

ARTICLE

How and when future orientation shapes weekly career adaptability

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Abstract

Previous research has revealed higher career adaptivity leads to higher career adaptability from between-person perspective. However, the construction of career adaptability is dynamic rather than static, so how career adaptivity influences episode-level career adaptability from a within-person perspective is critical but unknown. Drawing on career construction theory, we examined how future orientation, considered part of career adaptivity, influences weekly career adaptability. One wave of between-person data ($N = 97$) and four waves of within-person data (repeated measures) were collected from undergraduates in a Chinese university. The results found that future orientation positively predicted weekly career adaptability, and weekly future work self-mediated the relationship between them. Loneliness negatively moderated the relationship between future orientation and weekly future work self and further negatively moderated the indirect effect of weekly future work self between future orientation and weekly career adaptability. The theoretical and practical implications are discussed.

KEYWORDS

career adaptability, career construction theory, future orientation, loneliness

INTRODUCTION

In the current era of volatility, uncertainty, complexity, and ambiguity, it becomes imperative for individuals to adopt forward-thinking approaches and make proactive career preparations (Bennett & Lemoine, 2014). Those who engage in long-term planning tend to find themselves better equipped to navigate career transitions, embrace boundaryless careers, and achieve career milestones more readily (Guan et al., 2019). This holds particularly true for undergraduate students or new job entrants, as

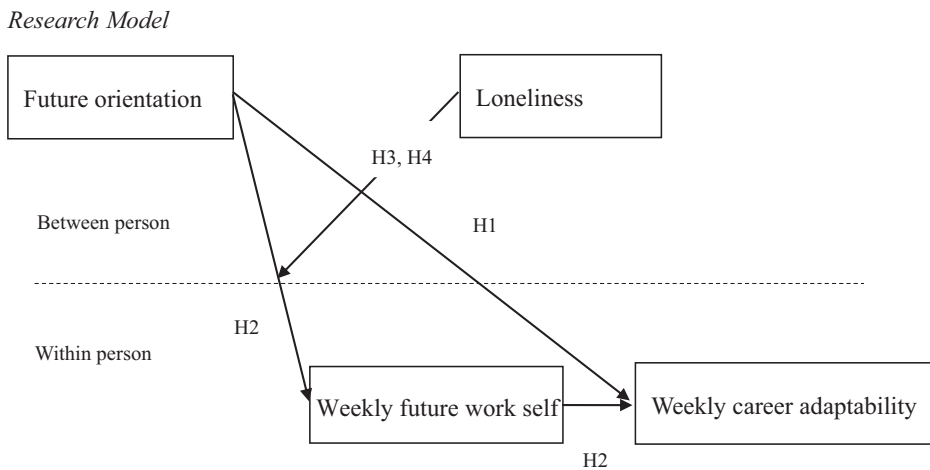


FIGURE 1 Research model.

they undergo significant shifts in transitioning from the role of students to that of employees. A future temporal focus, commonly referred to as future orientation (Savickas, 1997; Shipp et al., 2009), empowers employees to formulate well-defined career prospects and empowers them to proactively shape their employment circumstances and career trajectories (Zacher, 2014). Accordingly, previous studies have shown that future orientation positively predicts career adaptability (Pouyaud et al., 2012; Zacher, 2014). Nonetheless, two questions need to be answered.

First, it is worth noting that existing studies have predominantly taken a between-person perspective to explore how individuals' future orientation contributes to career adaptability. Given that the subjects of career adaptability studies are often undergraduates or young adults who are in the early stages of developing their career adaptability (Guan et al., 2014, 2015), it becomes evident that the within-person perspective, which captures the changing state of career adaptability over time, is vital but ignored. Second, the boundary condition of future orientation and dynamic career adaptability remains largely uncharted. Specifically, social relationships are assumed to be important in the individual development of dynamic career adaptability (Ghosh & Fouad, 2017; Stoltz et al., 2013), but how social connection or isolation impacts future orientation and changing career adaptability has yet to be explored. Addressing this question would provide valuable insights into understanding which individuals are better equipped to dynamically construct their career adaptability. Figure 1 presents the proposed research model.

LITERATURE REVIEW

Career construction theory

Career construction theory explains how people assimilate their vocational self-concepts and work roles. This theory uncovers how people engage in self-construction to guide their vocational behavior and cultivate meaningful careers (Savickas, 1997, 2013). As such, self-construction is critical in one's career construction process (Savickas & Porfeli, 2012). Career construction theory introduces a model of adaptation (Savickas, 2013) that illustrates the interplay of adaptivity, adaptability, adapting, and adaptation, which depicts that individuals' traits (adaptivity) and psychological resources (adaptability) would facilitate them in making career decisions or behaviors (adapting response), and subsequently achieving career outcomes (adaptation results). A meta-analysis study supported the career construction model of adaptation (Rudolph et al., 2017).

Specific to this study, researchers demonstrate that career adaptivity directly impacts career adaptability (Savickas, 1997, 2013). Empirical evidence has shown that career adaptivity, conceptualized as cognitive abilities, big-five personality, self-esteem, future orientation, and core self-evaluations, positively predicts career adaptability (for a review, see Rudolph et al., 2017). Similarly, future orientation also serves as a component of career adaptivity. Future orientation, characterized as a stable individual characteristic referring to one's allocation of focus on the future (Shipp et al., 2009), plays a significant role in an individual's ability to envision their potential life roles within a specific context. Individuals high in future orientation can foresee their life roles available in a specific situation and are aware of possible theaters and roles, making them more inclined to engage in thinking about plotting their future (Cochran, 1997; Savickas, 1997) and proactively shaping their career to be more prepared for future career transitions (Eggerwein et al., 2004).

Future orientation, weekly future work self, and weekly career adaptability

Weekly future work self is "representations of self in the future that encapsulate individually significant hopes and aspirations in relation to work" (Strauss et al., 2012, p. 581). It is a "component of the dynamic self-system, a constantly changing combination of self-schemas or identities that influences self-regulation and guides affect, information processing, and behavior" (Strauss et al., 2012, p. 581). To capture the dynamics of the construction of future work self, we conceptualize it by the week; as such, weekly future work self reflects the dynamic role of self-construction in the career, and it could unpack how future orientation influences weekly career adaptability.

It is important to note that future orientation and future work self, while related, are distinct concepts, distinguished by two key differences (Strauss et al., 2012). First, future orientation is a stable trait, whereas the weekly future work self is a dynamic and constantly changing motivation. According to Strauss et al. (2012), future work self develops over time as individuals consider their future hopes and aspirations, and it represents individuals' positive ideas of who they want to become in their future work life. Individuals higher in future work self tend to imagine their future work selves more easily, whereas those lower in future work self may struggle to form a clear mental picture of future work. We argue that weekly future work self reflects the weekly fluctuation of one's ability to think about their future. Second, although future orientation is a general construct, the future work self is "more specifically focused on one's future work representations" (Strauss et al., 2012, p. 583). Future work self then links self-concept to career behaviors and serves to motivate future behavior in relation to work (Markus & Nurius, 1986; Markus & Wurf, 1987). We conceptualize future orientation as career adaptivity and weekly future work self as a role of self-construction that reflects a changing self-system.

Future-oriented individuals are more likely to actively explore and refine their future work selves at a weekly episode. Their heightened future orientation leads them to allocate their attention and resources toward envisioning the future, resulting in a more vivid and well-developed representation of their weekly future work selves. Previous studies have demonstrated that a salient future work self would increase individuals' self-developing behaviors (Hoyle & Sherrill, 2006; Strauss et al., 2012). Career construction theory suggests that an evident career self is a prerequisite for developing career adaptability (Strauss et al., 2012). During the weekly episode, individuals high in future orientation are constantly thinking about their future work roles. As a result, a self about one's future career would then gradually be internalized into the self-construction process across weeks. Subsequently, weekly future work selves shape individuals' weekly career adaptability.

Loneliness and career construction process

One key proposition of career construction theory posits that individuals shape their self-concept through interpersonal connections (Savickas, 2013). In other words, selves emerge as outcomes of

interpersonal processes. Therefore, the dispositional characteristics regarding social interactions are the critical boundary conditions underlying future orientation and weekly future work self. Loneliness, recognized as a crucial indicator of interpersonal deficits (Heinrich & Gullone, 2006; Killeen, 1998), can result in adverse consequences during career development (Bek, 2017). Individuals may encounter obstacles in their career construction when they experience isolation from instrumental resources, developmental feedback, and emotional support. Lonely people may either lack a sufficient number of social contacts or experience lower quality interactions (Cacioppo & Hawkley, 2009). In social interactions, lonely people are prone to hyper-vigilance toward social threats (Cacioppo, S., Bangee, M., Balogh, S., Cardenas-Iniguez, C., Qualter, P., & Cacioppo, J. T., 2015; Cacioppo, S., Balogh, S., & Cacioppo, J. T., 2015) and heightened social anxiety (Cacioppo & Patrick, 2008; Jones, 1982), thereby limiting their capacity for effective communication, information acquisition, and intellectual growth.

In the Chinese context, traditionally labeled a relationship-orientated (*guanxi*) society where social relationships play a pivotal role in career advancement (Chen & Chen, 2009, 2012), loneliness poses an even greater hindrance. Within this cultural backdrop, self is an encompassing set of social relationships that are interdependently connected (Kitayama & Markus, 2000). People in this cultural context heavily rely on interpersonal relationships to frame their independent selves (Kitayama & Markus, 1995, 2000). For example, Bian (1997) found that stronger relationships increase the likelihood of securing better job opportunities; Xiao and Tsui (2007) noted that managers who cultivate extensive networks achieve higher career progression. Loneliness suppresses people's social interactions with their social contacts and reduces their likelihood of benefiting from social resources (Cacioppo & Hawkley, 2009). In contrast, individuals with lower loneliness have a higher propensity to engage in social interactions and build high-quality or high-quantity relationships with others (Tu et al., 2015). They benefit from this valuable network by gaining instrumental resources to shape their evolving career selves, receiving emotional support to alleviate anxiety in career self-exploration, and acquiring developmental information to refine their dynamic career selves. Our study therefore specifies the disadvantages of loneliness in the relationship between future orientation and weekly future work self in a collective context.

The present study

In this study, we explored the relationship between future orientation, weekly future work self, loneliness, and weekly adaptability in a dynamic perspective. This study also examined how loneliness moderates the effect of future orientation on weekly future work self and the mediation of weekly future work self in the relationship between future orientation and weekly career adaptability. We hypothesized that: (H1) future orientation would be positively related to weekly career adaptability; (H2) future orientation would have an indirect effect on weekly career adaptability through weekly future work self; (H3) loneliness would moderate the relationship between future orientation and weekly future work self; and (H4) loneliness would moderate the indirect effect of weekly future work self and future orientation.

METHODS

Participants

Participants were recruited from the sophomore undergraduates in a prestigious business school in China. These students were 2 years away from their graduation, making them particularly suitable for our research due to their active engagement in the process of exploring and planning their future careers. The final sample consisted of 388 weekly data points from 97 individuals, including

76 females (78.3%) and 21 males (21.7%). The average age of the participants was 19.1 years ($SD = 0.995$ years). This sample is representative of sophomore undergraduates, aligning with the typical educational trajectory in China, where students typically enter college at the age of 18.

Procedure

All participants were from two courses named Organizational Behavior and Business Ethics, respectively. The data collection was collected by one of the authors, who also served as the instructor for both classes. Participants were fully free to join this survey. In the recruiting process, the instructor introduced the purpose and process of this study and called for the participation of the investigation based on a voluntary principle. The instructor highlighted the independence of the students' course performance from their decision to participate in the research. After the recruitment, 102 students voluntarily participated in this survey investigation. We also took measures to ensure that research activities were based on willingness. First, in the recruiting section, only those individuals who applied to join this survey would be included in our research. Second, survey sessions were specifically scheduled after the regular class times, clarifying that this work was not a part of this course. Third, the students would not face any loss or threat if they did not join or complete survey tasks.

The surveys were conducted in five waves. The first-wave surveys collected data on future orientation, loneliness, and demographics (week 1). Then, after a month interval, weekly future work self and weekly career adaptability were measured in four consecutive weeks (weeks 6–9) with each being measured four times. In each wave, participants received an unsealed envelope, including a cover letter and a questionnaire. The cover letter stated the research purpose, ethics, and a guarantee of confidentiality. Participants were required to finish the paper–pencil questionnaire and then seal and submit the envelope to the research assistant. The research assistants matched the survey with their student numbers.

After 5 waves of distribution–returning processes, 388 weekly responses from 97 participants were collected, with a response rate of 95.1% (students who failed to finish any one of the surveys were excluded from the final sample). The high response rate can be attributed to the surveys being administered within a classroom setting at a regular time.

Measures

The survey utilized Chinese version instruments, which were meticulously translated from the original English version following a double-blind translation-back-translation procedure (Brislin, 1980). Initially, we invited two master's students proficient in English to translate the original English items into Chinese. Subsequently, another two master's students, equally skilled in English translation and without prior exposure to the original English items, were asked to translate the Chinese version back into English. To ensure the accuracy of the translations, we sought the expertise of a professor in the field. The professor conducted a meticulous comparison of the two versions of the translations and engaged in discussions with the four students to collaboratively determine the final version of the translated items. All of the scales used a five-point Likert scale, ranging from 1 = *strongly disagree* to 5 = *strongly agree*.

Future orientation

Future orientation was measured by five items from Strauss et al. (2012). This scale consists of six items; in this study, we used five items, and one item was dropped because of the lowest factor loading. To examine the validity of the five-item scale, we completed a supplementary analysis with an

independent sample (full results available on request). The reliability of the short-version (five items in this study) and full-version future orientation (six items) were 0.69 and 0.68, respectively. The correlation between the two versions was 0.98. Predictive validity results indicated similar correlations with future work self and career adaptability using the same measures as included in the current study. These results demonstrate that the short-version (five items in this study) and full-version future orientation (six items) have little difference.

Future orientation shows individual differences in the extent to which people consider distant (concern with future consequences) versus immediate consequences (concern with immediate consequences) when contemplating potential actions (Strathman et al., 1994). A sample item is “Often I engage in a particular behavior in order to achieve outcomes that may not result for many years.” Cronbach’s α for this measure was 0.737.

Loneliness

Loneliness was assessed with an eight-item measure (ULS-8), which is the short version of the UCLA Loneliness scale (ULS-20) by Hays and DiMatteo (1987). ULS-8 was proved to be a reliable and valid substitute for the ULS-20. This scale also showed good internal consistency among Chinese populations (Wu & Yao, 2008; Zhang, 2018) in accessing individual feelings of being cut off or separated from others. Sample items included “I lack companionship,” “I feel isolated from others,” and “People are around me but not with me.” Cronbach’s α for this measure was 0.825.

Weekly future work self

Weekly future work self was measured with a four-item scale developed by Strauss et al. (2012). This version has been used in the Chinese context and has shown good reliability and validity (Cai et al., 2015; Guan et al., 2014; Lin et al., 2016). Participants were asked to imagine their future work selves and rate the salience of their future work selves. Sample items included “I am very clear about who and what I want to become in my future work” and “The mental picture of this future is very clear.” Cronbach’s α for this measure was 0.870.

Weekly career adaptability

Weekly career adaptability was measured using a five-item career futures inventory scale from Rottinghaus et al. (2005). We adopted six items from the original scale in which the factor loading was over 0.6, but one of them was dropped because the subjects do not have real work experiences (e.g., “I can adapt to change in the world of work.”). The supplementary analysis with an independent sample described above demonstrated nominal differences between the five- and six-item scales. This scale shows its good reliability and validity in China, Germany, and America (Gunkel et al., 2010). Sample items included “I am good at adapting to new work settings” and “I can adapt to change in my career plans.” Cronbach’s α for this measure was 0.855.

Measurement model

In this study, we controlled for gender because the gender distribution was imbalanced (more female participants) and age because older individuals tend to have more life experiences to develop their future work self. Given that gender and age were both between-person variables, we controlled them at the between-person level.

TABLE 1 Results of multilevel confirmatory factor analyses.

Models	χ^2	<i>df</i>	CFI	TLI	SRMR	RMSEA
Four-factor model	240.89	139	0.93	0.92	0.05 _{within} 0.08 _{between}	0.04
Three-factor model a	530.77	143	0.74	0.69	0.15 _{within} 0.15 _{between}	0.08
Three-factor model b	336.52	142	0.87	0.84	0.05 _{within} 0.14 _{between}	0.06
Two-factor model	623.26	145	0.68	0.62	0.15 _{within} 0.19 _{between}	0.09

Note: Four-factor model: Between-person level includes future orientation and loneliness; within-person level includes weekly future work self and weekly career adaptability. Three-factor model a: Between-person level includes future orientation and loneliness; within-person level combines weekly future work self and weekly career adaptability. Three-factor model b: Between-person level combines future orientation and loneliness; within-person level includes weekly future work self and weekly career adaptability. Two-factor model: Between-person level combines future orientation and loneliness, within-person level combines weekly future work self and weekly career adaptability.

$n_{\text{between}} = 97$.

$n_{\text{within}} = 388$.

The research model included between- and within-level variables, so we conducted multilevel confirmatory factor analysis (MCFA) to examine the measurement model. Considering that the sample-to-parameter ratio was relatively low (Bentler & Chou, 1987), this study adopted the item-parceling technique in MCFA (Bentler & Chou, 1987; Landis et al., 2000). Following the recommendation of Kelloway (1998), this study randomly distributed the eight items for loneliness into three parcels. The results in Table 1 revealed that the four-factor model with future orientation, loneliness, weekly future work self, and weekly career adaptability fitted the data neatly ($\chi^2 = 240.89$, $df = 139$, CFI = 0.93, TLI = 0.92, SRMR = 0.05_{within}, 0.08_{between}, and RMSEA = 0.04), whereas the alternative showed unaccepted goodness of fit. These results supported the four-factor model.

Analytical strategy

Due to the multilevel structure of the model, we used Mplus 7.0 (Muthén & Muthén, 2012) to conduct multilevel analysis, including MCFA, multilevel mediation, multilevel moderation, and moderated mediation. Following the suggestions of Zhang et al. (2009), we adopted the “2-1-1” model to analyze cross-level mediation. Furthermore, we used the R package to calculate the 95% CI of the indirect effect and conditional indirect effect with parameter-based bootstrapping with the Monte Carlo approach (Preacher et al., 2007).

RESULTS

The means, standard deviations, and correlations are present in Table 2.

The regression results of direct and mediating effects are presented in Table 3. Model 2 shows that future orientation has a positive effect on weekly career adaptability ($\beta = 0.164$, $p < 0.05$), supporting H1. Regarding the mediating effect, Model 1 shows that future orientation is positively associated with weekly future work self ($\beta = 0.315$, $p < 0.001$). Model 3 shows weekly future work self is positively associated with weekly career adaptability ($\beta = 0.394$, $p < 0.001$) when weekly career adaptability is regressed on future orientation and weekly future work self. Results of the bootstrapping show that the indirect effect of weekly future self in the relationship between future orientation and weekly career adaptability is 0.124 (95% CI [0.049, 0.219]). Thus, H2 is supported.

The regression of the moderating effect is presented in Table 4. Model 1 shows that loneliness is negatively related to weekly future work self ($\beta = -0.192$, $p < 0.05$), and the interaction term “Future orientation \times Loneliness” is negatively associated with weekly future work self ($\beta = -0.268$, $p < 0.01$). Therefore, H3 is supported. As shown in Figure 2, future orientation is positively associated

TABLE 2 Means, standard deviations, and correlations of variables.

Variable	Mean	St.d	1	2	3	4	5	6	7	8	9	10	11
1. Gender	0.22	0.41											
2. Age	19.10	1.00	0.122										
3. Future orientation	3.64	0.65	0.108	-0.165									
4. Loneliness	2.48	0.68	-0.052	0.116	-0.260*								
5. W6 future work self	3.05	0.77	-0.029	-0.106	0.324**	-0.416***							
6. W7 future work self	3.02	0.72	0.055	-0.080	0.310**	-0.185	0.609***						
7. W8 future work self	3.13	0.71	0.143	-0.023	0.267**	-0.140	0.496***	0.760***					
8. W9 future work self	3.12	0.73	0.095	-0.107	0.249*	-0.064	0.390***	0.452***	0.542***				
9. W6 Career adaptability	3.55	0.62	0.190	-0.069	0.279**	-0.238*	0.400**	0.274**	0.271**	0.336**			
10. W7 Career adaptability	3.56	0.54	0.193	-0.222*	0.168	-0.155	0.246*	0.403**	0.415**	0.296**	0.671**		
11. W8 Career adaptability	3.58	0.60	0.306**	-0.056	0.253**	-0.173	0.196	0.290**	0.462**	0.394**	0.587**	0.647**	
12. W9 Career adaptability	3.52	0.57	0.241*	-0.074	0.185	-0.138	0.195	0.294**	0.423**	0.394**	0.625**	0.688**	0.743**

Note: $n_{\text{between}} = 97$, $n_{\text{within}} = 388$. Weeks 6–9 represent the repeated measure of future work self and career adaptability at weeks 6–9.

* $p < 0.05$.

** $p < 0.01$.

*** $p < 0.001$.

TABLE 3 Results of the indirect effect of weekly future work self between future orientation and weekly career adaptability.

Variable	Weekly future work self (Model 1)	Weekly career adaptability (Model 2)	Weekly career adaptability (Model 3)
Intercept	3.605***	4.594***	3.174**
Gender	0.069	0.316*	0.288*
Age	-0.028	-0.058	-0.047
Future orientation	0.315***	0.164*	0.04
Weekly future work self			0.394***
R^2	0.151*	0.145*	0.318***

Notes: $n_{\text{between}} = 97$, $n_{\text{within}} = 388$.

* $p < 0.05$.

** $p < 0.01$.

*** $p < 0.001$.

TABLE 4 Results of moderation of loneliness between future orientation and weekly future work self.

Variable	Weekly future work self (Model 1)	Weekly career adaptability (Model 2)
Intercept	3.079**	3.217**
Gender	-0.016	0.288*
Age	0.000	-0.045
Future orientation	0.319***	0.013
Loneliness	-0.192*	-0.044
Future orientation \times Loneliness	-0.268**	
Weekly future work self		0.369***
R^2	0.265**	0.301***

Notes: $n_{\text{between}} = 97$, $n_{\text{within}} = 388$.

* $p < 0.05$.

** $p < 0.01$.

*** $p < 0.001$.

with weekly future work self when loneliness is lower ($\beta = 0.501$, $p < 0.001$), but not when loneliness is higher ($\beta = 0.137$, n.s.). Regarding the moderated mediation hypothesis, Model 2 shows weekly future work self is positively related to weekly career adaptability ($\beta = 0.369$, $p < 0.001$). The results of bootstrapping show an indirect effect of weekly future work self between future orientation and weekly career adaptability is 0.185 (95% CI [0.078, 0.317]) and 0.051 (95% CI [-0.028, 0.145]) when loneliness is lower and higher, respectively. The difference in the indirect effects of weekly future work self is 0.134 (95% CI [0.028, 0.275]), supporting H4.

DISCUSSION

This study examined a cross-level (between-person level and within-person level) career construction model of adaptation; we elaborate on how and when future orientation influenced weekly career adaptability in a dynamic perspective. With 388 weekly data from 97 undergraduates, we found that future orientation (between-person level) influences weekly future work self and weekly career adaptability (within-person level). We also found that loneliness (between-person level) negatively moderated

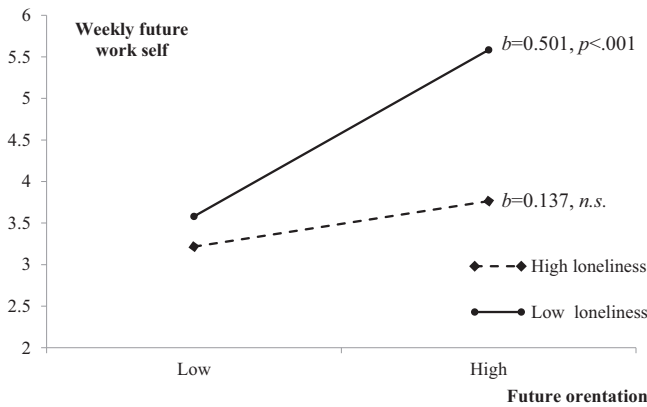


FIGURE 2 Moderating effect of loneliness between future orientation and weekly future work self.

the relationship between future orientation and weekly future work self and negatively moderated the indirect effect of future orientation on weekly career adaptability via weekly future work self. We will discuss the theoretical and practical implications of the present study below.

First, this study adopted a dynamic approach to unravel the influence of career adaptivity on weekly career adaptability. In line with career construction theory, previous studies have adopted a static approach to examine how different conceptualizations of career adaptivity, such as cognitive ability (Savickas & Porfeli, 2012), big-five personality (Savickas & Porfeli, 2012), or core self-evaluation (Guan et al., 2012; Hirschi & Valero, 2015; Pouyaud et al., 2012; van Vianen et al., 2012), influence one's career adaptability. Yet a dynamic perspective concerning changing career adaptability has long been missing. Our findings showed that future orientation had a direct effect on weekly career adaptability, extending our knowledge of how career adaptivity impacts episode-level career adaptability. Further, this study advanced career construction theory by unpacking the weekly level dynamics between future orientation, weekly future work self, and weekly career adaptability.

Second, this study examined the contingency of loneliness in the relationship between future orientation and weekly future work self. We discovered that loneliness negatively moderated the indirect effect of future orientation on weekly career adaptability via weekly future work self. A high level of loneliness appeared to suppress people's future orientation to shape their weekly future work self during the weekly episode, highlighting the importance of social networking and interacting in the dynamics of future work self. Career construction theory proposes that people interpret interpersonal experiences to make sense of themselves, and "adaptabilities develop through interactions between the inner and outer worlds of the person" (Savickas & Porfeli, 2012, p. 663). Our research provides empirical evidence that social isolation limits individuals' formation of future work self and career adaptability on a weekly episode.

These findings also highlighted the contextual contribution of loneliness in Chinese culture. In a *guanxi*-orientated society, those adept at building and maintaining social interactions with a valuable network find this ability highly instrumental for their career progress (Bian, 1997; Chen & Chen, 2012; Xiao & Tsui, 2007). Unfortunately, loneliness prevents individuals from accessing benefits from social interactions with a valuable network (Matook et al., 2015). This study thus highlighted how loneliness restrained the dynamic process between future orientation and weekly career adaptability in the Chinese context.

LIMITATIONS AND IMPLICATIONS

Several limitations need to be noted when interpreting the findings of this study. First, data were collected in five waves but still self-reported from the same source. Therefore, the concern of common

method bias may arise (Podsakoff et al., 2003). We recommend that longitudinal data be collected in future studies to increase the internal validity of these findings. Second, our sample was composed of undergraduates from a university in China (e.g., Cai et al., 2015; Guan et al., 2014); its external validity to other groups (e.g., newcomers in companies) and other contexts (e.g., individualistic societies) should be examined. Additionally, the dual role of the researcher as both investigator and course lecturer may have influenced participant responses, potentially leading to social desirability bias. Despite emphasizing the principles of independence and voluntary participation, participants may have been inclined to respond favorably, skewing self-ratings. Therefore, future studies are encouraged to replicate and expand upon our findings using diverse samples and settings. Third, we captured weekly fluctuations in the future work self and career adaptability using adapted or shortened scales. This is beneficial for reducing the survey length and participants' fatigue, but it also raises the concern of scale validity and reliability. Even though evidence shows that the scales in this study are valid, future studies are recommended to use the full version to advance the research. Furthermore, although our study provides insights into weekly variations, it lacks exploration of longer term changes at monthly or yearly intervals or across the lifespan of adults (Rudolph et al., 2017). Subsequent research endeavors could delve into dynamic construct changes over extended timeframes to provide a more comprehensive understanding of developmental trajectories.

Implications for practice

This study also offers several practical implications. As future orientation and weekly future work self are significant predictors of weekly career adaptability while loneliness serves as a detrimental factor, these insights can be valuable in identifying challenges that students may encounter in their student-to-employee transitions. For instance, when conducting a career exploration program or course, career counselors and educators should encourage students to define their long-term career objectives and create step-by-step plans to achieve them. Additionally, they can employ self-assessment tools to help individuals identify their strengths, interests, and values, aligning them with future career goals.

Furthermore, as demonstrated by our research findings, future work self and career adaptability fluctuate weekly, so career counselors and educators should not take it for granted that one-time interventions could solve all problems but rather realize that continuous efforts and providing episode-level feedback increase chances for improvement. For example, career counselors and educators could establish regular training and feedback with students or participants to monitor their progress and adjust interventions accordingly. They can also promote peer-to-peer support networks where individuals can exchange their experiences and insights, fostering a sense of community and continuous improvement.

Finally, individuals and trainers in career exploration need to realize the detrimental effect of individuals' loneliness in career construction and take measures to prevent this negative side effect. Career counselors and educators should provide courses or interventions to improve social skills, provide social support, offer more chances for social interactions, and address maladaptive social cognition (Masi et al., 2010). These courses or interventions may involve the establishment of support groups or forums where individuals can connect with others facing similar challenges, providing both emotional support and practical advice. Collaborating with academic institutions, employers, and community organizations to create a comprehensive support system for individuals in transition is another viable approach. Through these measures, individuals can better prepare themselves for their future careers.

CONCLUSION

Based on career construction theory, this study found that future orientation has a positive effect on weekly career adaptability, and weekly future work self-mediate this relationship. We also found

loneliness suppresses the relationship between future orientation and weekly future work self, as well as the indirect effect of weekly future work self on the relationship between future orientation and weekly career adaptability. Extending the consensus of existing studies adopting a static approach to reveal career adaptability, this study highlighted a dynamic approach to unpack how and when future orientation impacts individual weekly career adaptability.

CONFLICT OF INTEREST STATEMENT

The authors declare no conflicts of interest.

DATA AVAILABILITY STATEMENT

The datasets generated during and/or analyzed during the current study are available from the corresponding author on reasonable request.

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