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# Leading future orientations for current effectiveness: The role of engagement and supervisor coaching in linking future work self salience to job performance\*



Weipeng Lin<sup>a</sup>, Lei Wang<sup>b,\*</sup>, Peter A. Bamberger<sup>c</sup>, Qi Zhang<sup>d</sup>, Haifeng Wang<sup>e</sup>, Wencai Guo<sup>e</sup>, Jing Shi<sup>e</sup>, Tao Zhang<sup>e</sup>

- <sup>a</sup> Department of Human Resource Management, Business School, Nankai University, China
- <sup>b</sup> Department of Psychology and Beijing Key Laboratory of Behavior and Mental Health, Peking University, China
- <sup>c</sup> Recanati Business School, Tel Aviv University, Israel
- <sup>d</sup> Department of Psychological Sciences, Purdue University, United States
- e Sunshine Life Insurance, Beijing, China

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#### ABSTRACT

Recent research suggests that the salience of a future work self has a considerable impact on future-oriented activities such as skill development, career planning, career networking, and job searching. However, little is known as to whether, how, and under what conditions a more salient future work self may influence *concomitant* work outcomes such as job performance. Drawing on self-regulation theory, we argue that future work self salience (FWSS) affects job performance via its influence on engagement, with this influence amplified as a function of supervisor coaching. Using multi-source and lagged data collected from employees (N = 441), their direct supervisors (N = 98), and archival records in an insurance company, we found that engagement mediated the relationships between FWSS and both supervisor-rated and archival sales performance. Furthermore, the relationships FWSS has with employee engagement and sales performance, as well as the indirect effects of FWSS on two performance indicators, were stronger for employees exposed to higher levels of supervisor coaching.

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# 1. Introduction

Future orientation in the self-system, also referred to as the "possible self" (Markus & Nurius, 1986: 954), is the representation of self in the future. Research on future orientations suggest that the possible self, by "providing an evaluative and interpretive context for the current view of self" (Markus & Nurius, 1986: 955), may frame and thereby affect experiences in the present (Hoyle & Sherrill, 2006). Indeed, a number of studies demonstrated that future orientation in the self-system influences individual motivation and behavior (Hoyle & Sherrill, 2006; Oyserman, Bybee, & Terry, 2006; Strauss, Griffin, & Parker, 2012), suggesting that this future representation of self plays a key role in directing individuals' ongoing activities.

Applying this notion to work relations, Strauss and colleagues recently proposed the concept of future work self (FWS), defining it as "an individual's representation of himself or herself in the future that reflects his or her hopes and aspirations in relation to work" (Strauss et al., 2012: 580). Furthermore, they (2012: 581) posited and found that future work self salience (FWSS) – "the degree to which the future work self is clear and easy to imagine for a person" – facilitates future-oriented activities such as proactive career behaviors. In line

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Corresponding author at: Department of Psychology, Peking University, Beijing 100871, China.
 E-mail address: leiwang@pku.edu.cn (L. Wang).

with Strauss et al. (2012) research, recent studies further found that future work self salience is linked to skill development, career planning, career networking, and job searching, with career adaptability acting as the mediating mechanism (Guan et al., 2014; Taber & Blankemeyer, 2015). The idea that more salient future orientations direct and energize actions suggests that such orientations may also have more *immediate*, work-based behavioral consequences. However, little is known as to whether, how, and under what conditions a more salient future work self may influence concomitant work outcomes such as performance.

In the current study, we suggest that under certain conditions, such an orientation provides a coherent impression of how current tasks or work demands link to some desired future work-based state, and thus energize and direct work activities and heighten persistence, which in combination result in higher performance. More specifically, drawing on self-regulation theory (Lord, Diefendorff, Schmidt, & Hall, 2010; Vancouver & Day, 2005), we propose a moderated mediation model linking the salience of individuals' FWS to their concomitant performance through their engagement, which is conceptualized as the investment of an individual's complete self into the work role (Rich, Lepine, & Crawford, 2010). Drawing from research on self-regulation, we argue that a more salient FWS, by clarifying for employees what they want to get out of their work in the future, helps them self-select into positions that likely result in higher person–job fit, and helps them direct and sustain their deployment of personal resources towards goal accomplishment once in the job. In this way, a more salient FWS is associated with enhanced job engagement. Given the positive association between engagement and job performance (Rich et al., 2010), we therefore posit engagement as a mediating link between FWSS and job performance.

We also posit that supervisor coaching – by providing one-on-one feedback and direct guidance which facilitates employees' translation of their FWS into more local and job relevant states (i.e., engagement), and then channeling such engagement towards actionable job and organizational priorities – can amplify the engagement-mediated path between the saliency of a FWS and performance (see Fig. 1). We tested the model by examining time-lagged relationships among the variables while taking possible confounds (e.g., demographics and personality traits) into account using a sample of sales persons employed in a Chinese insurance company. China provides a highly appropriate context for examining FWSS and its relations in that Chinese culture encourages a focus on the future as well as persistence in the achievement of longer-term objectives (Hofstede, 1991, 2001).

# 2. Theoretical framework and hypotheses

# 2.1. Future work self salience and engagement

Future work self salience (FWSS) reflects the degree to which an individual has a clear and easily accessible mental picture of his/her FWS. Previous research on FWSS has focused primarily on its implications for future-oriented behaviors such as proactive career behaviors. Little is known about FWSS' influence on individuals' concomitant work outcomes in the workplace such as job performance. In the current study, we draw from self-regulation theory and propose that work engagement – a "positive, fulfilling, work-related state of mind" which includes components of vigor (i.e., energy, mental resilience, and persistence), dedication (i.e., the significance and meaning of work to the individual), and absorption (i.e., the degree to which one is concentrated and engrossed in work) (Schaufeli, Salanova, Gonzales-Roma, & Bakker, 2002: 74) – serves as a primary mediator of the relationship between FWSS and performance.

According to Vancouver and Day (2005: 158), self-regulation refers to "the processes involved in attaining and maintaining goals, where goals are internally represented (i.e., within the self) desired states". Future work selves tap such internally represented desired states because they are cognitive representations of one's ideal future (Strauss et al., 2012). Self-regulation theory also suggests that the more goal-directedness is made salient, the more self-regulation drives individuals to direct their efforts and resources into goal striving so as to achieve goal attainment (Karoly, 1993). Indeed, as noted by Lord et al. (2010: 551), individuals' sense of work-based selves "create cognitive, motivational, and affective constraints that guide more achievement-focused activities."

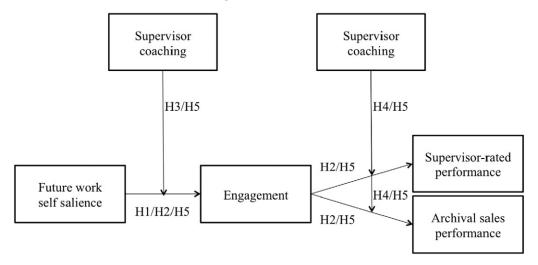


Fig. 1. Hypothesized model. *Note.* All the hypothesized relationships are positive. H = Hypothesis. H2 represents indirect effect. H3 and H4 represent moderation effects. H5 represents moderated mediation effect.

In this context, self-regulation theory suggests several reasons why more salient FWS may drive enhanced work engagement. First, previous research indicates that FWSS is positively associated with behaviors consistent with entering positions more aligned with individuals' future work selves (Strauss et al., 2012; Taber & Blankemeyer, 2015). More specifically, studies indicate that FWSS is related to input in proactive career behaviors such as career consultation (Strauss et al., 2012) and career planning (Strauss et al., 2012; Taber & Blankemeyer, 2015). By more carefully and proactively planning their career paths, those with more salient future work selves are likely to make career choices facilitating entry into positions more consistent with their future vocational objectives (i.e., the content of their FWS). Such self-selection into positions more consistent with one's future work selves heightens the likelihood that the individual will experience a greater sense of connection with and meaningfulness of their work and a generally more positive affective–cognitive state at work, thus resulting in higher levels of work engagement (Christian, Garza, & Slaughter, 2011). In other words, FWSS, by clarifying for employees what they want to get out of their work in the future, has a self-sorting effect. Those with a more salient FWS are likely to be better able to self-select into positions maximizing their sense of fit, and hence experience heightened engagement (Rich et al., 2010). In contrast, those with less salient future work selves are more likely to take jobs that ultimately are deemed less suitable, resulting in lower engagement.

Second, in addition to facilitating individuals' entry into positions deemed more suitable for themselves, FWSS is likely to enhance engagement once they enter the job. From a self-regulation perspective, future work selves, as a cognitive representation of the ideal future, help individuals identify discrepancies between current state and the hoped-for future, and convert such discrepancies into immediate job-based goals that are still based around the individuals' mental schema (i.e., a FWS) (Karoly, 1993; Strauss et al., 2012). Accordingly, for those with a salient FWS, there should be a tighter correspondence between their long-term work-related objectives and immediate job goals, which should enhance employees' sense of dedication and absorption.

Third, by facilitating the identification of discrepancies between current behavior and future selves, and the conversion of such discrepancies into specific and immediate job-based goals, more salient future work selves should help employees better direct and sustain their deployment of personal resources towards goal accomplishment (Vancouver & Day, 2005). Indeed, previous research has demonstrated that the identification of behavior–goal discrepancies is positively related to a subsequent increase in goal-directed effort (Kernan & Lord, 1990). More salient future work selves should enhance engagement by providing employees with a "compass" with which to "navigate through the fog of multiple trajectories," enabling them to align current work assignments with their more stable sense of what they hope to secure from and at work (Strauss et al., 2012: 582), helping them "keep their eye on the ball," and providing them with a basis for perseverance. Additionally, by facilitating the setting of specific goals, FWSS should boost resource investment resulting in enhanced vigor and absorption. Indeed, findings from numerous field studies and laboratory experiments indicate that specific goals lead to higher levels of intentional effort and better levels of output than vague goals (e.g., Hall, Weinberg, & Jackson, 1987). Finally, by enhancing the clarity of behavior–identity discrepancies, FWSS should also increase employees' ability to self-monitor their job performance, thus allowing them to more quickly and easily redirect their effort and attention towards critical job objectives (Kanfer & Ackerman, 1989; Karoly, 1993).

In sum, to the extent that such future-based cognitive frames are more meaningful and readily accessible (i.e., more salient), employees high in FWSS will exhibit higher levels of dedication, absorption, and vigor in their work. Accordingly, we hypothesize:

Hypothesis 1. Future work self salience is positively related to engagement.

# 2.2. Future work self salience, engagement, and performance

Research suggests that engagement with current work is associated with a variety of organizational outcomes (for reviews, see Christian et al., 2011; Simpson, 2009), with many studies indicating a direct association with performance (e.g., Bakker, Demerouti, & ten Brummelhuis, 2012; Rich et al., 2010).

Self-regulation theory suggests several reasons why engagement may boost performance. First, the experience of engagement is a fulfilling, positive work-related state of mind (Schaufeli & Bakker, 2004). Such energized states promote behaviors that are more vigilant, attentive, and focused, contributing to the achievement of organizational goals (Rich et al., 2010). Indeed, such a state likely enhances selective attention that both shields motivation and enhances the accessibility of goal-relevant information, thus enhancing individual competencies (Lord et al., 2010). Second, the dedication aspect of engagement is likely to drive persistence and increase the intensity with which employees perform their tasks (Burke, 2008; Christian et al., 2011; Rich et al., 2010). In sum, to the degree that engagement facilitates more focused, attentive, and sustained investment of effort and resources in the performance of the job, from the self-regulation perspective, there are good reasons to expect a positive association between engagement and performance. Taken in combination with our discussion of the link between FWSS and engagement, FWSS provides the basis upon which employees may become more engaged in their work, which, in turn, drives enhanced job performance. Accordingly, we hypothesize:

**Hypothesis 2.** Engagement mediates the association between the salience of future work self and performance.

# 2.3. The role of supervisor coaching

Coaching refers to a set of un- or semi-structured developmentally oriented behaviors in which supervisors provide constructive feedback, along with information, and guidance, to employees in order to help employees recognize opportunities to improve themselves and enhance their contribution to the organization (Heslin, Vandewalle, & Latham, 2006; Orth, Wilkinson, & Benfari,

1987). Previous research has shown that higher levels of supervisor coaching provide employees with greater insight regarding how to set career goals, frame career goals in the context of current organizational demands and constraints, as well as how to fulfill these goals (Heslin et al., 2006). Studies also indicate that supervisor coaching facilitates employees' personal growth and career development (Orth et al., 1987), raises employee aspirations, provides encouragement (Mink, 1993), and positively affects employee work attitudes and goal-oriented self-regulation (Theeboom, Beersma, & van Vianen, 2014), suggesting that coaching plays an important role in aligning the goals of the employee with those of the organization.

The feedback aspect of supervisory coaching is critical for self-regulation in that it serves as the basis for comparing a current state with a desired future state (Vancouver & Day, 2005). A substantial body of research suggests that leaders serve as a critical source of performance feedback for employees. Such feedback activates particular aspects of the employee's future self, and thus influences goal appraisal, discrepancy analysis, and the selection of particular achievement-oriented activities (Lord et al., 2010). While, as noted above, a more salient FWSS provides a strong basis for employee engagement, it is likely that this potential may be more fully realized when employees receive feedback activating those particular aspects of their future self relevant to critical task objectives and/or situational demands. Such feedback, by aligning employees' image of their future work self with the organization's expectations of them is likely to amplify any enhanced vigor, dedication, and absorption generated by FWSS (Douglas & Morley, 2001).

The provision of information and guidance is also likely to strengthen the impact of FWSS on engagement in that while a more salient future self may help employees avoid distraction and retain focus on goal achievement, they may still need instructions on how to distinguish actually useful activities from distracting behaviors. In this case, if lacking timely and adequate information and guidance, such focus and attention is likely to offer little self-regulatory benefit and may even weaken employees' vigor and dedication, because of higher risks that employees may allocate cognitive resources towards activities offering relatively low yield (Shah, Friedman, & Kruglanski, 2002). Furthermore, by providing employees with timely information and guidance through coaching, supervisors can facilitate employees' identification and implementation of achievement-oriented activities aimed at addressing discrepancies between work-related current and future selves. More specifically, by helping employees analyze and explore ways to solve specific problems while striving for their goals, coaching may demonstrate the attainability of even challenging goals, reduce the risk of employees feeling frustrated (MacLennan, 1995) and thus enhance employees' sense of self-efficacy and bolster goal commitment and persistence (Hollenbeck & Klein, 1987). Accordingly, through guidance and information provision, supervisory coaching is likely to play an important role in translating employee FWSS into a more positive and fulfilling, work-related state of mind, and allowing for enhanced employee vigor, dedication, and absorption (Hyvönen, Feldt, Salmela-aro, Kinnunen, & Mäkikangas, 2009). In sum, through coaching, supervisors are likely to help employees align their future work selves with organizational expectations and better understand how to realize such future states, and provide them feedback, guidance and information needed to leverage their FWS as a basis for enhanced work engagement. Accordingly, we hypothesize:

**Hypothesis 3.** Supervisor coaching moderates the relationship between employee future work self salience and engagement, such that the relationship is stronger for employees receiving more extensive supervisor coaching.

Leader coaching may also strengthen the relationship between employees' engagement and their performance. More extensive leader coaching activity helps employees identify those performance targets most highly valued by the organization, and thus helps employees focus on those valuable goals and targets. With a better understanding of how to channel their energies, the motivating state of engagement is likely to be more effective in fueling job performance. Additionally, by providing feedback and guidance with respect to how employees may solve specific problems, enhance their competencies, and improve their work behaviors (Heslin et al., 2006), supervisor coaching may make it easier for employees to translate their energized state (i.e., their engagement) into performance-related actions and outcomes. Finally, more intensive coaching may also boost performance to the extent that it provides insights about or actual access to the social capital critical in transforming energies into valuable, job-relevant outcomes (Holtom, Mitchell, & Lee, 2006). Thus, while engagement may be positively associated with job performance in general, this relationship is likely to be amplified in the context of more extensive supervisor coaching. Accordingly, we hypothesize:

**Hypothesis 4.** Supervisor coaching moderates the relationship between employee engagement and job performance, such that the relationship is stronger for employees receiving more extensive supervisor coaching.

**Hypothesis 5.** The indirect relationship between future work self salience and performance through engagement is stronger under conditions of more extensive supervisor coaching.

# 3. Method

# 3.1. Participants and procedure

The study was approved by the Institutional Review Board (IRB) of the corresponding author's university. Carefully following the approved protocol, we recruited participants in a tele-marketing center of a Chinese insurance company. Participants were informed of the purpose of the study and their confidentiality and voluntary participation were assured. All full-time employees in this center were invited to participate in the current study with the help of the human resource department of the company.

Provided with a list of names and contact information, employees in this company were responsible for "cold-calling" potential customers in order to introduce (and hopefully sell) a range of insurance products.

Tele-marketing positions in this company were designed to afford employees substantial temporal flexibility and autonomy (i.e., no scripts) in engaging with clients. Accordingly, in selecting candidates for these positions, the company placed an emphasis on self-directedness. Additionally, supervisors were encouraged to observe and provide coaching to their employees. The majority of supervisor coaching involved the provision of individualized feedback and guidance based on the monitoring of calls and behaviors. However, supervisors also engaged in other types of coaching (i.e., facilitation and inspiration), particularly when the company initiated the sale of new insurance products, or specified new unit sales targets.

Data were collected from three sources (supervisor survey, employee surveys, and company archives) at three separate times. At Time 1, employees provided their demographic information, rated their supervisors' coaching behaviors, and completed an instrument assessing FWSS. One week later, at Time 2, employees reported their level of engagement, while their direct supervisors were asked to provide performance ratings of the employees. Archival sales-performance data were then collected from the company record one month after the Time 2 survey (Time 3). In order to ensure data confidentiality, we used a code on the questionnaire to link employee questionnaires from phases one and two. Doing so allowed us to maintain data confidentiality while still allowing us to match the employee data with the supervisor and archival data.

Surveys were first distributed to all 717 full-time employees in the center. Among them, 496 (69.2%) returned complete responses in the first survey and of these 496 participants, 441 (88.9%) returned complete answers in the second survey. In addition, these employees' subjective performance ratings were provided by their direct supervisors (n = 98). Consequently, the final response rate is 61.5% for employees and 100% for supervisors. Among the employees, 60.1% were women; the average age was 24.9 years (SD = 4.3), and the average organizational tenure was 6.7 months (SD = 8.0) at Time 1 assessment; over half of the employees (51.9%) had an associate or bachelor degree. Among the supervisors, 44.7% were women, and all were between the ages of 24 and 40. All employees and supervisors in the current sample are Chinese.

#### 3.2. Measures

We followed the conventional translation–back translation procedure (Brislin, 1980) to ensure the accuracy of the translation of the English-based measures into Chinese. Unless otherwise indicated, each item required a response on a 7-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

# 3.2.1. Future work self salience

FWSS was measured at Time 1 using the 5-item scale developed by Strauss et al. (2012). Sample items included: "I am very clear about who and what I want to become in my future work" and "I can easily imagine my future work self". Cronbach alpha for this scale in the current research was .86.

# 3.2.2. Engagement

Engagement was measured at Time 2 using the 17-item engagement scale developed by Schaufeli et al. (2002). Participants answered the items on a 7-point frequency rating scale, ranging from 0 (*never*) to 6 (*every day*). Sample items include: "At my job I feel strong and vigorous", and "I am immersed in my work". Cronbach alpha in the current research was .96.

# 3.2.3. Supervisor coaching

Supervisor coaching was measured at Time 1 using the 10-item scale of Heslin et al. (2006). Respondents were asked to rate their agreement with items regarding their supervisors' exhibition of a variety of supervisory coaching behaviors. Sample items include: "Provide constructive feedback regarding areas for improvement", and "Act as a sounding board for you to develop your ideas". Cronbach alpha in the current research was .96.

# 3.2.4. Subjective performance

Employees' subjective performance was rated by their direct supervisors at Time 2 using a four-item scale taken from Farh and Cheng (1997). Sample items include "This subordinate makes a significant contribution to the overall performance of our work unit" and "This subordinate is one of the best employees in our work unit". Cronbach alpha in the current research was .91.

# 3.2.5. Objective performance

Employees' objective performance was measured at Time 3 using their archival sales performance records for the 1-month period following the Time 2 survey. This sales performance record was the standardized value of sales (i.e., z-score) from all insurance products sold by each employee in our sample. We received standardized sales record rather than raw data due to the proprietary and sensitive nature of the latter.

# 3.2.6. Control variables

Employees' demographics measured at Time 1, including gender, age, education, and organizational tenure were included as control variables in the analyses since they could be related to engagement (e.g., de Lange, De Witte, & Notelaers, 2008; Van den Broeck, Vansteenkiste, De Witte, & Lens, 2008) and performance (e.g., Bakker et al., 2012). We also controlled for the effects of conscientiousness because it has been demonstrated to be a strong and universally valid predictor of performance-related outcomes (Barrick,

Stewart, & Piotrowski, 2002). Moreover, because previous research indicates that negative affect can influence self-reported perceptions (Burke, Brief, & George, 1993) and hence induce common method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), we controlled for neuroticism, a variable commonly used to capture negative affectivity (Burke et al., 1993). We measured conscientiousness and neuroticism at Time 1 using Saucier's (1994) Mini-Markers. Eight items (rated from 1 [extremely inaccurate] to 7 [extremely accurate]) were used for each personality trait (e.g., "Organized" and "Efficient" for conscientiousness; "Moody" and "Fretful" for neuroticism). Cronbach's alpha for conscientiousness and neuroticism in the current research were .74 and .67, respectively. In sum, by controlling for these individual difference variables, we were able to take possible confounds into account and thus rule out some of the alternative explanations that need to be considered when examining FWSS.

#### 4. Results

The means, standard deviations, and correlations among the variables are presented in Table 1. FWSS was positively correlated with both engagement and supervisor-rated performance (r = .29 and .18, respectively; p < .01 in both cases). Engagement was positively correlated with supervisor-rated performance (r = .19, p < .01) and archival sales performance (r = .21, p < .01). These findings provided preliminary support for the hypothesized relationships. Of note, supervisor-rated performance and sales performance were only modestly correlated (r = .22, p < .01), consistent with previous findings indicating that sales managers evaluate sales personnel not only on the basis of their sales productivity but also on the basis of their overall contribution to the functioning of the work unit (MacKenzie, Podsakoff, & Fetter, 1993).

# 4.1. Testing the measurement model

To examine whether the constructs measured are distinguishable from each other, we conducted confirmatory factor analyses. Results showed that the six-factor model (including FWSS, supervisor coaching, engagement, supervisor-rated performance, conscientiousness, and neuroticism as latent variables) offered acceptable fit to the data,  $\chi^2(1259) = 3922.85$ , p < .01, CFI = .94, TLI = .94, RMSEA = .07. All items loaded significantly on their corresponding factors. This measurement model fit the data better than all fifteen constrained models in which any two of the six factors were combined (140.99  $\leq \Delta \chi^2$  [ $\Delta df = 5$ ]  $\leq 13,648.78$ , ps < .01). These results provided support for the hypothesized measurement model.

# 4.2. Testing main and mediation effects

With supervisors providing performance ratings for more than one employee, the data may be considered nested. One-way analysis of variance indicated significant between-group variances for FWSS (F = 1.47, p < .01, intraclass correlation coefficient 1 [ICC1] = .11, ICC2 = .32), supervisor coaching (F = 1.65, p < .01, ICC1 = .15, ICC2 = .39), supervisor-rated performance (F = 2.90, p < .01, ICC1 = .34, ICC2 = .65), and sales performance (F = 1.66, p < .01, ICC1 = .15, ICC2 = .40). As this may result in the violation of assumptions of data independence for ordinary least squares regression models (Klein & Kozlowski, 2000), we used multi-level modeling that allows us to test our research hypothesis at the individual level (Level-1) of analysis while at the same time taking into account non-independence inherent within nested data. Model estimation was conducted using the Mplus 7 software (Muthén & Muthén, 1998–2012).

We first estimated Model 1 that specified the Level 1 fixed effects of control variables (i.e., gender, age, education, organizational tenure, conscientiousness, neuroticism) on engagement and on each performance outcome. At Level 2, all Level 2 intercepts of Level 1 focal variables (i.e., FWSS, supervisor coaching, engagement, supervisor-rated performance, and sales performance) were set to freely correlate with each other. This model is used as a reference for subsequent analyses. In order to test our

Table 1			
Descriptive	statistics	for	variables.

Variable	M	SD	1	2	3	4	5	6	7	8	9	10
1. Gender	.60	.49										
2. Age	24.92	4.27	.16**									
3. Education	1.61	.71	.03	.16**								
4. Organizational tenure (month)	6.70	7.99	.14**	.23**	03							
5. Neuroticism	3.00	1.10	09	06	05	.01	(.67)					
6. Conscientiousness	5.16	1.14	.09	.10*	05	.08	$37^{**}$	(.74)				
7. Future work self salience	5.04	1.29	01	01	.09	10*	$27^{**}$	.22**	(.86)			
8. Supervisor coaching	6.04	1.01	.02	06	03	08	$20^{**}$	.23**	.38**	(.96)		
9. Engagement	3.92	1.33	04	.08	.05	03	14**	.14**	.29**	.18**	(.96)	
10. Supervisor-rated performance	5.72	1.16	.13**	.07	.07	.07	12*	.13**	.18**	.09*	.19**	(.91)
11. Sales performance	.00	1.00	.16**	.13**	.04	.27**	00	.08	00	06	.21**	.22**

Notes. N = 441. Gender was coded "0" for men and "1" for women. Education was coded "0" for "no degree", "1" for "high school diploma", "2" for "associate degree", "3" for "bachelor degree", and "4" for "master degree or above". Sales performance data are employees' standardized values of sales across all employee participants, thus the mean is 0.00 and the standard deviation is 1.00.

<sup>\*</sup> *p* < .05.

<sup>\*\*</sup> p < .01.

**Table 2** Hierarchical linear modeling results.

Predictor	Model 1	Model 1			Model 2			Model 3		
	Engagement	Supervisor-rated performance	Sales performance	Engagement	Supervisor-rated performance	Sales performance	Engagement	Supervisor-rated performance	Sales performance	
Intercept	3.92** (.07)	5.70** (.08)	.01 (.06)	3.92** (.07)	5.70** (.08)	.01 (.06)	3.84** (.07)	5.73** (.09)	06 (.05)	
Level-1 control variables										
Gender	18(.14)	.31** (.09)	.20* (.08)	17(.13)	.33** (.10)	.23** (.08)	17(.13)	.30** (.09)	.22** (.07)	
Age	.03* (.02)	.01 (.01)	.01 (.01)	.03* (.01)	.01 (.01)	.01 (.01)	.03 (.01)	.01 (.01)	.01 (.01)	
Education	.07 (.10)	.10 (.09)	.05 (.08)	.04 (.10)	.09 (.09)	.03 (.07)	.06 (.09)	.08 (.09)	.05 (.07)	
Organizational tenure	00(.01)	.01 (.01)	.03** (.01)	00(.01)	.01 (.01)	.03** (.01)	00(.01)	.01 (.01)	.03** (.01)	
Neuroticism	09(.07)	04(.05)	.04 (.04)	05(.06)	03 (.05)	.05 (.04)	04(.06)	03 (.05)	.05 (.04)	
Conscientiousness	.11 (.06)	.06 (.06)	.07 (.04)	.07 (.06)	.04 (.06)	.06 (.04)	.06 (.07)	.05 (.06)	.06 (.04)	
Level-1 predictors										
FWSS				.23** (.07)	.04 (.07)	02(.04)	.24** (.06)	.06 (.06)	01(.05)	
Coaching				.09 (.11)	02 (.09)	06 (.07)	.16 (.11)	06 (.07)	01 (.07)	
Engagement					.11* (.05)	.18** (.04)		.11* (.04)	.16** (.04)	
FWSS × Coaching							.16** (.06)	02 (.05)	.12* (.06)	
Engagement × Coaching								09 (.05)	01 (.05)	
Level-1 R <sup>2</sup>	.04	.06	.10	.07	.08	.17	.11	.11	.20	

Notes. N = 441. Gender was coded "0" for men and "1" for women. Education was coded "0" for "no degree", "1" for "high school diploma", "2" for "associate degree", "3" for "bachelor degree", and "4" for "master degree or above". Entries are estimations of the fixed effects. Estimations of the standard errors are in parentheses. FWSS = future work self salience.

<sup>\*</sup> *p* < .05.

<sup>\*\*</sup> p < .01.

main effects and mediation effects, on the basis of Model 1, we then estimated Model 2 that added the Level 1 fixed effect of FWSS on engagement and the Level 1 fixed effects of both FWSS and engagement on each performance outcome. The effects of supervisor coaching were controlled on all Level 1 endogenous variables. All exogenous variables at Level 1 were centered along their grand mean.

The unstandardized coefficient estimates are presented in Table 2. Predictors included in Model 2 accounted for 7.1%, 8.4%, and 16.7% of the individual-level variance in engagement, supervisor-rated performance, and sales performance, respectively. Taking nested effects into account, FWSS was positively related to engagement ( $\gamma=.23, p<.01$ ), consistent with Hypothesis 1. Additionally, as expected, engagement was positively related to supervisor-rated performance ( $\gamma=.11, p<.05$ ) and sales performance ( $\gamma=.18, p<.01$ ). We tested the proposed mediation effects (Hypothesis 2) on the basis of a Monte Carlo simulation procedure due to its capacity to accurately reflect the asymmetric nature of the sampling distribution of an indirect effect (Preacher, Zyphur, & Zhang, 2010). With 20,000 Monte Carlo replications, the indirect effect for FWSS via engagement on supervisor-rated performance was .03, with a 95% bias-corrected bootstrap confident interval (CI) of [.002, .057]. Similarly, the indirect effect for FWSS via engagement on sales performance was .04, with a 95% bias-corrected bootstrap CI of [.015, .076]. Thus, Hypothesis 2 was supported.

# 4.3. Testing moderation effects

To test for the proposed moderation effect (Hypotheses 3 & 4), on the basis of Model 2, we estimated a moderation model (Model 3) that added the interaction effect between employee FWSS and supervisor coaching on engagement, supervisor-rated performance, and sales performance, and the interaction effect between engagement and supervisor coaching on supervisor-rated performance, and sales performance. Results indicated that this model accounted for 10.5%, 10.6%, and 20.0% of the individual-level variance in engagement, supervisor-rated performance, and sales performance, respectively. As shown in Table 2, the interaction effect between employee FWSS and supervisor coaching was positively related to employee engagement ( $\gamma = .16$ , p < .01). These results demonstrated that the positive relationship between employee FWSS and engagement was stronger for employees under high, rather than low, levels of supervisor coaching (see Fig. 2), supporting Hypothesis 3. Interestingly, although the interaction effect between engagement and supervisor coaching was not significant, providing no support for Hypothesis 4, we found a significant interaction effect between FWSS and supervisor coaching on sales performance ( $\gamma = .12$ , p < .05). This interaction effect was plotted in Fig. 3.

We then used the online calculator for probing interactions developed by Preacher, Curran, and Bauer (2006) to estimate simple slopes, which describe the effects of employee FWSS on engagement and sales performance at varying levels of supervisor coaching. Specifically, high supervisor coaching was designated as 1 SD above the mean, average supervisor coaching was the mean, and low supervisor coaching was 1 SD below the mean. Results showed that the relationship between FWSS and engagement was significantly positive for employees under high (simple slope = .40, p < .01) and average levels (simple slope = .24, p < .01) of supervisor coaching but not significant for employees under low levels of supervisor coaching (simple slope = .08,

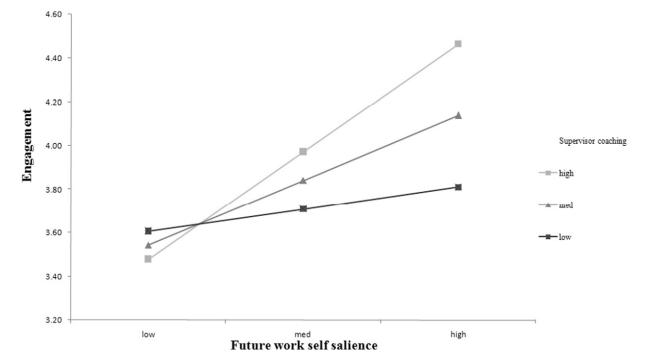


Fig. 2. Interaction between FWSS and supervisor coaching on employee engagement.

p > .05). Moreover, the relationship between FWSS and sales performance was significantly positive for employees under high levels of supervisor coaching (simple slope = .11, p < .05), but not significant for employees under average (simple slope = -.01, p > .05) and low levels of supervisor coaching (simple slope = -.09, p > .05).

We also examined the conditional indirect effects of FWSS on performance indicators through engagement at varying values of supervisor coaching (1 SD above the mean and 1 SD below the mean) using Bauer, Preacher, and Gil's (2006) method. Results indicated that the conditional indirect effect for FWSS via engagement on supervisor-rated performance was .04 with a 95% confidence interval (CI) of [.004, .089] when the levels of supervisor coaching were high versus .01 with a 95% CI of [-.010, .034] when the levels of supervisor coaching were low. The difference of the indirect effects between the two conditions was .03 with a 95% CI of [.001, .082]. Similarly, the conditional indirect effect for FWSS via engagement on sales performance was .06 with a 95% CI of [.028, .110] when the levels of supervisor coaching were high versus .01 with a 95% CI of [-.014, .046] when the levels of supervisor coaching were low. The difference of the indirect effects between the two conditions was .05 with a 95% CI of [.010, .104]. These results indicated that the moderating effect of supervisor coaching on the indirect effect was significant. Thus, Hypothesis 5 (proposing the moderation of the indirect effect of FWSS on performance by supervisor coaching) was supported.

# 4.4. Supplementary analysis

Although we used multi-source and lagged data in the analyses above, the possibility remains that rather than affecting performance, FWSS is influenced by it. Accordingly, we further conducted a sensitivity analysis. Specifically, we selected all the new-comers in our sample who were in the first six months of their employment as a sub-sample (n=296) to test our hypotheses. Given that the newcomers had relatively limited job exposure and performance feedback prior to our assessment of their FWSS, their FWSS is likely to be largely exogenous to factors associated with their new job or organization. As such, any effect of job performance on the salience of future work selves is likely to be limited at best, allowing the investigator to minimize the risk of reverse causality. The sensitivity analysis manifested the same pattern as that was found in the full sample, supporting all our hypotheses except for Hypothesis 4 (results are available from the authors upon request), suggesting that the reversed effect of performance on FWSS is less likely.

#### 5. Discussion

We found that FWSS was positively related to employees' reports of engagement, which in turn, was positively related to employees' supervisor-rated performance and company records of sales performance. Employees' engagement mediated the relationships between FWSS and supervisor-rated performance and sales performance. In addition, employees' perceptions of supervisor

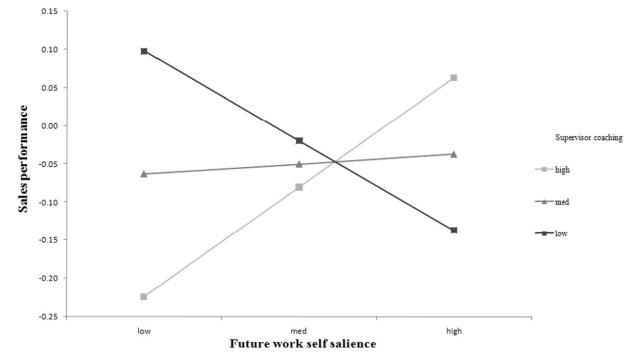


Fig. 3. Interaction between engagement and supervisor coaching on sales performance.

coaching were found to strengthen the positive relationships FWSS has with employees' engagement and sales performance, as well as the indirect effects of FWSS on both performance indicators through engagement.

Our findings offer important contributions to the literatures on both future work selves and supervisor coaching. Regarding the research on future work selves, our finding of a positive impact of FWSS on the strength of subsequent engagement suggests that employees' clear images of their future work states help them direct motivational resources into the current work context and thus heighten their levels of engagement. Additionally, by demonstrating that FWSS was related to both employees' subjective and objective performance through its impact on engagement, our research provides some of the first insights into how employees' FWSS may be linked to work outcomes of more immediate relevance to the organization such as employees' job performance. These findings suggest that, consistent with a self-regulation perspective, enhanced clarity and accessibility of work-related future selves activate employees' energized work states, which in turn serve to elicit and direct personal resources (e.g., energy) towards objectives that are often tightly linked to job performance. As such, the results also suggest that employees' engagement is a proximal individual psychological component through which FWSS influences more distal individual behavioral outcomes (i.e., job performance). By examining the relationship between FWSS and employee performance, with engagement as a mechanism linking the two, we extend the literature on this novel area of future work selves.

Moreover, our findings show that perceived supervisor coaching moderated the relationships FWSS has with engagement and sales performance, such that FWSS has positive and stronger effects on these outcomes for employees experiencing more extensive supervisor coaching. These results suggest that supervisor coaching has an important effect on the transformation of FWSS into employee engagement and sales performance. These findings are important in that they provide some of the first insights into how supervisor coaching, as a means to facilitate self-regulation, may transform more deep-seated, cosmopolitan, and future-focused conceptualizations of the work self (i.e., FWSS) into a more local-focused work states (i.e., engagement) and work outcomes (i.e., sales performance) of the present.

In contrast to the moderating effects of supervisor coaching identified in the first stage of the mediation, we found no significant interaction in this second stage of the mediation (i.e., the engagement–performance link), suggesting that while supervisor coaching amplifies the impact of FWSS on engagement, it has no conditioning effect on the impact of the latter on job performance. As such, our findings suggest that while supervisor coaching may function as an effective means to manage employee performance, its impact may have more to do with directing employees' motivational resources (i.e., FWSS) into the current work rather than with transforming energized states towards performance-related targets. This finding is important in that while supervisor coaching has long been thought to play a role in performance management, far greater attention has been paid to its role in guiding employee efforts than in framing the self-conceptualizations fueling those efforts.

# 5.1. Practical implications

Our findings also provide some suggestions for practice. First, our findings suggest that FWSS is related to higher levels of engagement and thus to higher levels of performance. This finding suggests the importance of cultivating employees' FWSS, which could be an important antecedent of engagement and performance. Strauss et al. (2012) suggested that FWSS can be enhanced through career development initiatives, such as career counseling. Thus, to help employees build engagement and enhance their performance, organizations could provide training to enhance employees' FWSS. Second, training aimed at activating employees' engagement states may also be helpful to improve employees' performance, because engagement is a proximal predictor of performance. Organizations could also try to create environments fostering engagement such as those offering high levels of job resources (e.g., autonomy and opportunities for development) (Bakker & Bal, 2010). Third, our examination of the moderating effects of supervisor coaching revealed that the relationships FWSS has with employee engagement and sales performance were stronger for employees under higher levels of supervisor coaching. Hence, organizations can help supervisors develop coaching skills through training, particularly on how to activate employees' engagement and performance.

# 5.2. Limitations and directions for future research

Our study, however, is not without limitations. First, although prior experimental and longitudinal research on possible selves provides support for the causal direction posited (i.e., from the saliency of FWS to performance; Anderman, Anderman, & Griesinger, 1999; Ruvolo & Markus, 1992), the lack of a longitudinal design makes it impossible for us to rule out the possibility of reverse causality. However, our data suggest such a reverse effect is unlikely in the current study. Specifically, results from the sensitivity analysis using the newcomer sub-sample demonstrated the same pattern as that was found in the full sample, suggesting that the reversed effect of performance on FWSS is less likely. Nevertheless, future research should adopt experimental or longitudinal designs in order to clarify the nature of any possible reciprocal relationship. To the extent that any reciprocal relationship is found, it may suggest that the dynamics proposed and demonstrated in the current study may trigger a virtuous circle where performance bolsters the salience of the FWS.

A second limitation is that we examined FWSS without taking the content of FWS into account. This can be problematic to the extent that a more salient FWS that is inconsistent with the current job is unlikely to lead to greater engagement or performance. However, as noted earlier, individuals expressing a highly salient FWS that is inconsistent with a particular job are unlikely to accept or remain in such a position. Moreover, to the extent that an inconsistent FWS was highly salient to some participants, this would have resulted in diminished support for our hypotheses, suggesting that if anything, our findings err on the conservative.

Nevertheless, this assumption should be tested in future research by examining the interaction between the content of future work selves and the salience of future work selves in affecting job engagement, performance, and other potential outcomes.

A third limitation has to do with the external validity of our findings given the study's focus on a sample of sales persons in a single company in China. On one hand, the emphasis placed on long-term orientation and power distance in Chinese culture (Hofstede, 1991) makes China an ideal context in which to test our hypotheses in that these values likely heighten the salience of the both FWS and coaching to the employees we studied. On the other hand, precisely because of the unique cultural and organizational context in which we tested our hypotheses, our findings may have questionable generalizability to those employed in other settings. Whether our findings can be replicated in other types of organizational contexts or cultures is an important empirical question that deserves attention in the future.

Finally, future research might extend our findings by looking at the implications of FWSS on other concurrent behavioral outcomes in the work context, such as organizational citizenship behavior (OCB). While the current study demonstrated the positive effect of FWSS on in-role behaviors (i.e., performance), we still know little about whether and how FWSS impacts extra-role behaviors. Moreover, the likely nature of this relationship is theoretically equivocal. On one hand, based on the assumption that individuals view OCB as means to enhance their reputation and social capital, and thus facilitate the realization of vocational objectives, FWSS may indeed be predictive of greater OCB. On the other hand, FWSS may be inversely associated with OCB to the extent that individuals with clear future goals might prefer to focus their resources on actions more closely aligned with their own in-role aspirations.

In short, we believe that we have just begun to scratch the surface regarding the potentially broad impacts that individuals' sketches of their future work selves may have on their work-related behaviors, and hope that our insights initiate a more wide-ranging research effort.

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