



**北京师范大学经济与工商管理学院
工作论文（working paper）系列
管理类 No. 15**

**钱婧、Lin、Han: What matters in the
relationship between mentoring and
job-related stress? The moderating
effects of protégés' traditionality and
trust in mentor**

2013年10月

What matters in the relationship between mentoring and job-related stress? The moderating effects of protégés' traditionality and trust in mentor

ABSTRACT

Mentoring received by protégés has been shown to play an important role in relieving protégés' job-related stress. However, literature on the relationship between mentoring and job-related stress has yielded mixed and inconclusive results. Our research seeks to reconcile the conflicting implications by examining protégés' individual traditionality and trust in mentor as moderators on the relationship between mentoring and job-related stress. We tested the hypotheses with data from a sample of 210 protégés from a large company in China. Results of our 2-way and 3-way interaction effect tests revealed that: 1) traditionality moderated the negative relationship between mentoring and job-related stress in such a way that the relationship was stronger for protégés with higher rather than lower traditionality; 2) the influence that mentoring had on job-related stress was strongest for protégés with both high traditionality and a high level of trust in mentor.

Keywords: mentoring, job-related stress, traditionality, trust in mentor

INTRODUCTION

Job-related stress is defined as an uncomfortable and undesirable feeling experienced by an individual ‘who is required to deviate from normal or self-desired functioning in the work place as the result of opportunities, constraints, or demands relating to potentially important work-related outcomes’ (Parker & DeCotils, 1983, p. 165). Given the high costs and deleterious effects associated with job-related stress such as burnout, higher employee turnover, lower work performance, decreased organizational effectiveness and organizational health care costs (Beehr & Newman, 1978; Kram & Hall, 1989; Manning, Jackson, & Fusilier, 1996; Maslach, Schaufeli, & Leiter, 2001), the topic of managing stress reduction has drawn great attention from researchers in recent years (e.g., Ganster & Schaubroeck, 1991; Harris & Kacmar, 2006).

As one of the most important interpersonal relationships at work, workplace mentoring has been linked with reducing employees’ job-related stress (e.g., Allen, McManus, & Russell, 1999). Workplace mentoring refers to a developmentally oriented relationship between a less experienced employee (the protégé) and a more experienced employee (the mentor) where the goal is personal and professional development of the protégé (Kram, 1985). It includes formal and informal forms of mentoring. Our study focuses on the informal mentoring as previous studies have suggested that, compared to formal mentoring, informal mentoring provides greater psychological support and has longer effects on protégés (e.g., Linnehan, 2003; Ragins, Cotton, & Miller, 1995). There are two perspectives in mentoring research: one focuses on the mentoring functions received by protégés and the

other on the mentoring functions provided by mentors. In this study, we adopt the former. Several decades of research has documented many positive effects of mentoring on protégés (e.g., Allen, Eby, Poteet, Lentz, & Lima, 2004; Eby, Allen, Evans, Ng, & DuBois, 2008; Waters, 2004). Mentors provide protégés with both psychological mentoring functions, which refer to the interpersonal aspects of the mentoring relationship such as counseling, friendship, acceptance, and role modeling behaviors, and career-related mentoring functions, which refer to actions that advance the protégé within the organization such as coaching, sponsorship, exposure, protection, and providing challenging assignments (Allen, Eby, O'Brien, & Lentz, 2008; Kram, 1985). According to social support theory, individuals tend to seek out and count on supportive relationships to prevent, reduce, and cope with stress (House, 1981). Thus, it would seem straightforward to expect employees who have been involved in mentoring relationships to experience less job-related stress. However, contrary to this expectation, literature on the relationship between mentoring and job-related stress has yielded rather mixed and inconclusive results. While some research has found that mentoring can lower the levels of job-related stress (e.g., Sosik & Godshalk, 2000), other studies however have reported that mentoring increases protégé stress (e.g., Kram & Hall, 1989). This ambiguity shows how the relation between mentoring and stress is much more complicated than it has previously been taken to be. Therefore, an important research question raised from our review is: what factors may influence the effect of mentoring on relieving protégés' job-related stress?

Recent research suggests that protégés differ in their responses to mentoring functions on the basis of their individual differences (e.g., Aryee, Lo, & Kang, 1999; Folkman & Moskowitz, 2004; Turban & Dougherty, 1994; Wanberg, Welsh, & Hezlett, 2003). For example, Turban and Dougherty (1994) found that protégés' personality characteristics, such as internal locus of control, high self-monitoring and high emotional stability, enhance the relationship between mentorship initiation and mentoring received, though they did not address these characteristics' moderating effects on the effectiveness of mentoring functions.

The domain of organizational research is becoming more international, bringing into question the transportability of social science models from one society to another (Tsui, 2004), and particularly to those undergoing profound transitions in institutional rules, social norms, and values (Farh, Hackett, & Liang, 2007). A case in point is China, where the workforce values are increasingly diverse, ranging from traditionalist Chinese to those with a strong international cultural influence (Ralston, Egri, Steward, Terpstra, & Kaicheng, 1999). For example, traditionality has been demonstrated to moderate Chinese employees' experience of work (e.g., managerial practices/organizational support) and their behavioral and attitudinal reactions (e.g., Chen & Aryee, 2007). Traditionality can be constructed at both societal and individual levels. Traditionality at the individual-level works as a kind of social construct that orientates the individual to reflect socially accepted values (Yang, Yu, & Yeh, 1989). We examine traditionality at the individual-level because previous studies have suggested that cultural differences can affect individuals more meaningfully at the

individual-level of analysis than the societal-level (e.g., Clugston, Howell, & Dorfman, 2000; Kirkman, Chen, Farh, Chen, & Lowe, 2009). We examine the moderating effect of individual protégés' traditionality on the relationship between mentoring and job-related stress to echo the call to investigate the influence of individual diversity on values that are likely to exist in a transitional society (e.g., Farh et al., 2007; Kirkman et al., 2009).

In addition, the study conducted by Ragins, Cotton and Miller (1995) found that the quality of mentoring relationship has a stronger impact on mentoring outcomes than the presence of a mentor. Agreeing with this assessment, Eby and colleagues have pointed out that, "mentoring relationships are developmental and relational in nature; they are not simply tickets to advancement in organizational settings" (Eby, Butts, Durley, & Ragins, 2010, p.83). Moreover, Ragins and Cotton (1999) suggest that the intimacy or closeness of the relationship, which is a construct related to the trust and comfort between mentor and protégé could exert an influence on mentoring process. Trust in mentor refers to the belief that a mentor will enact promised support and that such support is likely to be helpful (Young & Perrewé 2000b). However, previous research on mentoring and stress has not addressed this possibility of mentorship quality as moderators of mentoring effectiveness. Therefore, in this study, we attempt to bridge this research gap by examining the moderating effect of protégés' individual-level traditionality, the moderating effect of trust in mentor, and the joint moderating effect of both, on the relationship between mentoring and job-related stress.

In this regard, our research seeks to reconcile conflicting implications of past research for understanding relationships between mentoring and job-related stress while making three primary contributions to mentoring and job-related stress literature. First, we examined the moderating influence of an individual cultural difference of traditionalism on the stress-reduction effects of mentoring. Whereas mentoring has made considerable progress in Western countries, a recent review of the mentoring literature shows that research conducted in other cultures has lagged behind (Allen et al., 2008). In addition, although some have conducted mentoring field studies in other cultural settings (e.g., Aryee & Chay, 1994; Aryee, Waytt, & Stone, 1996), the unique influence that cultural values have on protégés has not been theorized or empirically examined. Accordingly, our study makes a first contribution by examining the moderating effects of the individual cultural value of traditionalism using a Chinese sample. Second, we made a contribution by examining the moderating influence of a relational quality construct of trust in mentor on the stress-reduction effects of mentoring. This is important because the popular press tends to present mentoring as an essential ingredient for employee development, yet mentors know little about the important factors when building such relationships (Eby & Lockwood, 2005; Young & Perrewé, 2000a; 2000b), and more importantly how to make sure that the time and effort that mentors devote to the relationship is worthwhile. Third, we posited and tested the joint moderating effect of traditionalism and trust in mentor on the relationship between mentoring and job-related stress. Examining the interactions of an individual difference in cultural value and a relationship quality as moderator of the stress reduction

effects of mentoring should provide a better understanding of the conditions under which it influences job-related stress. Figure 1 schematically depicts interrelationships among the variables examined in this study.

Insert Figure 1 about here

LITERATURE REVIEW AND HYPOTHESES

Mentoring and job-related stress

We propose that mentoring is negatively related to protégés' stress level in terms of preventing stress or assisting the coping with stress. Through psychological mentoring functions such as acceptance, encouragement and serving as role model, mentors help counter the threats to protégés' self-worth that often result from stressful events and give protégés an energizing sense of meaning and empowerment (Allen et al., 2008; Burk & Eby, 2010). Psychological mentoring functions also facilitate protégés' positive emotions and reframes stressful situations as opportunities for growth. These positive effects on self-worth and affect suggest that psychology mentoring is negatively related to job-related stress (Allen, Eby, Poteet, Lentz, & Lima, 2004; Allen et al., 2008). Career-related mentoring functions, such as coaching, providing feedback and development of new skills, helps protégés become less vulnerable to stressors and more capable of coping with stress (Allen et al., 2004, 2008). This is because realistic analysis of the situation along with developing relevant skills and providing available opportunities for protégés could directly expanding protégés' coping resources, which have been demonstrated to reduce stress level (Antonovsky, 1979, 1987). Thus, with psychological and career functions provided, mentors should be able to help

protégés reduce job-related stress. This leads us to the following hypothesis:

Hypothesis 1: Mentoring will be negatively associated with a protégé's reported job-related stress.

Moderating influence of traditionality

Traditionality can be traced to Yang's early work in 1989 (Yang et al., 1989), and is most frequently observed in Chinese societies such as Taiwan, Hong Kong, and Mainland China (Yang, 2003). In its early version, traditionality includes five clusters of values: submission to authority, filial piety and ancestral worship, conservatism and endurance, fatalism and defensiveness, and male dominance. Recent findings have suggested that among these five factors, submission to authority is arguably the most prominent, and they have defined and measured traditionality as the extent to which an individual endorses the traditional hierarchical role relationships prescribed by Confucian social ethics (e.g., Farh, Earley, & Lin, 1997; Hui, Lee, & Rousseau, 2004; Spreitzer, Perttula, & Xin, 2005). A construct similar to traditionality is power distance, both of which capture deference to authority figures (Hui et al., 2004). However, compared to power distance, traditionality originates from a broader societal and familial frame of reference rooted in Confucianism (Schwartz, 1992). This rationale has been used to build the theoretical framework of previous organizational behavior studies (e.g., Chen & Aryee, 2007; Farh et al., 2007).

In the context of the mentoring relationship, it is typical for high-traditionality protégés to accept status differences while being more willing to be influenced by their mentors who are more experienced than themselves. As a result, they will sense, explore, and exploit more

support from career and psychological mentoring functions such that the effectiveness of mentoring in reducing their job-related stress level for high traditionality protégés will be higher. Indeed, Allen, Eby, and Lentz (2006) posit that protégés' respect and admiration for the knowledge of mentors could enhance the amount and quality of mentoring functions received. In contrast, low traditionality protégés are those who have high sense of agency and less subscribe to the mentorship and less easily to be influenced. When in stressful situations, they are more likely to maximize the control in the coping process, both psychologically and instrumentally. Therefore, low traditionality protégées may either rely less on mentors' aid or be less willing to be influenced by the mentor. As such, we expect low-traditionality protégés to exploit less from their mentoring relationships than high-traditionality protégés can, thus the stress reduction function of mentoring on job-related stress for low traditionality protégés are less effective. Accordingly,

Hypothesis 2: Protégés' traditionality moderates the negative relationship between mentoring and job-related stress in such a way that the relationship will be stronger for protégés who are higher rather than lower in traditionality.

Moderating influence of trust in mentor

The existence of trust has been highlighted as central to exchange relationships (Blau, 1964) and previous mentoring studies have pointed out that trust in mentor is of particular importance for mentorship effectiveness (Eby et al., 2010; Young & Perrewé 2000b). When protégés have a higher level of trust in their mentors, they are more likely to perceive mentors' good-will, feel psychologically safe, and form higher confidence in the quality of

the mentoring provided (Liang, Spencer, Brogan, & Corral, 2008). High trust in mentor encourages employees to share experience with mentors, try their best to sense and internalize the mentor's psychological and career-related support and to exploit as much as possible from the mentoring relationship. Therefore, the mentoring effectiveness will be enhanced and the mentoring-stress relationship will be stronger when trust in mentor is higher rather than lower. In contrast, when protégés have a lower level of trust in their mentor, they will be reluctant to be influenced by their mentor. They may either doubt the quality of the mentoring functions provided or the intentions of their mentors. Protégés who have lower trust in their mentor would be less likely to share their work experience and psychological concerns with their mentors, and may be less willing to make good use of the mentoring provided or even ignore them. The mentoring effectiveness on reducing stress level thus will be lower when protégés' trust in mentor is low rather than high. Accordingly, we hypothesized that:

Hypothesis 3: Protégés' trust in mentor moderates the negative relationship between mentoring and job-related stress in such a way that the relationship will be stronger when trust in mentor is higher rather than lower.

Joint moderating influence of traditionality and trust in mentor

Following the preceding discussion, a logical question arises: what would happen if both moderators (i.e. traditionality and trust in mentor) work together? Adopting an interactionist perspective of employee behavior (Mischel, 1977), we suggest that whether high traditionlists' inclination to make an input of the mentoring functions has its stress level

implications is determined by the extent to which they trust their mentor. Protégés who are high in traditionality are more sensitive and responsive to their trusted mentors (Yang, 2003). They can gain more from mentoring relationships when they perceive their mentor as trustworthy (Eby et al., 2010; Young & Perrewé 2000b). Trust-in-mentor indicates the belief that the mentor holds positive intentions and enacts appropriately helpful behaviors, which could encourage high traditionality protégés' to engage in the execution of mentoring functions and make them more effective (Lewis & Wiegert, 1985; McAllister, 1995). Therefore, when high traditionality protégé has a high level of trust in their mentor, they will be more willing to make good use of them. Accordingly:

Hypothesis 4: Trust-in-mentor and traditionality jointly moderates the negative relationship between mentoring and job-related stress such that mentoring will have the strongest effect on stress when traditionality and trust in mentor are both high.

METHOD

Participants and procedure

Participants in the current study consist of 388 full-time employees from a high-tech communication company located in a major city in northern China. There are three main reasons why we chose this company. First, it is a privately owned and operated firm which generally means that the work environment is more flexible and less uniform than state-owned enterprises (SOEs) in China tend to be, leading to more unpredictable work patterns and more sources of variance regarding employees' job-related stress (e.g., Peng, Tan, & Tong, 2004; Wang, Tsui, Zhang, & Ma, 2003). Second, this firm operates within a

high-tech industry where staff turnover is high with a continual influx of new employees. Informal mentoring, as an important part of employee orientation and career development, therefore plays a greater role than formal mentoring. Third, there was no officially sanctioned formal mentoring program at the time the study was conducted.

Survey packets were distributed in a company-wide meeting. Surveys were completed on a voluntary basis. Each packet contained an information sheet explaining the objective of the survey, along with a consent form, the survey questionnaire and a return envelop with seal tape to protect the respondents' confidentiality. Participants were instructed to complete the survey and to bring it back to the upcoming meeting two weeks later. To protect the confidentiality of participants, they were instructed to seal the questionnaires in the envelopes provided after finishing their questionnaires. Two short messages were sent to the participants three days after the questionnaire was distributed and one day before the second meeting to encourage participants to complete the survey and to remind them to bring it with them. A box was placed outside the meeting venue and the participants were reminded by one of the authors to put their completed and sealed questionnaire into the box before and after the meeting.

A total of 285 surveys were returned with a response rate of 73.5%. After eliminating 43 incomplete questionnaires and 32 questionnaires that did not report any informal mentoring, 210 respondents remained and contributed to the sample of the present study. On average participants were 34.4 years old ($SD = 7.51$) and mostly males (69.0%). Most participants held a Bachelors degree (68.6%), with the remainder reporting a polytechnic diploma or associate

degree (14.3%), a graduate degree (15.7%) or high school education (1.4%). The average company tenure was 8.23 years ($SD = 6.57$). 62.9% of them were non-supervisory employees, 31.9% were first line supervisors and 5.2% were middle managers. The average number of informal mentors reported was 1.79 ($SD = .74$). The average mentorship duration for the referred mentoring relationship was 5.5 years ($SD = 4.17$). 73.8% of the mentors were male and 33.3% of the protégés have mentored others before.

Measures

The translation and back-translation method was applied to verify the questionnaire in Chinese. According to Behling and Law (2000), this technique is necessary since creating a translation from one language to another that maintains the conceptual equivalence is very difficult due to cultural differences. Since several researchers have raised the concerns of the potential constraints of this method (e.g., Wang, 1993; Xie, Schaubroeck, & Lam, 2008), one of the authors discussed each questionnaire item with the focus group members to ensure clarity. A few minor changes have been made based on the comments received. Response options ranged from (1) “strongly disagree” to (5) “strongly agree”.

Protégé status

This section was designed to: 1) screen participants to identify those who currently have informal mentors; 2) instruct those who have mentors to complete the questionnaire by filling in the following five sections; 3) instruct protégés who have more than one mentor to respond to the following five sections by referring to the most influential mentor; and 4) guide non-protégés to ignore the following sections and return the questionnaire on the designated

date.

Whether or not an employee currently has an informal mentor is determined by two items which are preceded by the following definition based on past mentoring studies (e.g. Fagenson, 1992).

A mentor is an experienced employee who serves as a role model, provides direction, support and feedback regarding career and personal development. A mentor is also someone with influence and insight, who directly provides upward mobility and/or brings your accomplishments to the attention of people who have power in the company. A mentor can be your supervisor or anybody else in the company.

Respondents were asked to indicate whether they are currently in an informal mentoring relationship. Those without an informal mentor were coded “0”. Others who have mentor(s) were also asked to give the number of informal mentors they currently have. Protégés who reported more than one mentor were instructed to complete the questionnaire by referring to the most influential mentor.

Mentoring function

Noe’s (1988a) 21-item measure of mentoring functions was used in the present study to indicate the amount of mentoring received by respondents. Some items were reworded to fit the context of the present study (the workplace setting). For example, the original item “Mentor reduced unnecessary risks that could threaten the possibility of becoming a school principle or receiving a promotion,” was changed to, “My mentor reduced unnecessary risks

that could threaten the possibility of becoming a manager or receiving a promotion.” The *career-related mentoring functions* subscale consists of 7 items (e.g. “My mentor has shared history of his/her career with me”). The *psychological mentoring functions* subscale contains 14 items (e.g. “My mentor has conveyed empathy for the concerns and feelings I have discussed with him/her.”). The Cronbach’s alpha for career and psychological mentoring functions were .89 and .94 respectively. The internal consistency reliability for the scale was .96.

Job-related stress

House and Rizzo’s (1972) 7-item job-related tension subscale was used to measure protégés’ work stress (e.g. “I work under a great deal of tension”). Higher scores were indicative of a higher level of job-related stress. The reliability estimate for the scale was .93.

Traditionality

Yang, Yu and Yeh’s (1989) Chinese 8-item individual traditionality scale was used to measure this construct. This scale has been used in previous Chinese research with reliabilities of .70, .89 and .73 respectively (Chen & Aryee, 2007; Chen, Tsui, & Zhong, 2007). Sample items included: “The best way to avoid mistakes is to follow the instructions of senior persons” and “When people are in dispute, they should ask the most senior person to decide who is right.” The scale’s reliability was .94.

Trust in mentor

Trust in mentor was measured with a four items developed by Butler (1992). It has been previously used in mentoring research (Young & Perrewe, 2000a, 2000b). A sample item

from this scale is “I can count on my mentor to be trustworthy.” The scale’s alpha coefficient was 80.

Control variables

We included nine control variables for testing the hypotheses. In keeping with other mentoring research (e.g., Hunt & Michael, 1983; Kram, 1983, p.608; Noe, 1988b; Ragins, 1989; Whitely, Dougherty, & Dreher, 1992), we controlled the participants’ age, gender, education, position, and tenure. Age and company tenure were measured by the number of years. Gender was coded 0 for “female” and 1 for “male”. Education was coded 1 for “high school”, 2 for “polytechnic diploma or associate”, 3 for “undergraduate” and 4 for “graduate”. The nominal variables of the employee position was coded 1 for “non-supervisory employees,” 2 for “first-level supervisor/manager,” and 3 for “middle-level manager”.

We also controlled four mentorship status variables as previous research has demonstrated that they could account for variance in mentoring received and/or mentoring outcomes (e.g., Allen, 2003; Eby, Durley, Evans, & Ragins, 2006). The variables were number of mentors, mentorship duration (number of years), gender of mentor (0 = female, 1 = male), and protégé as mentor (0 = no, 1 = yes).

DATA ANALYSIS

To examine the distinctiveness of the variables studied, we conducted a confirmatory factor analysis (CFA) to compare the fit of the hypothesized 4-factor model to the fit of alternative models. Following the widely used approach by previous research (e.g., Shalley, Gilson, & Blum, 2009; Shin & Zhou, 2007), we ran hierarchical regression analyses to test the two-way

and three-way moderating effect hypotheses. To minimize any potential problems of multicollinearity, we centered the variables used in the interaction term (Aiken & West, 1991). To further validate the results of the moderating effect analysis, we also conducted slope difference tests (Dawson & Richter, 2006).

RESULTS

Descriptive statistics

The means, standard deviations, and intercorrelations among all the study variables are reported in Table 1.

Insert Table 1 about here

Confirmatory factor analysis (CFA)

Table 2 presents the results of the CFA that examined the distinctiveness of the study variables. The fit indices revealed that the 4-factor model reflecting the hypothesized constructs had an adequate fit with the data ($\chi^2 = 311.30$, $df = 203$; TLI = .96, GFI = .96, RMSEA = .06). We compared this model with a series of alternative models. The 4-factor model fitted better than any of the alternative models, providing support for the distinctiveness of the constructs in the current study.

Insert Table 2 about here

Common Method Variance

As all our data were collected from protégés, there is a potential for common method variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003; Podsakoff & Organ, 1986). We

adopted several procedural steps to prevent method-related artificially inflated variance; e.g., using highly specific items, counterbalancing question order, and protecting respondent anonymity. We also assessed whether the use of single-rating source data was a concern in our study. Following previous studies (e.g., Carlson & Kacmar, 2000; Podsakoff et al., 2003; Podsakoff, MacKenzie, Moorman, & Fetter, 1990), we did this by comparing the fit indices of our hypothesized four-factor model with those of a four-factor model with an unmeasured method factor. The fit indices revealed that the model with four factors and an unmeasured method factor did not have a better data fit ($\chi^2 = 499.90$, $df = 221$; TLI = .93, GFI = .94, RMSEA = .08) than our hypothesized four-factor model ($\chi^2 = 311.30$, $df = 203$; TLI = .96, GFI = .96, RMSEA = .06). Therefore, using the same source data had little impact on the statistical results of our study.

Main effect test

Hypothesis 1 proposed that workplace mentoring would relate negatively to protégés' job-related stress. As shown in Table 3, mentoring negatively related to protégés' job-related stress ($\beta = -.32$, $p < .01$). Hence, Hypothesis 1 was fully supported, indicating that the protégés who reported that they received the greater extent of mentoring functions were more likely to experience less job-related stress.

Insert Table 3 about here

Moderating effect tests

When testing the separate and joint moderating effect of traditionality and trust in mentor (Hypothesis 2, 3 and 4), we entered the variables into the regression analysis at four

hierarchical steps: 1) the control variables; 2) mentoring, traditionality and trust in mentor; 3) the two-way interaction terms of mentoring \times traditionality, mentoring \times trust in mentor, and traditionality \times trust in mentor; 4) the three-way interaction term (mentoring \times traditionality \times trust in mentor). As shown in Table 4, traditionality moderated the influence of mentoring on job-related stress ($\beta = -.26, p < .01$), providing support for Hypothesis 2. However, the β of mentoring \times trust in mentor was not significant, failing to support Hypothesis 3.

Insert Table 4 about here

To interpret the specific moderating effects in Hypothesis 2, we first standardized the data using the following equation: centered variable = $(x - \text{mean})/\text{standard deviation}$ (Aiken & West, 1991). Standardization shifted the mean mentoring variable from 3.67 (the original value listed in Table 1) to 0, and the standard deviation from 0.86 to 1. We then followed Cohen and Cohen (1983) to define high mentoring as plus one standard deviation from the mean (i.e., $0 + 1 = +1$) and define low mentoring as minus one standard deviation from the mean (i.e., $0 - 1 = -1$). Regression equations were then calculated for the relationship between mentoring and job-related stress for high and low traditionality. These are plotted in Figure 2, where high mentoring is +1 and low mentoring is -1. As predicted, the linear relationship between mentoring and job-related stress was stronger for the high traditionality group and weaker for the low traditionality group, fully supporting Hypothesis 2.

Insert Figure 2 about here

In addition, the slope difference test showed that the slope for high traditionality differed to low traditionality significantly ($t = -8.73, p < .01$), which provided further support for Hypothesis 2.

Table 4 shows that the standardized regression coefficient associated with the mentoring \times traditionality \times trust in mentor three way interaction ($\beta = -.19, p < .01$) was statistically significant. Figure 3 depicts the interactions. We created the figure by following the same procedure for Figure 2. As predicted in Hypothesis 4, mentoring was the most negatively related to stress when traditionality and trust in mentor were both high.

Insert Figure 3 about here

As shown in Figure 3, protégés with high traditionality generally have a lower level of job-related stress. Figure 3 also showed that for protégés with low traditionality, the relationship between mentoring and job-related stress is more negative when these protégés simultaneously have high trust in mentor. Similarly, for protégés with high traditionality, the relationship between mentoring and job-related stress is more negative when these protégés simultaneously have high trust in mentor. When comparing the two groups, the slope difference test further showed that the slope for high traditionality and high trust in mentor differed to the slope for low traditionality and high trust in mentor significantly ($t = -2.08, p < .05$). The slope difference test therefore further supported Hypothesis 4.

DISCUSSION

While research into mentoring has steadily grown, the contingencies under which mentoring may be related to protégés' stress remain largely unknown. To this end, our study suggests

two findings to help counter this blind spot. First, the negative relationship between mentoring and job-related stress was moderated by the protégés' cultural value of traditionality in such a way that the negative relationship was stronger for protégés with a higher rather than lower level of traditionality. Second, results of the 3-way interaction revealed that trust-in-mentor and traditionality jointly moderated the negative relationship between mentoring and job-related stress such that mentoring had the strongest effect on stress when traditionality and trust in mentor were both high.

Theoretical implications

The results of this study provide important contributions to the literature on mentoring and job-related stress in three ways. First, our findings revealed that mentoring is conducive to protégés' job-related stress in a Chinese context, showing that mentoring could prevent and/or reduce a protégé's stress level. Second, our paper provided a plausible explanation of the mixed results obtained in previous mentoring literature by advocating an underrepresented perspective on the contingency effect of mentoring relationships. We addressed the exploratory question of whether individual difference of traditionality and trust in mentor separately played an important role in mentoring effectiveness in terms of reducing a protégé's job-related stress level (Allen et al., 2008). In addition, we investigated the contingency side of the mentoring-stress relationship by testing the joint moderating roles of traditionality and trust-in-mentor on the mentoring-stress relationship. We found that protégé's traditionality moderated the influence of mentoring on job-related stress such that the influence was stronger for protégés with high traditionality. Although we did not

find a significant moderating effect of trust in mentor, Figure 3 showed that for protégés with high traditionality, the effect of mentoring was stronger when these protégés had high trust in mentor; for protégés with low traditionality, the effect of mentoring was stronger again when these protégés had high trust in mentor. Such results demonstrated that we should take both traditionality and trust in mentor into account simultaneously. In support of this, our findings concerning the joint moderating effect of traditionality and trust in mentor showed that the mentoring-stress relationship was moderated by protégés' traditionality as well as the interactions between traditionality and trust in mentor.

Practical implications

The present study provides some interesting implications for mentoring practice. Our findings suggest mentoring as a strategy to reduce employees' job-related stress. A further implication stems from the results of the moderation analysis. After finding the moderating effect of traditionality, mentors should pay extra attention to individual differences when conducting mentoring activities to improve the effectiveness of mentoring programs. Last but not least, the moderating effect of the interplay of traditionality and trust in mentor provides opportunities for mentors to understand how to maximize mentoring effectiveness for protégés with various individual characteristics. Specifically, we encourage mentors not only to consider individual differences when providing mentoring functions, but also at the same time to exert an effort to develop their protégés' trust in them. Such educative efforts are important because the popular press tends to present mentoring as an essential ingredient for protégé development, yet mentors know little about how to build such relationship (Eby &

Lockwood, 2005; Young & Perrewé 2000a; 2000b), and more importantly how to make sure that the time and effort that they put into such relationships is worthwhile. Other than some factors that go beyond the control of a mentor or an organization (such as personality), trust in mentor is something that can be developed (e.g., McAllister, 1995). We therefore suggest that mentors need to pay special attention to protégés' individual differences such as their cultural value of traditionality when mentoring them, while simultaneously building trust with them through the recommended strategies of perspective taking, emotional intervention, and reflection and self-corrective actions (e.g., Williams, 2007).

Study limitations

Despite these findings, this study is not without limitations. First, the data used in the present study was only collected from one workplace within the high-tech industry, thus the extent to which the results are applicable to other organizations or industries can only be speculated. The general applicability of the present findings should therefore be examined in other types of organizations and/or industries in future research. The second limitation concerns the cross-sectional design, which means that the causal relationship cannot be ascertained from the findings of the present study. Additional quasi-experimental or longitudinal research would be useful to ascertain the causal basis of the relationship examined in this study (Kearney, Gebert, & Voelpel, 2009). Third, our data were collected from a single source, which indicates that our results may have been affected by common method variance. However, our analyses suggest that common method variance was not a concern here. In addition, although obtaining data from the mentor was beyond the scope of the present study

and using self-report data is well-accepted in mentoring studies (e.g., Allen et al., 2008), we encourage future studies to adopt additional procedural remedies, such as employing a time lag between measuring independent and dependent variables or collecting data from both protégés and mentors. Finally, our model is a single-level model which can not explain the multi-level phenomena. We suggest future studies investigating the relationship between mentoring and protégés' job-related stress extend our model to a multi-level model, such as including organization type or organizational culture as higher-level moderating variables.

CONCLUSION

In sum, our results highlight the importance of studying the contingency side of mentoring effects on protégés' job-related stress. Our findings suggest that the individuals' differential cultural values of traditionality is the boundary condition of the mentoring-stress relationship, and that the influence of mentoring on job-related stress was strongest for high traditionality protégés with a high level of trust in mentor. We therefore suggest that research on workplace mentoring will be advanced by considering the role of the moderating process.

References

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- Allen, T. D. (2003). Mentoring others: A dispositional and motivational approach. *Journal of Vocational Behavior, 62*, 134-154.
- Allen, T. D., Eby, L. T., O'Brien, K. E., & Lentz, E. (2008). The state of mentoring research: A qualitative review of current research methods and future implications. *Journal of Vocational Behavior, 73*, 343-357.
- Allen T. D., Eby, L. T., & Lentz, E. (2006). The relationship between formal mentoring program characteristics and perceived program effectiveness. *Personnel Psychology, 59*, 125-153.
- Allen, T., Eby, L., Poteet, M., Lentz, E., & Lima, L. (2004). Career benefits associated with mentoring for protégés: a meta-analysis. *Journal of Applied Psychology, 89*, 127-136.
- Allen, T. D., McManus, S. E., & Russell, J. E. A. (1999). Newcomer socialization and stress: Formal peer relationships as a source of support. *Journal of Vocational Behavior, 54*, 453-470.
- Antonovsky, A. (1979). *Health, stress and coping: new perspectives on mental and physical well-being*. San Francisco: Jossey-Bass.
- Antonovsky, A. (1987). *Unraveling the mystery of health: how people manage stress and stay well*. San Francisco: Jossey-Bass.
- Aryee, S., & Chay, Y. W. (1994). An examination of the impact of career-oriented mentoring

- on work commitment attitudes and career satisfaction among professionals and managerial employees. *British Journal of Management*, 5, 241-249.
- Aryee, S., Lo, S., & Kang, I. L. (1999). Antecedents of early career stage mentoring among Chinese employees. *Journal of Organizational Behavior*, 20, 563–576.
- Aryee, S., Wyatt, T., & Stone, R. (1996). Early career outcomes of graduate employees: The effect of mentoring and ingratiation. *Journal of Management Studies*, 33, 95-118.
- Beehr, T. A., & Newman, J. E. (1978). Job stress, employee health, and organizational effectiveness: A facet analysis, model and literature review. *Personnel psychology*, 31, 665-699.
- Behling, O., & Law, K. S. (2000). *Translating questionnaires and other research instruments: Problems and solutions*. Thousand Oaks, CA: Sage.
- Blau, E. M. (1964). *Exchange and power in social life*. New York: Wiley.
- Burk, H. G., & Eby, L. T. (2010). What keeps people in mentoring relationships when bad things happen? A field study from the protégés perspective. *Journal of Vocational Behavior*, 77, 437-446.
- Carlson, D. S., & Kacmar, K. M. (2000). Work–family conflict in the organization: Do life role values make a difference? *Journal of Management*, 26, 1031–1054.
- Chen, Z. X., & Aryee, S. (2007). Delegation and employee work outcomes: an examination of the cultural context of mediating process in China. *Academy of Management Journal*, 50, 226–238.
- Chen, Z. X., Tsui, A. S., & Zhong, L. F. (2007). Reactions to psychological contract breach:

- a dual perspective. *Journal of Organizational Behavior*, 29, 527-548.
- Clugston, M., Howell, J. P., & Dorfman, P. W. (2000). Does cultural socialization predict multiple bases and foci of commitment? *Journal of Management*, 26, 5-30.
- Cohen, J., & Cohen, P. (1983). *Applied multiple regression/correlation analyses for the behavioral sciences*. Hillsdale, NJ: Erlbaum.
- Dawson, J. F., & Richter, A. W. (2006). Probing three-way interactions in moderated multiple regression: Development and application of a slope difference test. *Journal of Applied Psychology*, 91, 917-926.
- Eby, L. T., Allen, T. D., Evans, S. C., Ng, T., & DuBois, D. L. (2008). Does mentoring matter? A multidisciplinary meta-analysis comparing mentored and non-mentored individuals. *Journal of Vocational Behavior*, 72, 254-267.
- Eby, L. T., Butts, M. M., Durley, J., & Ragins, R. R. (2010). Are bad experiences stronger than good ones in mentoring relationships? Evidence from the protégé and mentor perspective. *Journal of Vocational Behavior*, 77, 81-92.
- Eby, L. T., Durley, J. R., Evans, S. C., & Ragins, B. R. (2006). The relationship between short-term mentoring benefit and long-term mentor outcomes. *Journal of Vocational Behavior*, 69, 424-444.
- Eby, L. T., & Lockwood, A. (2005). Protégés and mentors' reactions to participating in formal mentoring programs: A qualitative investigation. *Journal of Vocational Behavior*, 67, 441-458.
- Fagenson, E. A. (1992). Mentoring—Who needs it? A comparison of protégés and

- non-protégés needs for power, achievement, affiliation and autonomy. *Journal of Vocational Behavior*, *41*, 48–60.
- Farh, J. L., Earley, P. C., & Lin, S. C. (1997). Impetus for action: A cultural analysis of justice and organizational citizenship behavior in Chinese society. *Administrative Science Quarterly*, *42*, 421–444.
- Farh, J. L., Hackett, R. D., & Liang, J. (2007). Individual-level cultural values as moderators of the perceived organizational support-employee outcome relationships in China: Comparing the effects of power distance and traditionality. *Academy of Management Journal*, *50*, 715-729.
- Folkman, S., & Moskowitz, J. T. (2004). Coping: Pitfalls and Promise. *Annual Review of Psychology*, *55*, 745-774.
- Ganster, D. C., & Schaubroeck, J. (1991). Work stress and employee health. *Journal of Management*, *17*, 235-271.
- Harris K. J., & Kacmar, K. M. (2006). Too much of a good thing: The curvilinear effect of leader-member exchange on stress. *Journal of Social Psychology*, *146*, 65-84.
- House, J. S. (1981). *Work, stress, and social support*, Reading, MA: Addison–Wesley.
- House, R. J., & Rizzo, J. R. (1972). Role conflict and ambiguity as critical variables in a model of organizational behavior. *Organizational Behavior and Human Performance*, *7*, 467–505.
- Hui, C., Lee, C., & Rousseau, D. M. (2004). Organization versus relationships in China: Is organizational support distinguishable from personal relations with one’s manager?

Organization Science, 15, 232–240.

Hunt, D. M., & Michael, C. (1983). Mentorship: A career and development tool. *Academy of Management Review*, 8, 475-485.

Kearney, E., Gebert, D., & Voelpel, S. C. (2009). When and how diversity benefits teams: The importance of team members' need for cognition. *Academy of Management Journal*, 52, 581–598.

Kirkman, B. L., Chen, G., Farh, J. L., Chen, Z. X., & Lowe, K. B. (2009). Individual power distance orientation and follower reactions to transformational leaders: A cross-level, cross-cultural examination. *Academy of Management Journal*, 52, 744–764.

Kram, K. E. (1983). Phases of the mentoring relationship. *Academy of Management Journal*, 26, 608–625.

Kram, K. E. (1985). *Mentoring at work*, Boston: Scott, Foresman and Company.

Kram, K. E., & Hall, D. T. (1989). Mentoring as an antidote to stress during corporate trauma. *Human Resource Management*, 28, 493–510.

Lewis, D. J., & Weigert, A. (1985). Trust as a social reality. *Social Forces*, 63, 967–985.

Liang, B., Spencer, R., Brogan, D., & Corral, M. (2008). Mentoring relationships from early adolescence through emerging adulthood: A qualitative analysis. *Journal of Vocational Behavior*, 72, 168-182.

Linnehan, F. (2003). A longitudinal study of work-based, adult–youth mentoring. *Journal of Vocational Behavior*, 63, 40–54.

Manning, M. R., Jackson, C. N., & Fusilier, M. R. (1996). Occupational stress, social support,

and the costs of health care. *Academy of Management Journal*, 39, 738-750.

Maslach, C, Schaufeli, W. B., & Leiter, M. P (2001). Job Burnout. *Annual Review of Psychology*, 52, 397-422.

Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review*, 20, 709-734.

McAllister, D. J. (1995). Affect- and cognition-based trust as foundations for interpersonal cooperation in organizations. *Academy of Management Journal*, 38, 24-59.

Mischel, W. (1977). The interaction of person and situation. In D. Magnusson & N.S. Endler (Eds.), *Personality at the crossroads: Current issues in interactional psychology* (pp. 333-352). Hillsdale, NJ: Erlbaum.

Noe, R. A. (1988a). An investigation of the determinants of successful assigned mentoring relationships. *Personnel Psychology*, 41, 457-479.

Noe, R. A. (1988b). Women and mentoring: A review and research agenda. *Academy of Management Review*, 13, 65-78.

Parker, D. F., & DeCotils, T. A. (1983). Determinants of job stress. *Organizational Behavior and Human Performance*, 32, 160-177.

Peng, M. W., Tan, J., & Tong, T. W. (2004). Ownership types and strategic groups in an emerging economy. *Journal of Management Studies*, 41, 1105-1129.

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88, 879-903.

- Podsakoff, P. M., MacKenzie, S. B., Moorman, R., & Fetter, R. (1990). The impact of transformational leader behaviors on employee trust, satisfaction, and organizational citizenship behaviors. *Leadership Quarterly, 1*, 107–142.
- Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of Management, 12*, 69–82.
- Ralston, D. A., Egri, C. P., Steward, S., Terpstra, R. H., & Kaicheng, Y. (1999). Doing business in the 21st century with the new generation of Chinese managers: A study of generational shifts in work values in China. *Journal of International Business Studies, 30*, 415–427.
- Ragins, B. R. (1989). Barriers to mentoring: The female manager's dilemma. *Human Relations, 42*, 1-22.
- Ragins, B. R., & Cotton, J. L. (1993). Gender and willingness to mentor in organizations. *Journal of Management, 19*, 97-111.
- Ragins, B. R., & Cotton, J. L. (1999). Mentor functions and outcomes: A comparison of men and women in formal and informal mentoring relationships. *Journal of Applied Psychology, 84*, 529-550.
- Ragins, B. R., Cotton, J. L., & Miller, J. S. (1995). Marginal mentoring: the effects of type of mentor, quality of relationship, and program design on work and career attitudes. *Academy of Management Journal, 43*, 1177-1194.
- Schwartz, S. J. (1992). Universals in the content and structure of values: Theory and empirical tests in 20 countries. In M. Zanna (Eds.), *Advances in experimental social*

psychology (pp. 1–6). New York: Academic Press.

Shalley, C. E., Gilson, L. L., & Blum, T. C. (2009). Interactive effects of growth need strength, work context, and job complexity on self-reported creative performance.

Academy of Management Journal, 52, 489-505.

Shin, S. J., & Zhou, J. (2007). When is educational specialization heterogeneity related to creativity in research and development teams? Transformational leadership as a moderator. *Journal of Applied Psychology*, 92, 1709-1721.

Sosik, J., & Godshalk, V. (2000). Leadership styles, mentoring functions received, and job-related stress: a conceptual model and preliminary study. *Journal of Organizational Behavior*, 21, 365–390.

Spreitzer, G. M., Perttula, K. H., & Xin, K. (2005). Traditionality matters: An examination of the effectiveness of transformational leadership in the United States and Taiwan.

Journal of Organizational Behavior, 26, 205–227.

Tsui, A. S. (2004). Contributing to global management knowledge: A case for high quality indigenous research. *Asia Pacific Journal of Management*, 21, 491–513.

Turban, D.B., & Dougherty, T.W. (1994). The role of protégé personality in receipt of mentoring and career success. *Academy of Management Journal*, 37, 688-702.

Wanberg, C. R., Welsh, E. T., & Hezlett, S. A. (2003). Mentoring research: A review and dynamic process model. *Research in Personnel and Human Resource Management*, 22, 39-124.

Wang, Z. M. (1993). Psychology in China: A review dedicated to Li Chen. *Annual Review of*

Psychology, 44, 87–116.

- Wang, H., Law, K. S., Hackett, R. D., Wang, D. X., & Chen, Z. X. (2005). Leader-member exchange as a mediator of the relationship between transformational leadership and followers' performance and organizational citizenship behavior. *Academy of Management Journal, 48*, 420-432.
- Waters, L. (2004). Protégé-mentor agreement about the provision of psychosocial support: The mentoring relationship, personality, and workload. *Journal of Vocational Behavior, 65*, 519-532.
- Whitely, W., Dougherty T. W., & Dreher, G. F. (1992). Correlates of career-oriented mentoring for early career managers and professionals. *Journal of Organizational Behavior, 13*, 141-154.
- Williams, M. (2007). Building genuine trust through interpersonal emotion management: A threat regulation model of trust and cooperation across boundaries. *Academy of Management Review, 32*, 595-621.
- Xie, J. L., Schaubroeck, J., & Lam, S. S. K. (2008). Theories of job stress and the role of traditional values: a longitudinal study in China. *Journal of Applied Psychology, 93*, 831-848.
- Yang, K. S. (2003). Methodological and theoretical issues on psychological traditionality and modernity research in an Asian society: In response to Kwang-Kuo Hwang and beyond. *Asian Journal of Social Psychology, 6*, 263–285.
- Yang, K. S., Yu, A. B., & Yeh, M. H. (1989). Chinese individual modernity and traditionality: Construct definition and measurement [in Chinese]. *Proceedings of the Interdisciplinary*

Conference on Chinese Psychology and Behavior, 287–354.

Young, A. M., & Perrewé P. L. (2000a). The exchange relationship between mentors and protégés: The development of a framework. *Human Resources Management Review*, 10, 177–209.

Young, A. M., & Perrewé P. L. (2000b). What did you expect? An examination of career-related support among mentors and protégés. *Journal of Management*, 26, 611–632.

TABLE 1: MEANS, STANDARD DEVIATIONS, RELIABILITIES, AND CORRELATIONS AMONG STUDY VARIABLES

		Mean	SD	1	2	3	4
1.	Mentoring	3.67	.86	(.96)			
2.	Job-related stress	2.75	.92	-.31**	(.93)		
3.	Traditionality	3.23	.98	-.14*	-.40**	(.94)	
4.	Trust in mentor	3.22	.68	.44**	-.20**	-.10	(.80)

1) $N = 210$ with listwise deletion; 2) * $P < .05$; ** $P < .01$.

TABLE 2: RESULTS OF THE CONFIRMATORY FACTOR ANALYSIS OF THE VARIABLES STUDIED

Model	χ^2	<i>df</i>	TLI	CFI	RMSEA
4-Factor Model	311.30	203	.96	.96	.06
3-Factor Model : Mentoring and Trust in Mentor Combined	644.14	206	.85	.86	.10
3-Factor Model: Mentoring and Job-related Stress	750.67	206	.83	.85	.11
3-Factor Model : Job-related Stress and Traditionality Combined	1154.42	206	.67	.71	.15

1) N = 210 with listwise deletion.

2) TLI is the Tucker-Lewis index; CFI, the comparative fit index; and RMSEA, the root-mean-square error of approximation.

TABLE 3: RESULTS OF MAIN EFFECT TEST

Variables	Job-related stress
<i>Controls</i>	
Age	-.05
Gender	-.04
Education level	.04
Company tenure	-.03
Position	.03
Number of mentors	-.07
Mentorship duration	.16
Gender of mentor	.08
Protégéas mentor	.10
<i>Main effect</i>	
Mentoring	-.32**
ΔR^2	.14**
ΔF	3.17**

1) $N = 210$ with listwise deletion; 2) * $P < .05$; ** $P < .01$.

TABLE 4: RESULTS OF HIERARCHICAL REGRESSION ANALYSIS FOR MODERATION

Variables	Job-related stress
<i>Step 1: Controls</i>	
Age	-.02
Gender	.06
Education level	.01
Company tenure	-.06
Position	.05
Number of mentors	-.08
Mentorship duration	.13
Gender of mentor	.06
Protégés mentor	.11
ΔR^2	.04
ΔF	.92
<i>Step 2: Main effect</i>	
Mentoring	-.34**
Traditionality	-.44**
Trust in mentor	-.10
ΔR^2	.28**
ΔF	7.87**
<i>Step 3: 2-way Moderating effect</i>	
Mentoring \times traditionality	-.26**
Traditionality \times trust in mentor	.06
Mentoring \times trust in mentor	.06
ΔR^2	.05**
ΔF	7.78**
<i>Step 4: 3-way Moderating effect</i>	

Mentoring × traditionality × trust in mentor	-.19**
ΔR^2	.01**
ΔF	7.59**

1) $N = 210$ with listwise deletion; 2) * $P < .05$; ** $P < .01$.

FIGURE 1: HYPOTHESIZED MODEL LINKING MENTORING TO JOB-RELATED STRESS

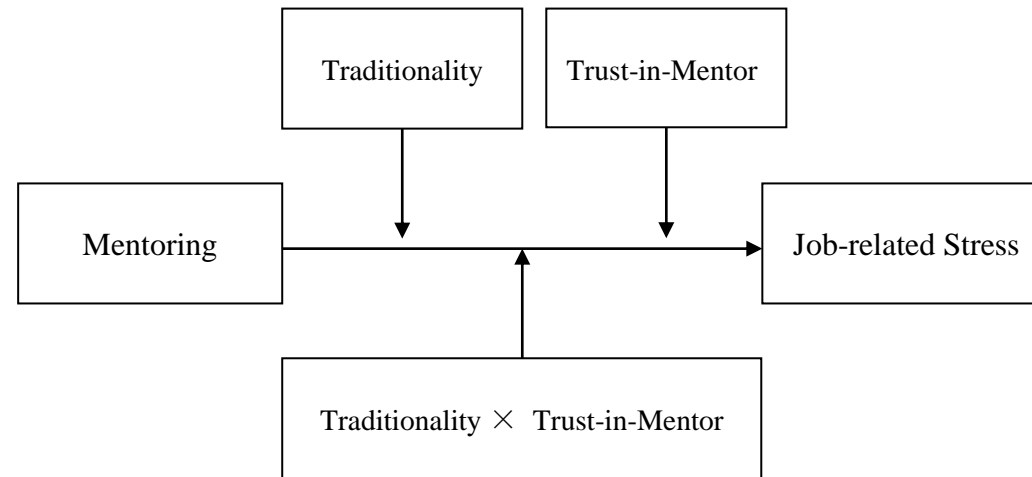


FIGURE 2: MENTORING AND JOB-RELATED STRESS BY TRADITIONALITY

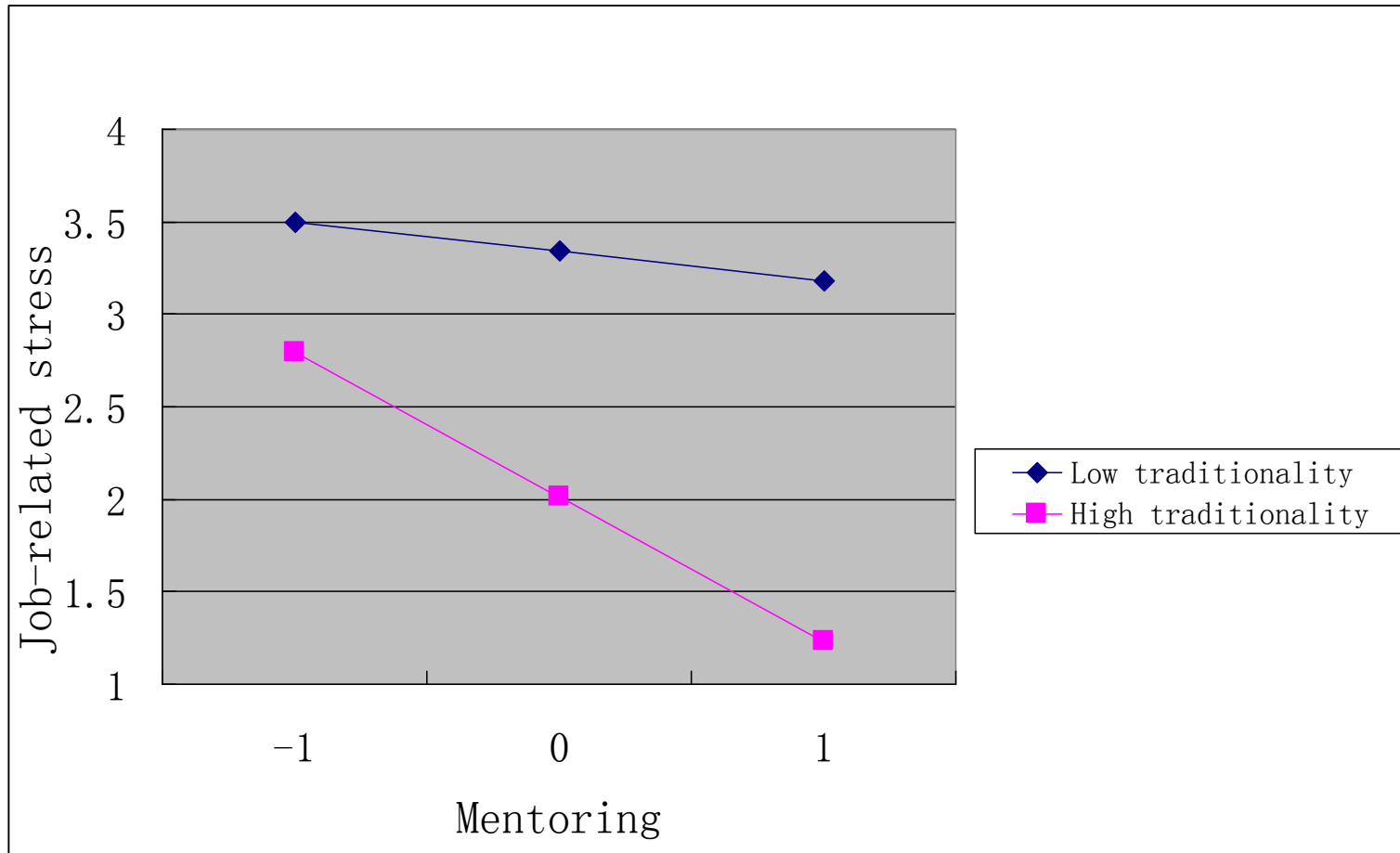


FIGURE 3: MENTORING AND JOB-RELATED STRESS BY TRADITIONALITY AND TRUST IN MENTOR

