

SOCIAL SUPPORT, SOCIAL COMPARISON, AND CAREER ADAPTABILITY: A MODERATED MEDIATION MODEL

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Our aim in this study was to identify the social factors that underpin the career adaptability of college graduates in China by examining the effects of social support and career self-efficacy on career adaptability among a sample of 879 Chinese college graduates. We also emphasized the moderating role of social comparison in influencing this relationship. The results showed that, (a) social support enhanced career adaptability, (b) career self-efficacy played a mediating role in the relationship between social support and career adaptability, and (c) social comparison orientation moderated the mediation model; specifically, a high social comparison orientation weakened the enhancing effect of social support on career self-efficacy and career adaptability. Theoretical and practical implications of these findings are discussed.

Keywords: career adaptability, career self-efficacy, social support, social comparison, college graduates.

Because of expanded enrollment, there has been a sharp increase in the number of Chinese college graduates in recent years. An estimated 7.27 million students graduated from college in China during the summer of 2014, which was a historical high and resulted in fierce competition in the job market (Kan, 2014). However, most of these graduates were neither properly prepared for career changes nor skilled in career planning or job hunting. This is primarily because the main focus of a college education is on achieving a high grade point average, although this measure of achievement is rarely directly beneficial to

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careers. The uncertainty of career abilities and related resources has left college graduates with little confidence in career adaptation processes. Therefore, career adaptability has become a critical issue for Chinese college graduates and has drawn a large amount of recent research attention (e.g., Hou, Wu, & Liu, 2014; Jin, Watkins, & Yuen, 2009).

Introduced by Savickas (1997), the concept of *career adaptability* represents a critical skill in an individual's ability to navigate various career tasks and is defined as an individual's general ability to adjust to changes in the employment context (Duffy, 2010). For college students undergoing the school-to-work transition, believing in one's career abilities and being prepared to accept and adjust to changes are factors of vital importance. However, there has been little empirical research undertaken on career adaptability, particularly in regard to college graduates (Duffy, 2010). Moreover, most researchers have focused on the predictors of individual characteristics and personalities (e.g., Duffy, 2010; Hou et al., 2014), and have failed to explore the effects of social factors (Blustein, 2011). Using social cognitive career theory (SCCT; Lent, Brown, & Hackett, 1994), our aim in the current study was to identify the social factors that can enhance college graduates' career adaptability in the Chinese context, and to examine the intervening mechanisms amongst these factors.

Recent research conducted in a Western individualistic context has been aimed at extending the career literature by exploring the impacts of certain social factors on career adaptability (e.g., Hirschi, 2009), but there is little evidence of whether or not these factors will exert the same influence on individuals who were raised and educated in a collectivist culture (Brown, 2002). Given that in the collectivistic culture there is more emphasis placed on group conformity and social interactions than is the case in an individualistic culture, we believed that social factors would play an important role in influencing Chinese college graduates' career adaptation. Therefore, in this study, we proposed that two critical social factors – social support (from others) and social comparison (with others) – would influence Chinese college graduates' career adaptability.

Accordingly, grounded in SCCT and prior career research, our study was designed to uncover the extent to which career adaptability is influenced by social factors under the change context. In such a context, for example, the school-to-work transition, individuals often endure a high degree of uncertainty and ambiguity, causing them to have more varied perceptions of, and reactions to, social factors that, in turn, affect career-related outcomes. We analyzed the relationship between social support and career adaptability as mediated by career self-efficacy and as moderated by social comparison. Our aim was to contribute to career research by highlighting the importance of social factors under the change context.

Social Support and Career Adaptability

Social support, defined as the psychological or physical help that individuals receive through social connections, can reduce psychological stress, alleviate tension, and improve social adaptation capabilities (Cobb, 1976). Previous researchers of adaptation among youth have found that social support is positively associated with a range of academic achievement and career indices (e.g., Flores & O'Brien, 2002). Career theorists have investigated a systematic set of multiple predictors of career adaptability, among which social factors have attracted increasing attention in recent years. For example, Hirschi (2009) proposed perceived social support as a significant predictor of both increased career adaptability development over the school year and future experience of life satisfaction in Swiss eighth graders. Consistent with prior research and theory, we expected that social support would enhance Chinese college graduates' career adaptability. Thus, we proposed the following hypothesis:

Hypothesis 1: Social support will be positively related to career adaptability.

Career Self-Efficacy as a Mediator in the Relationship Between Social Support and Career Adaptability

Researchers have proposed that the effects of personality and contextual variables on career behaviors are often exerted through the mediator of self-efficacy (e.g., Parker, Bindl, & Strauss, 2010). Further, according to Lent et al. (1994), SCCT describes how individuals' environments expose them to career-related activities that influence the development of self-efficacy, as well as interests and goals that affect career choices and behaviors. Thus, we proposed that career self-efficacy would mediate the relationship between social support and career adaptability.

Career self-efficacy reflects an individual's confidence in his/her ability to successfully complete tasks related to career planning and decision making (Taylor & Betz, 1983). Researchers have indicated that social support could have positive effects on career self-efficacy (e.g., Bandura, 1999), and that individuals' career self-efficacy will positively affect their career selection, job performance, and commitment to career choice (Betz & Hackett, 1997), increasing the motivation to develop career adaptability to help with career transitions. Other scholars have also indicated that career self-efficacy is one of the predictors of increased career adaptability (e.g., Bartley & Robitschek, 2000).

On the basis of the above, we expected to observe a mediation model in which social support would positively predict college graduates' career self-efficacy, which, in turn, would promote their career adaptability. Thus, we formed the following hypothesis:

Hypothesis 2: Career self-efficacy will mediate the relationship between social support and career adaptability.

The Moderating Role of Social Comparison Orientation

Chinese college graduates face fierce competition in the job market and such competitive situations are likely to promote interest in social comparisons (Ruble & Frey, 1991), especially in a culture oriented toward collectivism. As for personal development, researchers have shown that young people in China are strongly affected by peer pressure or environmental pressure, which mostly originates from social comparisons (e.g., Chen, Cheng, Zhou, & Li, 1990; Hou et al., 2014). Because they live in a country with a large population and a collectivist cultural background, Chinese people make social comparisons passively as well as actively. Thus, we believed that social comparisons would influence college graduates' view and use of social support, as well as their subsequent career outcomes.

We applied social comparison orientation (SCO; Gibbons & Buunk, 1999) in the measurement process, because individuals employ social comparisons and interpret comparison information to varying degrees (Buunk & Gibbons, 2006). Individuals who are high in SCO engage in more social comparisons and depend more on them than those low in SCO do, and they tend to have a high level of neuroticism that correlates with higher levels of social anxiety and depression, and lower self-esteem (Gibbons & Buunk, 1999). It has been found that for a number of health behaviors as well as learning new coping skills, social comparisons actually interfere, in that high-SCO individuals focus too much on how they are doing compared with others, rather than on their own resources and improvements (Gibbons & Buunk, 1999). From this perspective, high SCO might distract college graduates from their own resources and strengths, making it difficult for them to notice the social support that is applied to career tasks and, thus, preventing the positive effect of social support on career-related outcomes.

Apart from the negative effect of interfering in the focus and use of self-owned resources, social comparison with certain appropriate targets (Buunk & Gibbons, 2007) may also influence the effect of social support. From an evolutionary perspective, it has been suggested that social comparison assists individuals with self-evaluation to determine their rank in groups, which has an adaptive value (Buunk & Gibbons, 2007). High-SCO individuals who regularly make social comparisons are thought to be skilled in finding suitable targets to compare themselves with across different situations (Buunk & Gibbons, 2006). To be specific, individuals who feel threatened in regard to a particular dimension, such as social support, prefer to compare themselves with others who are worse off (i.e., downward comparison; Hakmiller, 1966) for the purpose of self-enhancement. In contrast, if social support is sufficient, individuals are more likely to compare themselves with those who are better off (i.e., upward comparison) in order to achieve self-improvement (e.g., Miller & Suls, 1977). With the potential target for comparison changing under different situations, we believed that the

effects of social support might be weakened by this adaptive and motivational function of social comparison.

On the basis of the arguments above, we believed that high SCO would interfere with the focus and use of social support, while also helping graduates position themselves accurately among peers and select appropriate targets to compare themselves with. However, it seemed likely that both functions would weaken the effect of social support on career self-efficacy, and, thus, the indirect effect on career adaptability. Therefore, we proposed the following hypothesis:

Hypothesis 3: A higher, compared to lower, social comparison orientation will have a stronger moderating influence on the positive effect of social support on career self-efficacy, and on the indirect effect of social support on career adaptability.

Method

Participants and Procedure

We distributed survey forms to senior-year college students at 12 colleges in 10 economically developed cities in China (i.e., Hangzhou, Beijing, Shanghai, Qingdao, Jinan, Chongqing, Guangzhou, Xiamen, Xi'an, and Tianjin) through emails and online survey platforms, and 976 students responded. After removing responses with incomplete data, the final sample contained 879 college graduates (90.1% valid, 423 men) with a mean age of 21.5 years ($SD = 1.32$), 72.0% of whom were the only child in their families.

Measures

All items were normed and standardized in Chinese.

Social support. The Social Support Rating Scale, designed by Xiao (1994), was used to measure social support. This 10-item measure comprises the following three dimensions: objective support, subjective support, and support utilization. To adjust the scale for college students, we made some term adjustments (e.g., from “colleague” to “schoolmate”). The response scale is standardized and ranges from *strongly disagree* (1) to *strongly agree* (5). The Cronbach's α in this study was .89.

Career self-efficacy. The 39-item Career Decision-Making Self-Efficacy Scale (Peng & Long, 2001) was designed for use with Chinese university students. Participants indicate how confident they feel in handling career decision-making tasks, using a response scale ranging from *no confidence at all* (1) to *complete confidence* (5). The Cronbach's α in this study was .92.

Career adaptability. We used the Career Adapt-Abilities Scale–China Form (CAAS–China; Hou, Leung, Li, Li, & Xu, 2012) to measure career adaptability. It comprises four subscales, with six items each to measure concern, control,

curiosity, and confidence. Participants respond to 24 items on a scale from *weakest* (1) to *strongest* (5). The Cronbach's α in this study was .88.

Social comparison orientation. The 11-item Social Comparison Orientation Scale–Chinese Edition (Wang, Wang, & Shi, 2006) was used to measure the extent to which participants engage in social comparisons. Responses are made on a scale ranging from *strongly disagree* (1) to *strongly agree* (5). The Cronbach's α in this study was .91.

Control variables. Previous studies have indicated that demographic variables, such as gender or number of siblings would have significant impacts on career adaptability and career self-efficacy (e.g., Hirschi, 2009). Therefore, we controlled for participants' gender and only child information in the data analysis.

Data Analysis

We used the bootstrapping procedure to test the mediating effect, and applied the PROCESS macro of SPSS version 21.0, developed by Hayes (2013). Hayes (2015) pointed out that the result of a first-stage moderated mediation analysis using SPSS INDEX can result in a claim that an indirect effect is moderated if this index is different from zero. We applied bootstrapping with 5,000 samples to test this index and to produce 95% bias-corrected confidence intervals.

Results

Results presented in Table 1 are summary statistics and intercorrelation for the measured variables. We found statistically significant positive correlations of social support with career self-efficacy, career self-efficacy with career adaptability, and social support with career adaptability.

Table 1. *Descriptive Statistics of and Correlations Among Variables*

| | <i>M</i> | <i>SD</i> | 1 | 2 | 3 | 4 | 5 |
|----------------------------------|----------|-----------|--------|-------|-------|-------|------|
| 1. Gender | 0.52 | 0.50 | – | | | | |
| 2. Only child | 0.72 | 0.45 | -.19** | – | | | |
| 3. Social support | 42.06 | 6.42 | .09* | -.07* | – | | |
| 4. Career self-efficacy | 137.19 | 21.19 | .04 | -.02 | .37** | – | |
| 5. Career adaptability | 95.41 | 16.90 | .06 | -.01 | .39** | .93** | – |
| 6. Social comparison orientation | 48.39 | 10.31 | -.03 | .02 | .12 | -.02 | -.03 |

Note. $N = 879$. Gender was recorded as 0 = male and 1 = female. Only child was recorded as 0 = no and 1 = yes. * $p < .05$, ** $p < .01$.

We first examined whether or not social support predicted career self-efficacy and career adaptability, and whether or not the relationship between social support and career adaptability was mediated by career self-efficacy (see Table

2). The effects of social support on career self-efficacy and on career adaptability were found to be significant. The effect of social support on career adaptability dropped from 1.02 to 0.15 after adding career self-efficacy as a mediator between them, indicating that the mediating role was significant. Further, the results of bootstrapping showed that the mediating effect of career self-efficacy was significant. Thus, Hypotheses 1 and 2 were supported.

Table 2. *Career Self-Efficacy as a Mediator in the Relationship Between Social Support and Career Adaptability*

| | DV = CSE | | | DV = CA | | | DV = CA | | |
|-----------------------|----------|-----------|---------------|----------|-----------|---------------|----------|------------|---------------|
| | <i>B</i> | <i>SE</i> | 95% CI | <i>B</i> | <i>SE</i> | 95% CI | <i>B</i> | <i>SE</i> | 95% CI |
| Gender | 0.45 | 1.35 | [-2.20, 3.10] | 1.11 | 1.07 | [-0.99, 3.21] | 0.79 | 0.45 | [-0.09, 1.66] |
| Only child | 0.36 | 1.50 | [-2.58, 3.31] | 1.10 | 1.19 | [-1.23, 3.44] | 0.84 | 0.50 | [-0.13, 1.82] |
| SS | 1.20*** | 0.10 | [0.99, 1.41] | 1.02*** | 0.08 | [0.86, 1.18] | 0.15*** | 0.04 | [0.08, 0.23] |
| CSE | | | | | | | 0.72*** | 0.01 | [0.70, 0.74] |
| <i>R</i> ² | | .13 | | | .15 | | | .85 | |
| <i>F</i> | | 45.30*** | | | 52.51*** | | | 1267.14*** | |

Note. *N* = 879. DV = dependent variable, SS = social support, CSE = career self-efficacy, CA = career adaptability. *** *p* < .001.

The interaction between social support and SCO was incorporated into the test of the first-stage moderated mediation model. As shown in Table 3, SCO significantly moderated the relationship between social support and career self-efficacy. The conditional effects of the mediator varied according to the different levels of SCO ($-1 SD = 1.42$, $+1 SD = 0.37$). The INDEX of the model computed using the PROCESS macro was -0.05 ($SE = 0.01$) with a confidence interval excluding zero (95% CI = $[-0.07, -0.04]$). Thus, Hypothesis 3 was supported.

Table 3. *SCO as a Moderator in the Mediation Model*

| | DV = CSE | | | DV = CA | | |
|-----------------------|----------|-----------|----------------|----------|------------|---------------|
| | <i>B</i> | <i>SE</i> | 95% CI | <i>B</i> | <i>SE</i> | 95% CI |
| Gender | 0.77 | 1.31 | [-1.81, 3.35] | 0.79 | 0.45 | [-0.09, 1.66] |
| Only child | 0.73 | 1.46 | [-2.13, 3.60] | 0.84 | 0.50 | [-0.13, 1.82] |
| SS | 4.60*** | 0.49 | [3.73, 5.65] | 0.15*** | 0.04 | [0.08, 0.23] |
| SCO | 2.86*** | 0.42 | [2.04, 3.68] | | | |
| SS × SCO | -0.07*** | 0.01 | [-0.09, -0.05] | | | |
| CSE | | | | 0.72*** | 0.01 | [0.70, 0.74] |
| <i>R</i> ² | | .19 | | | .85 | |
| <i>F</i> | | 40.20*** | | | 1267.14*** | |

Note. *N* = 879. DV = dependent variable, SS = social support, CSE = career self-efficacy, CA = career adaptability, SCO = social comparison orientation. *** *p* < .001.

Discussion

Theoretical Implications

Our findings extend previous research on the positive roles of social factors in individuals' career development by showing that social support promotes college graduates' career self-efficacy and career adaptability. In accordance with previous findings (e.g., Schultheiss, 2003), our results confirm the importance of social interactions in helping individuals to cope with a fiercely competitive career environment. When faced with the change context of the school-to-work transition, graduates urgently need support resources to build up self-confidence in dealing with oncoming career-related tasks. Consistent with the perspective that relational support is adaptive for a variety of career-related tasks across one's lifespan (e.g., Kenny & Bledsoe, 2005), social support from family, teachers, friends, and schoolmates contributes significantly to career adaptability, with college graduates who have more support also reporting higher levels of career adaptability.

We also examined the dynamic relationships among these variables by proposing career self-efficacy as a mediator in the relationship between social support and career adaptability. Career self-efficacy motivates graduates to develop adaptability and relevant proactive behaviors for positive career development (Hirschi, Lee, Porfeli, & Vondracek, 2013). We have extended previous research on career self-efficacy by empirically testing its antecedents, as well as its effect on career adaptability. These findings also suggest that SCCT could serve as an important theoretical framework to guide investigations into how career self-efficacy mediates social factors and individuals' career development.

The confirmed moderating effect of SCO indicates that different types of social interactions might have diverse and interactive influences on career-related outcomes. As career-related behavior is generated in a certain context in which myriad social factors are construed, understood, and felt as a set of background resources, we should consider the effects of social factors as a whole instead of focusing on their separate effects in influencing career development, particularly because some of these effects may be interactive. In addition, as SCO is often seen as a personal characteristic that originates from social comparison, the moderating role of SCO could also be used to explain how social factors and personality characteristics integrate to shape individuals' career self-efficacy and career adaptability.

Practical Implications

In addition to enriching career theory, our findings might offer some practical implications for the improvement of college graduates' career decision making

and adaptation, as well as implications for career education and counseling practices. First, we suggest that college students should actively seek social connections and exploit social support to enhance their career confidence during the school-to-work transition. Second, the individual's career self-efficacy and career adaptability should be built on a comprehensive evaluation of himself/herself, in which social comparison could help with identifying the gap between that individual and peer competitors. However, as shown in this study, the positive effects of social support on career self-efficacy and career adaptability are weakened by high SCO; thus, college graduates who are high in SCO, in particular, should learn to manage and apply social comparisons in an appropriate manner and to an appropriate extent. Third, career education and counseling could help college students create more support-oriented interpersonal connections, guide them to avoid misuse of social comparisons, and provide specific activities to facilitate career-related tasks in order to enhance graduates' career self-efficacy and career adaptability.

Limitations and Directions for Future Research

Future researchers may address the limitations of this study. First, as the current research was conducted among a sample of college graduates in China, whether or not the findings can be generalized to graduates in other cultures or to individuals in other stages of career development remains to be examined. Second, we utilized cross-sectional data and, thus, cannot assert causality. Future researchers could incorporate longitudinal or quasiexperimental designs to test causal inferences and to understand how these variables and their relationships change over time.

We focused on the effects of two representative social factors (i.e., social support and social comparison), and future researchers should continue to explore more social and contextual factors that influence individuals' career adaptability and further career development. In addition, the predictive validity of social support as it affects other career-related outcomes, as well as the objects and directions of social comparison that may influence career-related outcomes, are worthy of further research. Despite these limitations, we have provided an important starting point to explore the underlying mechanisms by which social factors affect college graduates' career self-efficacy and career adaptability under the context of change.

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