (OCQ) and rated their satisfaction with various HCHRP offered by their organization. Results show that although there was a strong overall correlation between organizational commitment and satisfaction with various HCHRP ( $r = .66$ ), employee age was a significant moderator of only the relationships between organizational commitment and maintenance-related HCHRP (e.g., work–life balance) and not of development-related HCHRP (e.g., training opportunities). Furthermore, moderation effects had small effect sizes, suggesting that employee age is not a characteristic organizations need to consider when making strategic decisions about HCHRP.

## KEYWORDS

Organizational commitment; employee age; high commitment human resource practices; moderation

Organizational commitment, defined as the strength of employees' identification with and involvement in their organization (Allen & Meyer, 1990; Mowday, Steers, & Porter, 1979), has been linked to positive organizational outcomes such as higher job performance, organizational citizenship behavior, low absenteeism, and low turnover (Mackay, Allen, & Landis, 2017; Mathieu & Zajac, 1990; Meyer, Stanley, Herscovitch, & Topolnytsky, 2002). As a result, organizations try to foster employees' sense of commitment through high-commitment human resource practices (HCHRP; Conway, 2004; Kooij, Jansen, Dikkers, & De Lange, 2010), such as offering ongoing training, job security, opportunities for advancement, or flexible work schedules.

The traditional view of HCHRP takes a best-practice perspective, suggesting that there is a universal set of practices that any organization can use to foster commitment in their 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 organizational commitment is affected by a number of 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 an employee's family responsibilities (Scandura & Lankau, 1997). Additionally, a supervisor's ability to communicate the availability of HCHRP to employees also acts as a moderator (Wright & Haggerty, 2005), suggesting that employee perceptions about HCHRP differ 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 factors, and that the nondifferentiated best-practice perspective to HCHRP may be shortsighted (Guest, 2011). 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).

The goal of this study was to examine whether employee age moderates the relationship between employee satisfaction with HCHRP and organizational commitment. In line with previous research, employee satisfaction with HCHRP was conceptualized as an affective construct that conveys employees' feelings of contentment and sense of gratification with HCHRP

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that are offered by their organization (Bal, Kooij, & De Jong, 2013; Conway, 2004; Kooij et al., 2013). Applying tenets from the Selective Optimization with Compensation theory of life-span development (SOC; Baltes & Baltes, 1990; Baltes, Staudinger, & Lindenberger, 1999), the study tested whether satisfaction with HCHRP oriented around career development (e.g., ongoing training, opportunity for promotion and advancement) is more predictive of organizational commitment in younger employees, whereas satisfaction with HCHRP oriented around career maintenance (e.g., job flexibility, work-life balance) is more predictive of commitment in older employees.

### Organizational commitment

The construct of organizational commitment has become popular among researchers since its introduction in the 1970s (Porter, Steers, Mowday, & Boulian, 1974; Mowday et al., 1979), no doubt in part due to its predictive relationship with numerous organizational outcomes. Regardless of whether commitment is operationalized via the one-factor model proposed by Mowday et al. (1979) or the three-component model advanced by Allen and Meyer (Allen & Meyer, 1990; Meyer & Allen, 1997), meta-analyses show that employee commitment predicts job performance, organizational citizenship behavior, absenteeism, turnover, and measures of employee well-being such as health, stress, and work-family conflict (Mackay, 2016; LePine, Erez, & Johnson, 2002; Mathieu & Zajac, 1990; Meyer & Allen, 1997; Solinger, Van Olffen, & Roe, 2008). The link between commitment and job performance also appears robust and independent of whether job performance is measured through self-report, supervisory ratings, or objective performance indicators (Meyer, Allen, & Smith, 1993; Meyer et al., 2002; Riketta, 2002).

Given the positive outcomes associated with organizational commitment, researchers have searched for antecedents of the construct in an attempt to identify ways in which commitment can be increased among employees. Meta-analytic estimates by Meyer et al. (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 of affective commitment. Other studies suggest employees who work under charismatic leaders (Choi, Lim, & Tan, 2016; for meta-analytic estimates see Jackson, Meyer, & Wang, 2013) or under leaders who promote relationships characterized by trust, liking, and respect become subordinates

with higher commitment (Liden, Wayne, & Sparrowe, 2000; Wayne et al., 2009).

Although leadership qualities appear to be important antecedents of commitment, the most established antecedent pertains to the way employees feel toward their organization as a whole. 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 employee commitment (e.g., Eisenberger, Fasolo, & Davis-LaMastro, 1990; Mathieu & Zajac, 1990; for a review see Rhoades & Eisenberger, 2002). In fact, the Meyer et al. (2002) meta-analytic estimate of the relationship between affective commitment and perceived organizational support ( $\rho = .63$ ) was stronger than that of any other antecedent, suggesting that perceived organizational support is perhaps the most important precursor to commitment. One way in which organizations attempt to establish perceived organizational support, and thereby promote organizational commitment, is by providing employees with various HCHRP.

### HCHRP as antecedents of organizational commitment

A number of studies show that employees have higher commitment levels if their organizations provide HCHRP. Correlations between employee satisfaction with various HCHRP and organizational commitment tend to be in the .3 to .5 range (Conway, 2004; Innocenti, Profili, & Sammarra, 2013; Kooij et al., 2013), and these relationships have been found in organizations across the globe (e.g., Lew, 2008; Patrick & Sonia, 2012). Meta-analytic estimates provided by Kooij et al. (2010) show that employees experience higher commitment if their organizations have HCHRP oriented around ongoing training ( $\rho = .42$ ), opportunity for promotion and advancement ( $\rho = .52$ ), availability of flexible work schedules ( $\rho = .35$ ), ongoing performance feedback ( $\rho = .38$ ), encouragement of teamwork and cooperation ( $\rho = .42$ ), open communication with management ( $\rho = .40$ ), and fair rewards and compensation ( $\rho = .49$ ). Some or the same relationships were also 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 but employees' satisfaction with HCHRP. As mentioned earlier, studies show there is incongruence between the actual HCHRP offered by an organization and employees' perceptions of the presence of

HCHRP, making it important for researchers to focus on employee perceptions rather than on objective availability of HCHRP (Allen et al., 2003; Truss, 2001; Wright & Haggerty, 2005).

The explanation for the link between employees' satisfaction with HCHRP and their levels of 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 as a signal of an organization's long-term investment in employees, which results in feelings of commitment toward the organization and a desire to reciprocate through increased performance (Coyle-Shapiro, Kessler, & Purcell, 2004; Hannah & Iverson, 2004; Kooij et al., 2010). Put another way, the presence of HCHRP leads to perceptions of organizational support, which is one of the strongest antecedents of commitment (Allen et al., 2003; Rhoades, Eisenberger, & Armeli, 2001).

Numerous studies have thus established that a relationship exists between employee satisfaction with HCHRP and organizational commitment, and the existence of this relationship is supported by social exchange theory and the reciprocity norm. That said, the correlations reported by these studies are of moderate strength, ranging from .3 to .5, which suggests the possible presence of moderating variables (Hunter & Schmidt, 2004). Discovering moderators of the HCHRP–organizational commitment relationship is of interest to researchers because it identifies conditions under which HCHRP will exert their maximum effect. According to SOC theory, employee age may be a moderator of the HCHRP-organizational commitment relationship.

### Selective Optimization with Compensation (SOC) theory

Tenets of SOC theory (Baltes & Baltes, 1990; Baltes & Carstensen, 1996; Baltes et al., 1999) propose that individuals experience gradual age-related losses in physical, cognitive, and sensory abilities. Their resources, both internal and external, become increasingly restricted and losses begin to outweigh gains. This in turn causes a motivational shift, with individuals becoming oriented around the maintenance of existing abilities and prevention of further losses, as opposed to the development of new capacities.

There exist three strategies that individuals use 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. Applied to the organizational context, employees using the selection strategy may choose to work on fewer projects, perhaps ones they consider most important, 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. For example, 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 potential for success. Lastly, *compensation* entails the use of alternative means to reach selected goals. An example of this in the organizational context would be an employee experiencing knee arthritis choosing to wear a supportive brace and taking frequent breaks in order to complete a task.

### SOC in the organizational context

Applying SOC theory to organizational behavior suggests that employee motivation changes as employees age, with development-related work motives (e.g., further training and career promotion) declining and maintenance-related work motives (e.g., job security and schedule flexibility) strengthening. A number of studies have found support for the tenets of SOC theory. Kooij, De Lange, Jansen, Kanfer, and Dikkers (2011) showed that the desire to have promotion opportunities and further training decreases with age, and that this relationship is mediated by an employee's future time perspective (i.e., the perception of how much time one has remaining in life; Kooij, Bal, & Kanfer, 2014). Older employees who use the three strategies proposed by SOC appear to have more positive outcomes. Yeung and Fung (2009) reported that in employees aged 40 years and older, those who were more likely to use compensatory strategies were able to maintain their level of job performance. Similar findings were shown by Abraham and Hansson (1995), who used self-ratings of performance, by Bajor and Baltes (2003), who used supervisor ratings of performance, and in a meta-analysis by Moghimi, Zacher, Scheibe, and Van Yperen (2017), who used both self and supervisor performance ratings. Older employees who report using SOC strategies are also rated by their supervisors as being better able to perform their jobs, irrespective of their actual job performance (Weigl, Müller, Hornung, Zacher, & Angerer, 2013). Lastly, studies also show that employees who use SOC strategies have higher work-related well-being (Wiese, Freund, & Baltes, 2000, 2002).

In summary, SOC theory suggests that as individuals age their goals shift toward maintenance and loss

prevention, and they accomplish these goals through the strategies of selection, optimization, and compensation. Research has found support for SOC theory, showing that work-related motivations do change with age and that older employees who use SOC strategies have better outcomes. The implication of these findings is that younger and older employees differ on which HCHRP they find most appealing, leading to the present study's hypotheses.

### Study aims and hypotheses

Juxtaposing the findings from SOC research with findings showing satisfaction with HCHRP predicts organizational commitment leads to a specific inference: Employee age likely acts as a moderator of the HCHRP–organizational commitment relationship. If, as SOC theory suggests, increasing age brings a motivational shift from development and growth to maintenance and loss prevention (Baltes & Baltes, 1990; Ebner, Freund, & Baltes, 2006; Heckhausen, 1997), then younger and older employees ought to prefer different types of HCHRPs. This in turn suggests that the strength of the relationship between employee satisfaction with HCHRPs and commitment will vary with age: HCHRPs related to maintenance (e.g., job flexibility) will be better predictors of commitment in older employees, whereas HCHRPs related to development and growth (e.g., ongoing training) will have stronger associations with commitment in younger employees. This leads to the following hypotheses.

#### Overall relationship between HCHRPs and organizational commitment

As reviewed in the preceding, numerous studies show that employees who have higher satisfaction with their organization's HCHRPs also exhibit higher levels of commitment (e.g., Kooij et al., 2010; Meyer et al., 2002). The presence of HCHRPs makes employees feel cared for and supported by their organization, which increases feelings of commitment toward the organization (Eisenberger et al., 1986; Kooij et al., 2013). In accordance with this research, the following hypothesis is proposed:

**Hypothesis 1:** There will be a positive relationship between employees' satisfaction with their organization's HCHRPs and their commitment toward the organization.

#### Employee age as a moderator of maintenance-related HCHRPs

Maintenance-related HCHRPs are organizational practices and policies aimed at ensuring employees' safety, well-being, and continued job performance. These include HCHRPs oriented around work–life balance, job security, and job flexibility (Bal et al., 2013; Conway, 2004; Kooij et al., 2013). If, as proposed by SOC theory, increasing age creates a shift in motivation toward maintenance and regulation, then these HCHRPs will be especially appealing and meaningful to older employees. This in turn suggests that satisfaction with these HCHRPs will be quite a strong predictor of commitment in older employees, but less so in younger employees. Thus, the following was hypothesized:

**Hypothesis 2:** Employee age will moderate the relationship between commitment and satisfaction with the following maintenance-related HCHRPs: *work–life balance* (Hypothesis 2a), *job security* (Hypothesis 2b), and *job flexibility* (Hypothesis 2c), with the strength of the relationship increasing with age.

To date, very few studies have tested similar hypotheses, and their results are inconsistent. Some studies suggest employee age indeed moderates the link between HCHRPs and commitment (e.g., Innocenti et al., 2013; Kooij et al., 2013), whereas others find no moderating effects (Conway, 2004; Finegold, Mohrman, & Spreitzer, 2002), find moderation in the inverse direction (Korff, Biemann, & Voelpel, 2017), or suggest curvilinear moderation effects (Kooij et al., 2010). That the desire to learn new skills is significantly lower in older adults (Kanfer & Ackerman, 2004; Kooij & Zacher, 2016).

The lack of consensus likely stems from a number of methodological reasons. Some of the studies have questionable statistical power to find significant effects; for example, the Conway (2004) study only had 37 participants in the oldest age category. Studies also differ in their operationalization of employee age, with Kooij et al. (2013) using age as a continuous variable, whereas Conway (2004) and Finegold et al. (2002) converting age into a categorical variable with three levels. The measurement of commitment also varies, with some studies using Allen and Meyer's (1990) Organizational Commitment Scale and others using the Mowday et al. (1979) Organizational Commitment Questionnaire. Other potential methodological issues leading to

inconsistency in the results include possible range restriction in collected data and the use of employees from different organizations and countries.

### **Employee age as a moderator of development-related HCHRP**

Development-related HCHRP are organizational practices and policies aimed at encouraging employee advancement and growth. Specifically, these include HCHRP relating to ongoing training, opportunity for advancement, and a challenging/stimulating work environment (Bal et al., 2013; Conway, 2004; Kooij et al., 2013). If, as proposed by SOC theory, aging brings a motivational shift away from development and growth (and toward maintenance and regulation), then these HCHRP will be less important to older employees. This in turn suggests that satisfaction with these HCHRP will be an especially good predictor of commitment in younger employees, but will not be as good of a predictor of commitment in older employees. Thus, the following was hypothesized:

**Hypothesis 3:** Employee age will moderate the relationship between commitment and satisfaction with the following development-related HCHRP: *training opportunities* (Hypothesis 3a), *advancement opportunities* (Hypothesis 3b), and *level of challenge in one's job* (Hypothesis 3c), with the strength of the relationship decreasing with age.

## **Method**

### **Participants**

Participants were randomly selected from a pool of customer-facing employees of a multinational transportation company headquartered in the United States. They were contacted via a company e-mail that explained the purpose of the study and provided information on how to access and complete the survey. Of the 9022 employees invited to take part in the survey, 6360 participated (70.1%). Sixty-eight percent were male. The sample was geographically diverse, representing over 100 cities throughout the United States. 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 years 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, 2018): Shipping, Receiving, and Traffic Clerks ( $n = 1646$ ), Light Truck or Delivery Services Drivers ( $n = 1619$ ), and Couriers and Messengers ( $n = 3095$ ).

### **Measures**

Study instruments were embedded in a broader organizational survey assessing variables such as employee commitment, well-being, and customer-related satisfaction. Only measures relevant to the present study are described in the following. Although these measures were administered as part of a larger survey, participants first completed the organizational commitment scale and then the scale assessing satisfaction with various HCHRP; thus, the presence of the other survey items is unlikely to have affected participants' responses.

### **Organizational commitment**

An eight-item version of the Organizational Commitment Questionnaire (OCQ; Mowday et al., 1979; Porter et al., 1974) was used to assess employee levels of commitment. The OCQ is a one-factor scale that assesses feelings of loyalty, value congruence, and willingness to exert extra effort on behalf of the organization. It is accepted as a valid measure of commitment and correlates highly ( $r = .88$ ) with the Meyer and Allen (1991, 1997) affective commitment subscale of the Organizational Commitment Scale. Prior to implementation, the OCQ items were modified by substituting the word "organization" with the actual name of the participant's 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 was 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.

**Attitudes toward HCHRP practices**

Employees’ perceptions of various HCHRPs were assessed using a measure developed by the study’s researchers. Scale items were derived by examining content of the Job Description Index (JDI; Smith, Kendall, & Hulin, 1969) and by identifying other HCHRPs discussed in organizational literature. The scale assessed employees’ satisfaction with the six HCHRPs related to the study’s hypotheses (see the appendix). Each item was anchored on a 5-point Likert-type scale with response options ranging from (1) *very dissatisfied* to (5) *very satisfied*. The direct wording of the items gives the scale high face validity and provides assurance that it is a sound measure of employees’ satisfaction with HCHRPs. Reliability analyses revealed a Cronbach’s alpha of .82 for the development-related HCHRP items and .75 for the maintenance-related HCHRP items, and the removal of any items would not have increased either Cronbach’s alpha.

**Procedure**

The survey was administered via the Internet, and employees who volunteered to participate were provided access to the survey through a link in an e-mail. Participation was voluntary and surveys were completed during work hours. Upon accessing the survey, participants read an instruction page that explained the purpose of the questionnaire. To encourage participants to provide honest answers, the following statement appeared on the instruction page, “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 completion of the survey took about 15 minutes. Demographic data were collected separately by the study’s

researchers by accessing the organization’s HR databases. Included demographic variables were age, gender, ethnicity, and job tenure.

**Statistical analyses**

Hypotheses were tested using path analyses conducted in AMOS nested within SPSS 23. Following Aiken and West (1991) and Dawson (2014), predictor variables were standardized before calculating interaction terms to avoid multicollinearity. Covariances were drawn between all predictors.

A separate model was constructed and assessed for each hypothesis. In each model, OCQ scores served as the outcome variable. Employee age, satisfaction with one of the specific HCHRPs, and the age-by-HCHRP interaction term served as the predictors of primary interest. Given that Conway (2004) found employee tenure to also moderate the commitment–HCHRP relationship, initial models also included employee tenure and the tenure-by-HCHRP interaction term. As an example, Figure 1 shows the initial path model testing Hypothesis 2a.

To estimate the final regression weights, the following procedure was used: (a) The initial model was run to determine if it contained any non-significant predictors, (b) the model was trimmed (i.e., non-significant predictors were removed) and then rerun, and (c) if the age interaction term was significant, another model was estimated without the age interaction term to assess the effect size of the moderation (i.e., the  $R^2$  change due to the age interaction term).

**Results**

**Descriptive statistics**

Table 1 presents means and standard deviations for organizational commitment, each HCHRP item, and

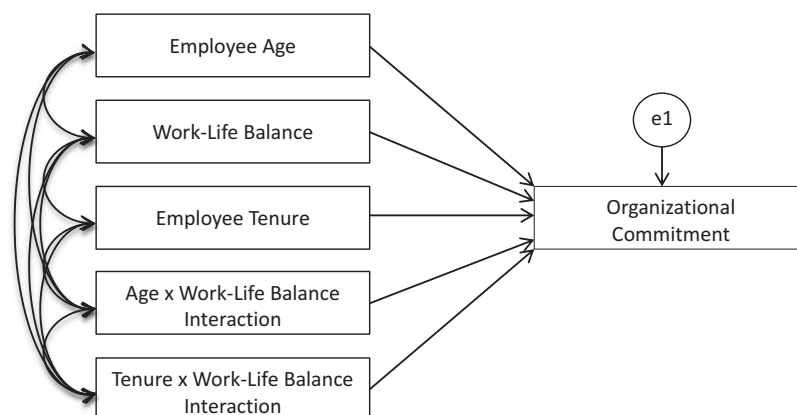


Figure 1. Path model testing Hypothesis 2a.

an HCHRP composite variable (i.e., all HCHRP combined). Overall, employees reported high levels of commitment, averaging 4.21 ( $SD = .26$ ) on the 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 ( $SD$  ranging from .94 to 1.17) on the 5-point scale. The composite HCHRP mean was 3.84 ( $SD = .84$ ), with the mode answer being *satisfied*.

### Hypothesis 1

The study's first hypothesis stated that employees' satisfaction with their organization's HCHRP will correlate with organizational commitment. As Table 2 shows, the correlation between commitment and the composite HCHRP variable (i.e., all HCHRP combined) was .66 ( $p < .001$ ). The correlations between commitment and the individual HCHRP items were also all significant at the  $p < .001$  level and ranged from .49 to .56. Thus, Hypothesis 1 received empirical support. These results indicate that satisfaction with HCHRP is indeed associated with higher levels of employee commitment, regardless of whether the HCHRP are measured individually or as a composite.

### Hypotheses 2a to 2c: tests of moderation of maintenance-related HCHRP

These hypotheses predicted that age would positively moderate the relationship between organizational

commitment and the maintenance-related HCHRP (i.e., work-life balance, job security, job flexibility). It was expected that the strength of the correlations between satisfaction with these HCHRP and commitment would increase with employee age.

### Hypothesis 2a

This hypothesis assessed whether employee age moderates the relationship between employees' satisfaction with their work-life balance and their organizational commitment. As shown in Table 3, the final path model explained 25.70% of variance in commitment and contained three significant predictors. Work-life balance was the strongest predictor ( $\beta = .51, p = .001$ ), followed by the age-work-life balance interaction term ( $\beta = .06, p = .001$ ) and tenure ( $\beta = -.03, p = .021$ ). The interaction was positive, indicating that the moderation was present in the hypothesized direction (see Figure 2). In other words, the correlation between work-life balance satisfaction and commitment was significantly stronger in older employees. Of note, although the interaction was significant, it added 0.3% of explanatory variance in the overall model, representing a weak effect.

### Hypothesis 2b

This hypothesis examined moderation with respect to job security. Similar to the analysis exploring work-life balance, the final path model explained 27.5% of variance in commitment (see Table 3). Satisfaction with job security was the strongest predictor ( $\beta = .52, p = .001$ ), followed by the age-job security interaction term ( $\beta = .06, p = .001$ ) and employee age ( $\beta = .03, p = .013$ ). As hypothesized, the interaction term was positive, indicating that the job security-commitment correlation was significantly stronger for older employees (see Figure 3). As in the results of Hypothesis 2a, the interaction was significant but represented a weak effect (0.3%).

**Table 1.** Descriptive statistics for study variables.

Measure	<i>M</i>	<i>SD</i>
Organizational commitment	4.21	.26
HCHRP		
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

**Table 2.** Correlations among study variables.

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1. Organizational commitment	–	.50**	.52**	.51**	.51**	.49**	.53**	.66**	–.01	–.02
2. Work-life balance		–	.47**	.50**	.52**	.51**	.51**	.72**	.04**	.03*
3. Job security			–	.52**	.49**	.50**	.47**	.73**	–.07**	–.04**
4. Job flexibility				–	.57**	.54**	.49**	.80**	–.06**	–.03**
5. Training opportunities					–	.71**	.58**	.82**	–.04**	–.03**
6. Advancement opportunities						–	.54**	.80**	–.05**	–.02
7. Level of challenge							–	.75**	–.01	–.03*
8. HCHRP composite								–	–.05**	–.03*
9. Age									–	.36**
10. Tenure										–

\*Correlation significant at the 0.05 level; \*\*correlation significant at the 0.01 level.



**Table 3.** Test of moderation for maintenance-related HCHRP.

Hypothesis/model	Predictor	$\beta$	C.R.	$p$	Model $R^2$
H2a: Work-life balance	Work-life balance	.51	46.58	.001	.257
	Tenure	-.03	-2.79	.021	
	Age interaction term	.06	5.15	.001	
H2b: Job security	Job security	.52	48.32	.001	.275
	Age	.03	2.47	.013	
	Age interaction term	.06	5.12	.001	
H2c: Job flexibility	Job flexibility	.51	46.84	.001	.260
	Age	.03	2.54	.011	
	Age interaction term	.03	2.64	.008	

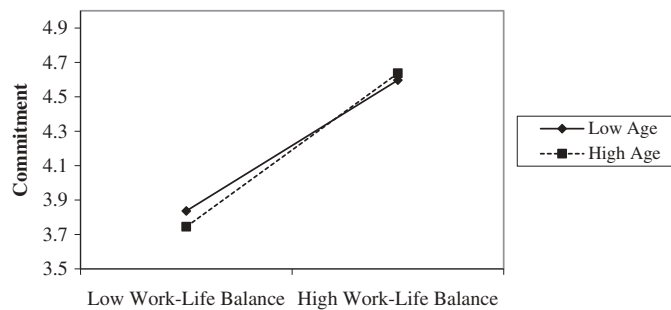
**Hypothesis 2c**

Lastly, Hypothesis 2c tested whether age moderates the association between employees’ satisfaction with their job flexibility and organizational commitment. Table 3 shows the final path model explained 26.0% of variance

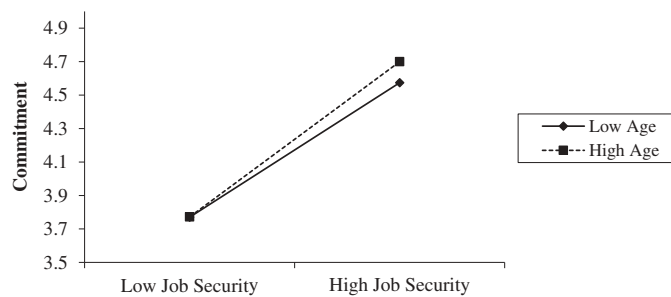
in commitment. The model’s significant predictors were satisfaction with job flexibility ( $\beta = .51, p = .001$ ), employee age ( $\beta = .03, p = .011$ ), and the age-job flexibility interaction ( $\beta = .03, p = .008$ ). As with the analyses in the preceding, the moderation was significant and in the hypothesized direction (see Figure 4), although it represented a very small effect size (0.1%).

**Hypotheses 3a to 3c: tests of moderation of development-related HCHRP**

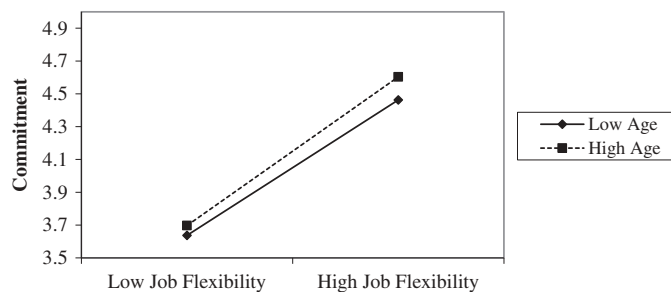
Whereas Hypotheses 2a to 2c predicted positive moderating effects (i.e., stronger relationships with increasing age), Hypotheses 3a to 3c predicted that age would negatively moderate the relationship between development-related HCHRP (i.e., ongoing training, advancement opportunities, level of job challenge) and



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



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



**Figure 4.** Moderation of the organizational commitment-job flexibility relationship.

organizational commitment. In other words, it was expected that the strength of the correlations between these HCHRP and commitment would decrease with increasing employee age.

### Hypothesis 3a

Table 4 shows the results for Hypothesis 3a, which examined moderation with respect to training opportunities. The final model explained 26.6% of variance in commitment. Satisfaction with training opportunities was a significant predictor ( $\beta = .52, p = .001$ ), and the age by training opportunity interaction ( $\beta = .02, p = .078$ ) was not significant. The results therefore indicate that although employee satisfaction with training opportunities is a strong predictor of organizational commitment, employee age is not a moderator of this relationship.

### Hypothesis 3b

Hypothesis 3b tested whether age moderates the relationship between organizational commitment and satisfaction with advancement opportunities. Table 4 shows that two predictors were included in the final trimmed model, satisfaction with advancement opportunities ( $\beta = .49, p = .001$ ) and the age by advancement opportunities interaction term ( $\beta = .02, p = .036$ ). The model explained 24.4% of variance in affective commitment.

Of note, the interaction term was positive and therefore opposite to the hypothesized direction, indicating that the correlation between advancement opportunities and commitment was stronger in older workers, not younger ones. It is important to highlight that, similar to the other significant age interactions, the effect size of the moderation was small, explaining 0.1% of additional variance in commitment.

### Hypothesis 3c

Hypothesis 3c examined moderation with respect to level of challenge in one's job. Table 4 shows that the final model explained 29.0% of variance in organizational commitment and contained 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 in Hypothesis 3b, the interaction was opposite to the hypothesized direction and, although significant, added only 0.3% of explanatory variance in commitment.

## Discussion

This study examined whether employee age moderates the relationship between employees' satisfaction with various HCHRP and their organizational commitment. It was hypothesized that, overall, a significant relationship would be found between satisfaction with HCHRP and commitment. The strength of this relationship, however, would differ by age: Older employees would exhibit a stronger link between maintenance-related HCHRP (e.g., job flexibility) and commitment, whereas younger employees would exhibit a stronger link between development-related HCHRP (e.g., training opportunities) and commitment.

There was a strong significant correlation between organizational commitment and the composite HCHRP variable ( $r = .66$ ), providing support for Hypothesis 1. Furthermore, individual correlations between each HCHRP and organizational commitment were also all significant, ranging from .49 to .56. These findings add further evidence that employees' satisfaction with HCHRP is indeed linked to feelings of loyalty and commitment to the organization. The results corroborate existing research (e.g., Innocenti et al., 2013; Kooij et al., 2013; Meyer et al., 2002) and offer support for the idea that organizations seeking to have a committed workforce ought to provide HCHRP. It is important to point out, however, that the correlational nature of the data provides no information about the direction of the relationship between the variables, and readers should take this into account before concluding that satisfaction with HCHRP leads to higher levels of organizational commitment.

Hypotheses 2a to 2c examined whether employee age moderates the relationships between maintenance-related HCHRP and organizational commitment, specifically examining satisfaction with work-life balance (Hypothesis 2a), job security (Hypothesis 2b), and job flexibility (Hypothesis 2c). Each hypothesis proposed that the relationship between commitment and the maintenance-related HCHRP would become stronger with age.

From the perspective of statistical significance, the results provide support for the hypotheses, as significant interactions were found in all three analyses and all interactions were in the hypothesized direction. It is

**Table 4.** Test of moderation for development-related HCHRP.

Hypothesis/model	Predictor	$\beta$	C.R.	$p$	Model $R^2$
H3a: Training opportunities	Training opportunity	.52	47.74	.001	.266
	Age interaction term	.02	1.76	.078	
H3b: Advancement opportunities	Advancement opportunity	.49	45.06	.001	.244
	Age interaction term	.02	2.09	.036	
H3c: Job challenge	Job challenge	.54	50.45	.001	.290
	Age interaction term	.06	5.25	.001	

important to note, however, that although the interactions were significant, the effect sizes of the interactions were small, adding only 0.1% to 0.3% of explanatory variance in organizational commitment. From an applied perspective, these are trivial  $R^2$  changes. The reason these interactions were statistically significant, yet small in magnitude, lies in the fact that the study used a large sample size (more than 6000 employees), which resulted in small standard errors during hypothesis testing.

Thus, although the results show that age significantly moderates the relationship between employees' satisfaction with maintenance-related HCHRP and their commitment, the strength of the moderation is not large and is unlikely to influence the strategic decisions of human resource practitioners. This sentiment is shared by Finegold et al. (2002), who after finding weak moderation age effects concluded that the need to devote attention to employee age has been exaggerated, at least with respect to HCHRP.

Hypotheses 3a to 3c examined the degree to which employee age moderates the relationships between employees' satisfaction with development-related HCHRP and commitment, specifically examining training opportunities (Hypothesis 3a), advancement opportunities (Hypothesis 3b), and level of challenge in one's job (Hypothesis 3c). Each hypothesis proposed that the strength of the relationship would decrease with age.

The results failed to provide support for the hypotheses. Although significant age interactions were found in two analyses, the interactions were opposite to the hypothesized direction, indicating that the relationship between development-related HCHRP and commitment increased, not decreased, with age. More importantly, as in the results of Hypotheses 2a to 2c, interaction effect sizes were small (0.1% to 0.3% of explanatory variance), further corroborating the results of Finegold et al. (2002).

In all, the study's results do not support the notion that employee age is a convincing moderator of the relationship between employee satisfaction with HCHRP and organizational commitment. Although a number of analyses revealed significant interaction effects, the effect sizes were small enough to be considered trivial and the statistical significance is likely attributable to the large sample size of the study. If, as purported by SOC theory, increasing age brings a motivational shift toward maintenance and away from development, either this shift is slight or it does not manifest itself in the workplace, at least for the employees who participated in this study. 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 organizational behavior.

The conclusion made in the preceding paragraph is only tenable if there exist no other explanations for the lack of effects. In other words, it is possible that a moderating age effect does exist, but one of a number of methodological issues prevented its discovery. One possibility is that the scales used to measure focal variables had low construct validity. Although plausible, we believe this is unlikely because the HCHRP scale had high face validity (see the [appendix](#)) and commitment was measured using the OCQ, an instrument that has shown high convergent validity with other commitment scales (Meyer & Allen, 1991, 1997). Furthermore, both scales exhibited acceptable Cronbach's alphas (.75 to .94), dismissing potential questions relating to measurement reliability. Another possibility is that range restriction occurred in the measurement of the study's variables. In other words, if participants as a whole provided answers that were truncated in range, our ability to find moderation effects would be diminished. An examination of the standard deviation of the variables (see [Table 1](#)) suggests this is also unlikely; standard deviations for the HCHRP items ranged from .94 to 1.07 and the standard deviation for organizational commitment was .24. Given that both variables were measured using a 5-point Likert-type scale, the standard deviations suggest enough variability existed in participants' responses. Furthermore, if range restriction were the true culprit for the study's lack of impressive moderation effect sizes, then the results would not have shown a strong overall correlation ( $r = .66$ ) between the HCHRP composite and commitment that was tested in Hypothesis 1. Employee age also showed no range restriction, exhibiting a standard deviation of 9.15 years and a range of 19 to 70. Thus, range restriction appears an improbable reason for the study's inability to show that employee age moderates the HCHRP-organizational commitment relationship.

Lastly, it is possible that our inability to show that employee age moderates the relationship between HCHRP and organizational commitment could be rooted in the fact that variables were measured via self-report scales, suggesting the influence of common method variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Although we cannot conclusively rule out this possibility, we believe common method variance is unlikely to have influenced the results regarding the study's primary goal, which was to test the moderation effects of employee age rather than to provide overall estimates of the strength of the

HCHRP–commitment relationship. In other words, even if common method variance resulted in inflated relationships between HCHRP and organizational commitment, there is no reason to believe that common method variance would influence the strength of moderation effects, particularly considering that employee age was attained via the organization's HR databases.

Thus, the study's inability to show that employee age substantively moderates the HCHRP–organizational commitment relationship is unlikely due to methodological issues such as low construct validity, range restriction, or common method variance. Other methodological issues, such as the generalizability of the study's sample to other employees, may be responsible for the results (discussed in the limitations section that follows); nevertheless, the findings of the present study suggest that employee age is not a meaningful moderator of the HCHRP–organizational commitment relationship. Although a number of our moderation analyses revealed significant effects, the effect sizes of these moderations were too small to warrant consideration when making strategic human resource decisions.

### **Practical implications**

The traditional perspective regarding HCHRP posits that there is 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 assessed whether a more nuanced approach, one that takes into account employee age, may be more appropriate. Taking all of the present study's findings into consideration, the results do not provide convincing evidence that the relationship between employees' satisfaction with HCHRP and their commitment to the organization varies substantially with age, and consequently, the results do not offer evidence that the traditional best-practice view of HCHRP is shortsighted. The lack of meaningful moderating age effects found in the present study suggests that organizations need not take employee age into account when making strategic decisions about HCHRP.

That said, it is important to point out that the study's inability to find moderating effects with respect to employee age does not necessarily lend support to the best-practice view of HCHRP. As mentioned previously, existing research has shown that the organizational 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), an employee's family responsibilities (Scandura & Lankau, 1997), and a supervisor's ability to communicate the availability of HCHRP to employees (Wright & Haggerty, 2005). 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 implications for organizations seeking to foster organizational 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 organizational commitment and employee satisfaction with HCHRP. It is intuitive that employees' satisfaction with HCHRP 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 the self-perception theory of attitude formation (Bem, 1972) and cognitive dissonance theory (Festinger, 1957), individuals are motivated to find justifications for their attitudes. An employee who feels loyal to an organization could therefore justify his or her loyalty by giving high HCHRP ratings. The implication of this is that the strong overall correlation found between employees' satisfaction with HCHRP and their levels of commitment ( $r = .66$ ) does not necessarily mean that organizations promoting HCHRP will see equally strong increases in employee commitment. That said, previous cross-lagged longitudinal research has attempted to tease apart a similar issue and found that perceived organizational support chronologically precedes commitment (Rhoades et al., 2001). Thus, it is likely that satisfaction with HCHRP is a stronger causal antecedent to employee commitment than the reverse.

It is worthwhile to also mention that although directionality is a legitimate concern in correlational research, it is also somewhat of a moot point with respect to the present study. Aside from Hypothesis 1, the remainder of the study's hypotheses focused on the moderation of the HCHRP–organizational commitment relationship. Whether satisfaction with HCHRP leads to increased commitment, or vice versa, does not affect the results of the analyses examining the presence of moderation by employee age.

A second limitation of the study pertains to the possibility of cohort effects. Older and younger individuals differ not only in age, but also in the cultural and societal context in which they formed their values. Furthermore, studies suggest that dual-career and single-parent families have become more common over the years, which could lead younger employees to have desires for HCHRP different from those of employees from previous generations (Lyons & Kuron, 2014; Scandura & Lankau, 1997). In other words, it may be tenuous to assume that a 25-year-old employee is career driven and primarily desires advancement opportunities whereas a 55-year-old is especially interested in work-life balance. The results of the present study, although framed from the perspective of employee age, may be in fact attributable to employee life stage or cohort/generation. Future research would ideally measure both chronological age and also ask participants to identify their career or life stage, and our omission of doing so presents a limitation. The collection of both types of data would allow presentation of results from multiple perspectives and, more importantly, also would allow for an empirical assessment of whether employee age is a viable predictor of the life or career stage of an employee.

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 United States. Although the sample was large ( $N = 6,360$ ) and geographically represented more than 100 U.S. cities, it is unknown whether the results would generalize to other types of organizations or organizations located outside of the United States. Furthermore, study participants represented mostly blue-collar jobs (i.e., delivery drivers, messengers, shipping clerks). Future studies ought to determine whether the results generated using this sample would hold had the sample included other types of jobs.

## Conclusion

This study examined the degree to which employee age moderates the relationship between employee satisfaction with various HCHRP and organizational commitment. Results indicate that there was a strong overall correlation between employees' satisfaction with HCHRP and their commitment ( $r = .66$ ), but that employee age was not a meaningful moderator of this relationship, suggesting that employee age is not a characteristic that organizations need to take into account when making strategic decisions about HCHRP.

## Notes on contributor

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### **Appendix: Items assessing satisfaction with various HCRPs**

*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) The level of challenge in your job.
- (5) Your training opportunities to improve your skills or learn new skills.
- (6) Your opportunity to advance to other jobs.