Abstract

The current research examined the effects of career-specific parental behaviors (reported by parents at time 1) on Chinese university students’ career exploration (reported by students at time 2) and career adaptability (reported by students at time 3). A survey study was conducted among Chinese university graduates (N = 244) and their parents (N = 244). The results supported a mediation model such that a high level of parental support and a low level of parental interference had beneficial effects on Chinese undergraduates’ career exploration, which in turn positively predicted their career adaptability. Lack of parental career engagement had a direct negative effect on career adaptability. Significant interaction effects were also found among these three types of parental behaviors such that at a lower level of lack of parental career engagement, the positive effects of parental support, as well as the negative effects of interference on career exploration were stronger. The corresponding moderated mediation models were also supported. These findings carry implications for research on career construction theory and career counseling practices.

Key words: career-specific parental behaviors, career exploration, career adaptability
Career-specific Parental Behaviors, Career Exploration and Career Adaptability:
A Three-Wave Investigation among Chinese Undergraduates

From a developmental perspective, most undergraduate students are in the stage of emerging adulthood (Arnett, 2000), which allows for various exploratory activities to identify one's future career possibilities, and to develop relevant abilities to cope with diverse challenges in career development. Faced with many difficulties and uncertainties, undergraduates still need guidance from external sources, among which the interventions and suggestions provided by their parents cannot be easily substituted (Bryant, Zvonkovic, & Reynolds, 2006). Career-specific parental behaviors refer to the concrete actions parents use to guide the career development of their children (Dietrich & Kracke, 2009). Career-specific parental behaviors are related to the general aspects of parental practices, such as general parenting styles (Tracey, Lent, Brown, Soresi, & Nota, 2006) and attachment styles with children (Blustein, Walbridge, Friedlander, & Palladino, 1991); at the same time, this concept also captures parents’ specific understandings and interventions for the career development of their children (Zhao, Lim, & Teo, 2012).

Dietrich and Kracke (2009) found that parental support (parents encourage youths to explore their career possibilities and provide advice whenever necessary), parental interference (parents intend to control their children's career preparation and career aspirations by imposing their own preferences), as well as the lack of parental career engagement (parents’ inability or reluctance to get involved in their children's career development) serve as the basic elements of career-specific parental behaviors. Recent research has showed that these parental behaviors significantly predicted career exploration and career decision-making difficulties of adolescents, as well as the career self-efficacy of university students (Dietrich & Kracke, 2009; Zhao, Lim, & Teo, 2012). In spite of the progress, there still exist questions related to the roles of these parental practices in the career
development of university students. First, previous research mainly relied on offspring’s perceptions to measure career-specific parental behaviors (Dietrich & Kracke, 2009; Zhao, Lim, & Teo 2012). Although the validity of this operationalization has been supported, there still exists the need to measure this construct from the perspective of parents, to further corroborate previous findings (Dietrich & Kracke, 2009; Garcia, Restubog, Toledano, Tolentino, & Rafferty, 2012). Second, previous research mainly focused on the behavioral (career exploration) and social-cognitive (career decision-making difficulties and career self-efficacy) outcomes, but not much work has been done to examine how parental practices affect undergraduates’ adaptive-abilities related to their career development.

The current research aims to address these gaps through the following ways. First, to better estimate the effects of these parental practices on undergraduates’ career-related outcomes, we adopted parents’ self-reports to measure career-specific parental behaviors, and examined their relations with students’ self-reports of career-related outcomes. In addition, we measured the key variables at three time points, to reduce the potential common method variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Second, we also examined the relations between career-specific parental practices and Chinese undergraduates’ career adaptability (Savickas, 1997, 2005, 2013). As career adaptability refers to the self-regulatory resources that help individuals to cope with the challenges and difficulties in their career transitions (Savickas, 1997), research into the antecedents of career adaptability will carry great implications in helping individuals to achieve positive career outcomes. To the best of our knowledge, there exists only one study that reveals a positive relationship between undergraduates’ perception of parental support and their career adaptability (Tian & Fan, 2014). By using the three-factor framework of parental behaviors and a more direct method to measure these behaviors, the current research examined parental influence on undergraduates’ career adaptability in a more comprehensive and rigorous way.
In addition, the current research also examined the dynamic relations among these variables by testing the mediating role of career exploration, as well as the interactive effects of different types of parental behaviors on outcome variables. Based on previous research (Bartley & Robitschek, 2000; Blustein, 1997; Jordaan, 1963; Stumpf, Colarelli, & Hartman, 1983), we propose that undergraduates’ career exploration behavior will serve as the proximal predictor of their career adaptability, and mediate the effects of parental practices on career adaptability. From a self-determination perspective (Deci & Ryan, 1985; Ryan & Deci, 2000), we further propose that as these three types of parental behaviors are closely related to the need fulfillment of competence, autonomy and relatedness in undergraduates’ career exploration, therefore career exploration will be positively predicted by parent support, but negatively predicted by parental interference and lack of parental career engagement. In addition, this research also examined the interactions among these three types of parental behaviors, to explore how the combination of different types of parental behaviors affects undergraduates’ career exploration and adaptability.

Career Exploration and Career Adaptability

According to career construction theory (Savickas, 1997, 2005, 2013), career adaptability depicts the multiple psychological resources involved in the problem-solving process in one’s career development, including career concern (the ability of considering future possibilities and preparing for these possibilities), career control (the ability of making deliberate decisions and taking conscientious actions), career curiosity (the strength of exploring various situations and roles) and career confidence (the positive beliefs on one’s problem-solving skills across different situations). To develop these adaptive-abilities, individuals need to continuously gain insights of their own characteristics and the complexity of working environments through various personal experiences (Savickas, 2013). As career exploration refers to the activities that enable individuals to collect and analyze information
that is relevant to their career development (Blustein, 1997; Jordaan, 1963; Stumpf, Colarelli, & Hartman, 1983), we argue that career exploration may serve as a proximal antecedent for individuals’ career adaptability.

Career exploration includes self-exploration and environmental exploration (Stumpf et al., 1983). Through self-exploration, individuals can thoroughly examine their own interests, values, and experiences and thus form a clear image about who they are and how these internal attributes shape their future careers (Blustein, 1989; Flum & Blustein, 2000; Stumpf et al., 1983). Environmental exploration enables individuals to make more informed career decisions by collecting information on jobs, organizations and occupations (Blustein, 1992, 1997; Neimeyer, 1988; Super & Hall, 1978; Werbel, 2000). It has been established that both self-exploration and environment-exploration activities play important roles in helping individuals to identify suitable job opportunities, achieve better employment and cope with the difficulties and challenges in their career transitions (Zikic & Klehe, 2006; Werbel, 2000).

In this study, we propose that the continuing course of career exploration behaviors may contribute to the development of career adaptability. First of all, career exploration promotes the search for valuable information related to self-appraisal or adjustment to different jobs and occupations (Blustein, 1992, 1997; Super & Hall, 1978), which yields useful insights that advance a person to a gratifying career choice, therefore career exploration is likely to promote students’ strength in exploring various situations and potential roles (career curiosity). As previous research has showed that career exploration correlates positively with future-oriented mental process, such as goal-directedness (Blustein, 1989), personal growth initiative (Robitschek & Cook, 1999) and the formation of ego identity (Blustein, Devenis, & Kidney, 1989), we thus propose that by collecting and processing relevant information, career exploration also motivates individuals to seriously consider their future career possibilities and prepare for these possibilities (career concern).
In addition, previous research also suggest that the activities involved in career exploration also promote students’ abilities of making deliberate decisions and taking conscientious actions (Blustein & Phillips, 1988), therefore career exploration is very likely to strengthen the abilities of career control. The engagement of these exploration activities can also promote the self-efficacious beliefs in their problem-solving skills during their career development (Blustein, 1989; Lent & Hackett, 1987), therefore we propose that career exploration will also promote students’ career confidence. Based on the above discussion, we propose that:

**Hypothesis 1:** Career exploration will be positively related to career adaptability.

**The Roles of Parental Career-specific Behaviors**

From the perspective of career construction theory (Savickas, 1997, 2005, 2013), career is a process motivated by individuals’ willingness to gain insights for their future career development and life meanings, therefore individuals’ intrinsic motivation plays an important role in their career exploration and career adaptability development. Consistently, self-determination theory (Deci & Ryan, 1985) also emphasizes the role of intrinsic motivation in driving individuals’ behavior across different life domains. It is also argued that by fulfilling individuals’ need for autonomy, competence and relatedness, contextual factors can promote individuals’ intrinsic motivation and proactive behaviors (Ryan & Deci, 2000). In this study, we propose that the three types of parental behaviors are closely related to the need fulfillment of competence, autonomy and relatedness in undergraduates’ career activities, therefore they will serve as significant predictors for undergraduates’ career exploration.

The first factor, parental support, emphasizes parents’ supporting behaviors in encouraging youths’ exploration activities (e.g., seeking information, getting apprenticeship opportunities) and giving suggestions on their career development when needed. From the perspective of self-determination theory (Deci & Ryan, 1985; Ryan & Deci, 2000), these
supportive behaviors help youths explore valuable information and experiences to gain their insights for future career development, therefore undergraduates’ sense of competence will be improved by parental supportive behaviors. As a result, they will be motivated to initiate career exploration activities. Consistently, previous research has showed the positive effects of parental support on career exploration across different research samples (Dietrich & Kracke, 2009; Neuenschwander & Kracke, 1997; Phillips et al., 2001; Phillips et al., 2002; Schultheiss et al., 2001).

The second factor, parental career interference, refers to parents’ controlling behavior in offspring’s career development, such as implementing their own ideas in offspring’s career choices or interfering too much on their career preparation. When parents try to enforce their own ideas on their offspring’s career development, these practices are likely to inhibit youths’ sense of autonomy and erode their intrinsic motivation (Deci & Ryan, 1985; Ryan & Deci, 2000). Accordingly, previous research has found that youths under over-controlling parental practices are more passive in their career preparation, and displayed a high level of behavioral inhibition and lack of exploration activities (Grotevant & Cooper, 1988; Young et al., 2001). Therefore, in current research we also propose that parental career interference will be negatively related to career exploration, and will also has a negative effect on career adaptability.

Lack of parental career engagement refers to the low level of parents’ involvement in youths’ career preparation. This lack of parental career engagement may be due to low importance attributed to youths’ career issues, or because parents may not be capable of helping youths to cope with the challenges in their career development (Mortimer et al., 2002). From a self-determination perspective, undergraduates who lack the parental engagement not only perceive a high level of difficulty in solving the problems in their career exploration, but also experience a low level of social relatedness with parents when exploring
their future career possibilities. Existing literature shows that neglectful parental practices have negative effects on adolescents’ career exploration (Vignoli, Croity-Belz, Chapeland, Fillipis, & Garcia, 2005). Therefore, in the present study, lack of parental career engagement is hypothesized to be negatively related to undergraduates’ career exploration, which in turn predicts career adaptability.

**Hypothesis 2:** Undergraduates’ career adaptability will be positively predicted by parental support and negatively predicted by parental interference and lack of parental career engagement, with these relations mediated by undergraduates’ career exploration.

In addition to the main effects discussed above, previous research also suggests that the three types of parental behaviors also interplay with each in predicting career exploration and career decision-making difficulties (Dietrich & Kracke, 2009). The current research also explored these possibilities by examining how these parental behaviors interact with each other in predicting career exploration and career adaptability. Based on the self-determination theory, we propose that as a high level of parent support leads to a high sense of competence, a low level of interference leads to a high level of autonomy, and a low level of lack of parental career engagement promotes the feeling of relatedness; the combination of a high level of parental support, a low level of interference, and a low level of lack of parental career engagement may produce the optimal effect on undergraduates’ career exploration behavior, as well as their career adaptability.

**Hypothesis 3:** The positive effects of parental support on career exploration and career adaptability will be stronger when parents display a higher level of engagement (H3a); the negative effects of interference on career exploration and career adaptability will be stronger when parents display a higher level of engagement (H3b); the positive effects of parental support on career exploration and career adaptability will be stronger when parents display a lower level of interference (H3b).
Method

Participants and procedure

Data were collected from a university in North China and participants were recruited by the career center of this university by sending advertisement through emails and phone messages. Participants were informed that the data will be only used for research purpose and their personal information will be kept confidential. At the first wave (June 2013), each participant was required to contact his/her father or mother to complete the survey on career-specific parental behaviors. The completed questionnaires were mailed back to the career center by postage prepaid envelope service. Parents were asked to sign consent forms before completing the questionnaires. The second wave of data collection was completed in September 2013 in a big classroom and participants completed the questionnaires on career exploration. The third wave of data collection was completed in October 2013 in the same classroom and participants completed the questionnaires on career adaptability. To reduce the attrition rate, participants who provided valid responses for all the three waves of questionnaires were rewarded a gift worth 10 RMB (around $2 US). Each participant received a debriefing report after completing the third-wave questionnaires.

Two hundred and forty-four full data sets were obtained. The mean age of undergraduate participants (60% females) was 21.11 ($SD = 1.29$). 34.8% of participants indicated their majors as “natural sciences”, 15.6% indicated “social sciences”, 13.5% indicated “arts or humanities”, and 36.1% indicated “interdisciplinary or others”. Their average annual family income was 36,658 (around $ 6100 US) RMB ($SD = 33,669$). For family economic status, 2.9% of participants indicated their family economic status as “very poor”, 24.9% indicated “poor”, 30.7% indicated “below the average”, 36.9% indicated “average”, 4.1% indicated “above the average”, 0.4% indicated “rich” and no participants indicated “very rich”. For the parents (52.5% mothers), their average age was 47.07 ($SD = 7.45$).
For parents’ education, 19.3% were primary school level or below, 36.9% were junior middle school, 24.2% were senior middle school, 10.2% had an associate degree, 9.0% had a bachelor’s degree, 0.4% had a master’s degree or higher.

**Measures**

_Career adaptability_. Undergraduates’ career adaptability was measured by the Chinese version of the *Career Adapt-Abilities Scale* (Hou et al., 2012), which consists of 24 items that are divided equally into four subscales measuring the adaptive resources of concern, control, curiosity and confidence. Participants responded to each item on a scale from 1 (not strong) to 5 (strongest). For the global indicator, the Cronbach alpha was .95. For each dimension, Cronbach's alpha was .87 for career concern, .90 for career control, .85 for career curiosity and .90 for career confidence.

_Career-specific parental behaviors_. Career career-specific parental behaviors were measured by the scale developed by Dietrich and Kracke (2009). The items were modified to fit the perspective of parents. For example, the original item “my parents talk to me about my vocational interests and abilities” was changed to “I talk to my child about his/her vocational interests and abilities”. (“1” = completely disagree, 5 = completely agree). Cronbach’s alpha was .84 for lack of parental career engagement, .89 for parental support, and .90 for parental interference.

_Career exploration_. Career exploration was assessed by the scale developed by Stumpf et al. (1983), which consist of 5 items on self exploration and 6 items on environment exploration. As these two sub-scales were highly correlated with each other ($r = .69, p < .001$), in the current study we calculated the average score of these 11 items to represent undergraduates’ career exploration. Cronbach's alpha was .92.

_Control variables_. In this study, we measured and controlled student’s gender, age, grade and major (dummy coded, “natural sciences” as reference group), parents’ gender, age,
education, socio-economic status, and family income ($Ln$ transformed to correct skewed distribution).

**Results**

**Descriptive and correlations**

The descriptive statistics and inter-correlations among parental support, parental interference, lack of parental career engagement, undergraduates’ career exploration and career adapt-ability were presented in Table 1. Career adaptability correlated positively with career exploration ($r = .32, p < .001$), parental support ($r = .21, p < .01$) and correlated negatively with lack of parental career engagement ($r = -.27, p < .001$), but not correlated with parental interference ($r = -.12, ns$). Career exploration correlated positively with parental support ($r = .41, p < .001$), negatively with lack of parental career engagement ($r = -.19, p < .01$) and parental interference ($r = -.19, p < .01$). At the dimension level, career exploration correlated most closely with career curiosity ($r = .35, p < .001$).

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Insert Table 1 here.
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**Testing for mediation effects**

We examined the mediation role of career exploration with the procedure developed by Preacher and Hayes (2008). Prior to the analyses, all continuous predictors were mean centered (Aiken & West, 1991). The results showed that after controlling for the effects of students’ age, grade, gender, major, family income, socio-economic status, parents’ age, education and gender, family career support ($\beta = .36, p < .001$) and family career interference ($\beta = -.13, p < .01$) were significantly related to undergraduates’ career exploration, while the effect of lack of parental career engagement was not significant ($\beta = .04, ns$). The positive relationship between career exploration and career adaptability was also significant after
controlling for the effects of career-specific parental behaviors and control variables ($\beta = .19$, $p < .001$). In addition, lack of parental career engagement had a direct negative relationship with career adaptability ($\beta = -.11$, $p < .05$) after controlling for other parental behaviors and career exploration. The bootstrapping results indicated that the indirect effect of parent career support on career adaptability through career exploration was significant, with a 95% CI not containing zero ([.03, .12]); the indirect effect of parent career interference was also significant, with a 95% CI not containing zero ([-.05, -.01]). The results of bootstrapping also showed that lack of parental career engagement had a direct effect on career adaptability, with a 95% CI not containing zero ([-.20, -.03]). In sum, career exploration fully mediated the effects of parental support and interference on career adaptability, but lack of parental career engagement had a direct effect on career adaptability.

Insert Table 2 here.

To further examine these relations at the dimensional level of career adaptability, we conducted hierarchical regression analyses by using the four dimensions of career adaptability as the outcome variable. The bootstrapping results indicated that parental career support had significant indirect effects on career curiosity ($Effect size = .08$, 95% CI = [.04, .15]), career confidence ($Effect size = .08$, 95% CI = [.04, .13]) and career concern ($Effect size = .06$, 95% CI = [.01, .12]), but not on career control ($Effect size = .04$, 95% CI = [-.004, .11]). The indirect effects of parental career interference on career curiosity ($Effect size = -.03$, 95% CI = [-.06, -.01]), career confidence ($Effect size = -.03$, 95% CI = [-.06, -.01]), and career concern ($Effect size = -.02$, 95% CI = [-.05, -.01]) were significant, but the indirect effect on career control was non-significant ($Effect size = -.02$, 95% CI = [-.04, .001]).

Testing for moderation effects
We first tested whether there existed three-way interaction among these parental behaviors in predicting career exploration and the results showed that this interaction was non-significant ($\beta = .001$, ns). We then examined the two-way interactions among these parental behaviors and found a significant interaction between parental support and lack of parental career engagement ($\beta = -.09, p < .05$), and an interaction between parental interference and lack of parental career engagement ($\beta = .08, p < .01$). As showed in Figure 1, when lack of parental career engagement is higher (one SD above the mean), parental support was positively related to career exploration ($\beta = .21, p < .01$); when lack of parental career engagement is lower (one SD below the mean), this relationship was stronger ($\beta = .44, p < .001$). Figure 2 showed that when lack of parental career engagement is higher (one SD above the mean), parental interference was not related to career exploration ($\beta = -.001$, ns); when lack of parental career engagement is lower (one SD below the mean), this relationship was significant ($\beta = -.19, p < .001$).

Insert Figure 1 and Figure 2 here.

We further examined whether lack of parental career engagement also moderated the indirect effects of the other two parental behaviors on career adaptability by using the procedure outlined by Hayes & Scharkow (2013). Hayes & Scharkow (2013) recommended bootstrapping techniques to assess the significance of conditional indirect effects. Researchers may examine the magnitude of the indirect effect (via the mediator) of the independent variable on the dependent variable, at a range of values of the moderator (typically, one standard deviation above and below the mean). Researchers can use bootstrapping techniques to generate confidence intervals for the magnitude of the indirect effects and assess significance via these confidence intervals. The results of bootstrapping
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showed that when lack of parental career engagement is higher (one SD above the mean), the indirect effect from parental support to career adaptability through career exploration was significant, with a 95% CI of [0.01, 0.09]; when lack of parental career engagement is lower (one SD below the mean), the indirect effect is significant and larger, with a 95% CI of [0.04, 0.15]. At the same time, the moderated mediation index (95% CI = [-0.05, -0.03]) showed that lack of parental career engagement significantly moderated the indirect effect of parental support on career adaptability. The results of bootstrapping showed that when lack of parental career engagement is higher (one SD above the mean), the indirect effect from parental interference to career adaptability through career exploration was non-significant, with a 95% CI of [-0.03, 0.02]; when lack of parental career engagement is lower (one SD below the mean), the indirect effect is significant, with a 95% CI of [-0.06, -0.01]. At the same time, the moderated mediation index (95% CI = [0.004, 0.03]) showed that lack of parental career engagement significantly moderated the indirect effect of parental interference on career adaptability.

Discussion

The current research examined the effects of career-specific parental behaviors on university students’ career exploration and career adaptability. Based on a three-wave survey, the results supported a mediation model such that a high level of parental support and a low level of parental interference had beneficial effects on Chinese undergraduates’ career exploration, which in turn positively predicted their career adaptability. Lack of parental career engagement had a direct negative effect on career adaptability. Significant interaction effects were also found among these three types of parental behaviors such that at a lower level of lack of parental career engagement, the positive effects of parental support, as well as the negative effects of interference on career exploration were stronger. The corresponding moderated mediation models were also supported. These findings carry implications for
research on career construction theory and career counseling practices.

**Theoretical Implications**

The results showed that all the three types of parental behaviors had significant direct or indirect effects on undergraduates’ career adaptability. Although the positive effects of career adaptability in individuals’ career development have been established in recent studies (e.g., Guan, Deng, Sun, Wang, Cai, Ye, et al., 2013; Guan, Guo, Bond, Cai, Zhou, Xu, et al., 2014; Johnston, Luciano, Maggiori, Ruch, & Rossier, 2013; Tolentino, Garcia, Restubog, Bordia, & Tang, 2013), not much work has been done to examine the effects of parental behaviors on career adaptability (Tian & Fan, 2014). The current research addressed this gap by testing the roles of career-specific parental behaviors in shaping the career adaptability of Chinese undergraduate students. As we hypothesized, undergraduates’ career adaptability was positively predicted by parents’ supportive behaviors, but negatively predicted by parental interference and lack of parental career engagement. As previous research was mainly adopted perceptions of offspring to measure parental behaviors, the current findings provide direct evidence on the effects of parental behaviors in undergraduates’ career development.

As this study was conducted in a Chinese context, which is characterized by the collectivistic values (Hofstede, 2001), therefore future research should continue to examine whether these findings could be replicated in other cultural settings. In addition, these results also suggest that career adaptability is likely to mediate the effects of parental influences on other important career outcomes, such as long-term career success. These important questions remain to be discovered in future research.

This study also showed that undergraduates’ career exploration mediated the effects of parental support and parental interference on career adaptability. From the perspective of self-termination theory, as parental support strengthens undergraduates’ sense of competence and parental interference reduces their autonomy, these parental behaviors may directly affect
undergraduates’ motivation to get involved in career exploration (Deci & Ryan, 1985; Ryan & Deci, 2000). Career exploration in turn enables individuals to explore valuable information and opportunities, and prepare themselves for various career challenges. As a result, career exploration serves as the key explanatory link between these two parental behaviors and career adaptability.

At the dimension level, career exploration was most closely related to career curiosity, which highlights the importance of self-exploration and environment exploration in strengthening undergraduates’ ability of collecting and analyzing career-related information. Career exploration had a relatively weaker relationship with career control and these results suggest that there exist other relevant proximal predictors for career control, which remain to be discovered. On the other hand, the results also showed that lack of parental career engagement had a direct effect on career adaptability, which was not mediated by career exploration. Future research may continue to examine other important mediators in this process. For example, from the perspective of theory of planned behavior (Ajzen, 1991), the lack of parental career engagement may decreases undergraduates’ career adaptability through a normative pressure, as the lack of parental career engagement may result in the perception that parents don’t regard career development as an important issue. This perceived family norm may inhibit undergraduates’ intention to develop their adaptive-abilities.

The interactions among these three types of parental behaviors further demonstrate the dynamic process through which parental behaviors affect undergraduates’ career exploration and adaptability. The results suggest that when parents are highly engaged in undergraduates’ career development, they could engender both positive and negative effects, depending on the level of supportive behavior and interfering behavior. For example, when parents are engaged in undergraduates’ career development and can provide supportive resources, undergraduates are more likely to initiate exploration behavior; however, if parents
are engaged in undergraduates’ career development but cannot provide supportive resources, undergraduates tend to reduce their career exploration behavior. On the other hand, when parents are engaged in undergraduates’ career development but try to impose their thoughts into this process, undergraduates are also less likely to initiate exploration behavior. From the perspective of self-determination theory (Deci & Ryan, 1985; Ryan & Deci, 2000), these results further emphasize the importance of sustaining undergraduates’ sense of competence and autonomy in helping them to develop adaptive abilities in their career development. Future research may continue to examine how these parental behaviors interplay with each other in predicting offspring’s long-term career outcomes.

**Practical Implications**

These results carry important implications in developing undergraduates’ adaptive career abilities. As the three types of parental behaviors serve as significant predictors for undergraduates’ career adaptability, they can be used as important tools for parents to diagnose their dysfunctional behaviors, in order to facilitate the career development of their offspring. The significant interaction effects among parental behaviors further suggest that the combination of a high level of parental support, a low level of interference, and a low level of lack of parental career engagement will lead to positive results in undergraduates’ career exploration and adaptability. On the other hand, the current findings also suggest that individuals’ career exploration serves as important proximal predictor for their career adaptability, therefore educators and counselors should help undergraduates involved in more exploratory activities, as a way to promote their career adaptability.

**Limitations**

Despite the theoretical and practical implications discussed above, the current research has several possible limitations. First, although we collected the data from different sources and time points, career exploration and career adaptability may be reciprocally
related to each other rather than one causing the other. On the one hand, specific career behaviors like self-exploration and environmental exploration can contribute to the development of career strengths like career adaptability. On the other hand, career adaptability can also enable individuals to engage in proactive career behaviors like career exploration. Therefore, future work should adopt a more rigorous design to examine the dynamic relations among these variables. Second, as the current research was conducted among a sample of students from a university in China, whether the findings discussed above could be generalized to other Chinese undergraduates remains to be examined in future research.
References


Parental Behaviors and Career Adaptability


Parental Behaviors and Career Adaptability


Table 1

Descriptive statistics and correlations among variables

<table>
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<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
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<th>6</th>
<th>7</th>
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<th>9</th>
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</thead>
<tbody>
<tr>
<td>1. Parental support</td>
<td>5.18</td>
<td>1.07</td>
<td>.89</td>
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<td>2. Parental interference</td>
<td>3.48</td>
<td>1.38</td>
<td>-.01</td>
<td>.90</td>
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<td>3. Lack of parental career engagement</td>
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<td>.32***</td>
<td>.84</td>
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<td>4. Career exploration</td>
<td>4.8</td>
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<td>-.19**</td>
<td>-.19**</td>
<td>.92</td>
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<td>5. Career concern</td>
<td>3.34</td>
<td>.79</td>
<td>.15*</td>
<td>-.11</td>
<td>-.22**</td>
<td>.25***</td>
<td>.87</td>
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<td>6. Career control</td>
<td>3.85</td>
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<td>-.14*</td>
<td>-.25***</td>
<td>.19**</td>
<td>.90</td>
<td>.63***</td>
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<td>7. Career curiosity</td>
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<td>-.09</td>
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<td>.65***</td>
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<td>.64***</td>
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<td>8. Career confidence</td>
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<td>.65***</td>
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<td>-.12</td>
<td>-.27***</td>
<td>.32***</td>
<td>.85***</td>
<td>.87***</td>
<td>.87***</td>
<td>.90***</td>
<td>.95</td>
</tr>
</tbody>
</table>

*p < .05, **p < .01, ***p < .001.
Table 2 Hierarchical regression analysis of career exploration and career adaptability

<table>
<thead>
<tr>
<th>Variable</th>
<th>Career exploration</th>
<th>Career adaptability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
</tr>
<tr>
<td>Constant</td>
<td>6.40***</td>
<td>5.20**</td>
</tr>
<tr>
<td>Age</td>
<td>-.11</td>
<td>-.05</td>
</tr>
<tr>
<td>Grade</td>
<td>.31**</td>
<td>.23*</td>
</tr>
<tr>
<td>Gender</td>
<td>.20</td>
<td>.11</td>
</tr>
<tr>
<td>Major: Social Sciences</td>
<td>-.16</td>
<td>-.09</td>
</tr>
<tr>
<td>Major: Arts &amp; Humanities</td>
<td>.14</td>
<td>.07</td>
</tr>
<tr>
<td>Major: Others</td>
<td>-.17</td>
<td>-.16</td>
</tr>
<tr>
<td>Ln family income</td>
<td>-.07</td>
<td>-.05</td>
</tr>
<tr>
<td>Family SES</td>
<td>-.02</td>
<td>.00</td>
</tr>
<tr>
<td>Parent age</td>
<td>.01</td>
<td>.01</td>
</tr>
<tr>
<td>Parent education</td>
<td>.06</td>
<td>.04</td>
</tr>
<tr>
<td>Parent gender</td>
<td>.09</td>
<td>.09</td>
</tr>
<tr>
<td>Parent support (PS)</td>
<td>.36***</td>
<td>.33***</td>
</tr>
<tr>
<td>Parent interference(PI)</td>
<td>-.13**</td>
<td>-.09*</td>
</tr>
<tr>
<td>Lack of parental career engagement (LE)</td>
<td>.04</td>
<td>.00</td>
</tr>
<tr>
<td>PS × PI</td>
<td>.01</td>
<td></td>
</tr>
<tr>
<td>PS × LE</td>
<td>-.09*</td>
<td></td>
</tr>
<tr>
<td>PI × LE</td>
<td>.08**</td>
<td></td>
</tr>
<tr>
<td>Career exploration</td>
<td>.08*</td>
<td>.27***</td>
</tr>
<tr>
<td>R Square</td>
<td>.19***</td>
<td>.04*</td>
</tr>
</tbody>
</table>

N = 244. Results were reported after controlling for student age, grade, gender, family income, majors, Socio-economic status, family age, family education and family gender.
Figure 1 Moderation effects of lack of parental career engagement (LE) on the relationship between parent support and career exploration.
Figure 2 Moderation effect of lack of parental career engagement (LE) on the relationship between parental interference and career exploration