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Abstract

Purpose – The purpose of this study was to examine the effects of authentic leadership on the work–family balance (WFB) of followers by focusing on the mediating roles of leader–member exchange (LMX) and work-to-family enrichment (WFE) and the moderating role of traditionality in China.

Design/methodology/approach – Data were collected using field survey research design. Participants included 206 employees in a pharmaceutical company in China.

Findings – The results indicate that LMX and WFE sequentially mediated the positive relationship between authentic leadership and WFB. In addition, traditionality strengthened the relationship between authentic leadership and LMX.

Research limitations/implications – This study contributes to the integration of authentic leadership literature and the work-family balance model. This research also indicates that authentic leadership is a source of enhancing employees' work–family balance. However, data are correlational and cross-sectional, which limits the ability to draw causal relationships.

Practical implications – The findings reveal that authentic leadership is effective in inducing followers' WFB. The value of traditionality can strengthen the effect of authentic leadership.

Originality/value – Our study addresses unexplored theoretical predictions and provides new directions for authentic leadership and work–family research.

Keywords: authentic leadership; leader–member exchange; work–family enrichment; work–family balance; traditionality

Introduction

A growing body of evidence has demonstrated that leaders' authenticity is an effective

way of avoiding moral problems and advancing both organizational benefits and enduring

employee welfare (George *et al.*, 2007). Luthans and Avolio (2003, p. 243) deemed this

leadership approach *authentic leadership*, which they defined as "a process that draws from

both positive psychological capacities and a highly developed organizational context, which

results in both greater self-awareness and self-regulated positive behaviors on the part of

leaders and associates, fostering positive self-development." Authentic leadership is

originated from positive psychology theory that reflects its conceptual roots in positive

psychology and focuses on the positive psychological capacities that constitute authenticity

(Luthans and Avolio, 2003).

Positive modeling by authentic leaders can foster internal regulation among followers,

contributing to greater positive attitudes, well-being, and performance (Rahimnia and

Sharifirad, 2015; Walumbwa *et al.*, 2008). Although many studies have illustrated the effects

of authentic leadership in the work domain, we still know little about how the perception of

authentic leadership affects the work–family balance (WFB) of followers. The issue of WFB

is now attracting increasing attention in both Eastern and Western countries (Casper *et al.*,

2018). Scholars have provided empirical support for the notion that WFB facilitates job

satisfaction, enhances family quality (Chan *et al.*, 2015; Odle-Dusseau *et al.*, 2012), and

alleviates anxiety, depression, and stress (Haar *et al.*, 2014; Odle-Dusseau *et al.*, 2012).

To address this research gap and extend the potential outcomes of authentic leadership

from work to family, this study investigates the effects of authentic leadership on employees'

WFB. Greenhaus and Allen (2011) defined WFB as an overall appraisal of the extent to which the effectiveness and satisfaction of individuals in their work and family roles are consistent with their life values at a given point in time. Authentic leaders possess the characteristics of transparency and genuineness (Walumbwa *et al.*, 2008). Their behavioral style encourages followers to pursue achievements aligned with their personal values, which promotes WFB. Accordingly, we first argue that the exhibition of authentic leadership can facilitate WFB.

To understand how authentic leadership influences WFB in followers, this study also examines the underlying mechanism through which authentic leadership promotes WFB. Authentic leader induces the perception among followers that their leader is reliable, trustworthy, and inclined to develop a close relationship with them (Rahimnia and Sharifirad, 2015), which can promote a higher quality of leader–member exchange (LMX). Work–family enrichment theory contends that resources (e.g., social capital) gained in the workplace can be shifted to the family domain to help improve the quality and performance of family life (Greenhaus and Powell, 2006). As such, the strengthened LMX may transfer positive work resources (authentic leadership) to the family domain and thus enrich the quality of family life.

The enhancement of family quality derived from LMX can be referred to as work-to-family enrichment (WFE), which is defined as the extent to which experiences at work help generate quality of family life (Greenhaus and Powell, 2006). As suggested by the work–family balance model, WFE is important in facilitating WFB by helping individuals to fulfill their needs and expectations between work and family (Greenhaus and Allen, 2011).

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Accordingly, our main contention is that authentic leadership serves as a workplace resource that helps to establish and maintain a high quality LMX relationship, which shifts the resources subordinates gain at work to facilitate WFE, and in turn enhances WFB.

We also posit a boundary condition under which authentic leadership exerts stronger or weaker effects on LMX. According to the contingency theory of leadership, the extent to which a leadership style is influential is contingent on its context (Yukl, 2013). This study proposes that traditionality among subordinates, defined as the degree to which an individual upholds traditional values (Schwartz, 1992), serves as one such contextual factor that moderates the effects of authentic leadership on LMX. Traditionality has been shown to be an important boundary condition that can alter the effects of leadership in a Chinese setting (Li *et al.*, 2014; Liu *et al.*, 2010). Accordingly, we propose that to better understand the relationship between authentic leadership and LMX in the Chinese context, traditionality should be considered as a moderator.

This research contributes to the literature on authentic leadership, traditionality, LMX, and the work–family interface in several ways. First, it extends the literature on authentic leadership by going beyond work-related consequences to include their spillover effects on WFB, thus enhancing our understanding of the potential outcomes of authentic leadership. Second, drawing on work–family enrichment theory (Greenhaus and Powell, 2006), we investigate the sequential mediating roles of LMX and WFE, providing a new perspective on the mechanism underlying the authentic leadership processes and opening up the "black box" regarding the association between authentic leadership and WFB. Third, this research considers the cultural concept of traditionality when offering insights into the boundary

condition, which is the first attempt to integrate Chinese cultural values into the work–family literature. Finally, we test the theoretical model of this paper in the context of China. To the extent that Chinese people attach great importance to interpersonal relationships and family concepts (Yang *et al.*, 1989), they experience great pressure from both society and family. Furthermore, scholars have called for future research to examine the effects of authentic leadership in Eastern contexts such as in China because Confucian values emphasize authenticity toward others as a fundamental virtue (Li *et al.*, 2014). Accordingly, studying the effects of authentic leadership on WFB in China is important and timely in helping individuals to achieve a work–family balance.

Theory and hypotheses

Authentic leadership and LMX

Authentic leadership was first proposed by Luthans and Avolio (2003) to denote the production of a positive psychological capacity and advanced self-awareness. Walumbwa and colleagues (2008) later modified this definition by ascribing four incremental dimensions: *self-awareness* represents the extent to which an individual understands himself or herself and knows the effects he or she may have on others; *relational transparency* denotes authentic disclosure to others by sharing real feelings and true information without disguise or distortion; *balanced processing* refers to a balanced and objective attitude toward all information and suggestions; *internalized moral perspective* implies deeply held moral standards and inner values that direct the individual's decisions and behavior.

As a construct in the literature on positive psychology, authentic leadership promotes LMX in several ways. First, authentic leaders use introspection to reach a precise and

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consistent assessment of themselves (Hinojosa *et al.*, 2014). They also endeavor to create a

transparent relationship with others by sharing internal ideas and expressing their true

feelings (Liu *et al.*, 2015). This genuine attitude is effective in earning the acceptance and

trust of followers, which may enhance the quality of social exchange between leader and

followers. Second, authentic leaders fully understand the art of balance. They process affairs

in such a way that all followers' suggestions receive equal consideration (Gardner *et al.*,

2005). The perception of fairness and balance make followers feel recognized and

appreciated (Avolio *et al.*, 2004). Accordingly, with positive psychological resources, a high

quality LMX can be cultivated. Third, authentic leaders show integrity and insist on high

moral standards (Walumbwa *et al.*, 2010). They abide by autonomous morality rather

succumbing to external pressure (Hinojosa *et al.*, 2014). Guided by these transcendent moral

leaders, followers are more likely to believe in and rely on their leaders and develop close

relationships and reciprocal connections with them. We thus propose:

Hypothesis 1: Authentic leadership is positively related to LMX.

LMX and WFE

With high quality LMX, followers are more likely to receive special privileges from

leaders (Wang *et al.*, 2005). Mutual trust, respect, and reciprocal beliefs are gradually built

between leader and follower with an increase in LMX (Graen and Uhl-Bien, 1995). It is

noteworthy that the benefits of high quality LMX are not restricted to the work domain.

According to work–family enrichment theory, resources generated in the workplace can be

applied to the family domain (Greenhaus and Powell, 2006), and scholars have noted that in

high quality LMX followers are given more autonomy and negotiating opportunities, which

have positive spillover effects on the family domain (Morganson *et al.*, 2016).

Work–family enrichment theory provides two perspectives to depict how resources obtained in the work role transfer benefits to the family domain (Greenhaus and Powell, 2006). In the *instrumental path* resources can be transferred directly from work to the family domain, and in the *affective path* the transfer process operates indirectly through positive affect.

Extending this theory to include LMX, we suggest that LMX generated by authentic leadership can enrich followers' family life quality via these paths. First, high-quality LMX relationships bring followers various resources that can directly benefit their family lives. A high degree of LMX can raise the self-esteem, self-efficacy, and self-confidence of followers (Wayne *et al.*, 1997). As noted by work–family enrichment theory, positive evaluations of the self are critical in inducing WFE (Greenhaus and Powell, 2006). With greater self-worth, followers are more likely to develop confidence in family affairs. Furthermore, stronger LMX provides followers with greater flexibility and more opportunity to participate in decision making at work (Keller and Dansereau, 1995). With such support and autonomy, followers favored by the leader may conserve more time and energy at work and then redirect these resources to family life.

Second, high quality LMX relationships increase positive affect at work, which can indirectly enrich followers' family lives. Employees with high LMX are likely to experience favorable treatment and receive tangible and intangible rewards from leaders (Wang *et al.*, 2005), which generate positive affect (Wayne *et al.*, 1997). With enhanced positive affect at work, followers may be in a better mood when they get home (Greenhaus and Powell, 2006),

resulting in patience and likelihood of positive interactions with their families, thus enriching

family life. Taken together, we propose the following hypothesis.

Hypothesis 2: LMX is positively related to WFE.

WFE and WFB

According to work–family enrichment theory, experiences at work can provide

transferrable resources that enrich the quality of family life, which can in turn facilitate

family performance (Greenhaus and Powell, 2006). Similarly, the theoretical model of

work–family balance proposed by Greenhaus and Allen (2011) suggests that WFE is an

effective contributor to WFB. To the extent that WFE shifts resources from the workplace to

promote positive interactions and close relationships in the family (Wayne *et al.*, 2006),

individuals with a high perception of WFE tend to experience satisfying involvement and

successful achievement both at work and at home. Accordingly, effective accomplishment is

achieved in both the work and family domains in accordance with personal values, achieving

WFB. In addition, when the resources derived from work provide the energy needed for

family life, individuals are more likely to have enhanced vigor and efficacy to better fulfill

both work and family roles and reach a balance between these roles across domains and life

values.

Hypothesis 3: WFE is positively related to WFB.

Mediating roles of LMX and WFE

According to work–family enrichment theory and the work–family balance model,

resources that originate from work experiences are conducive to the enhancement of WFB

(Greenhaus and Allen, 2011; Greenhaus and Powell, 2006). We thus contend that authentic

leaders are a potential source of work-related resources, delivering genuineness, morality, and support to induce high quality LMX. With enhanced LMX, positive interactions at work can spill over to the family domain and cultivate WFE, which ultimately contributes to the emergence of WFB. We hence propose the following hypothesis.

Hypothesis 4: LMX and WFE jointly mediate the relationship between authentic leadership and WFB.

Moderating role of traditionality

The contingency theory of leadership contends that the effect of leadership should be examined in terms of the context in which it takes place (Yukl, 2013). We suggest that followers' traditional values are a critical contextual factor for the effect of authentic leadership on LMX, particularly in the Chinese setting.

Chinese society heavily emphasizes traditional beliefs and values (Yang *et al.*, 1989). People in China still hold to most of the traditional norms rooted in Confucian ideology. For instance, Chinese people attach great importance to hierarchy, respect for status, and maintaining harmony (Liu *et al.*, 2010). With this hierarchical mindset, Chinese people tend to keep their distance from those of different status, and take for granted that authority holders possess certain privileges (Yang *et al.*, 1989). Therefore, employees with high traditionality are likely to be highly motivated and encouraged by authentic leaders whom they perceive as more approachable than expected. In contrast, individuals with low traditionality are less committed to the norms of authority regard authentic leadership as a norm, and are therefore less influenced by authentic leaders to develop quality LMX relationships.

Hypothesis 5: Traditionality moderates the relationship between authentic leadership and LMX such that the relationship is stronger when traditionality is high rather than low.

Methods

Samples and procedures

We collected our data from frontline manual employees at a pharmaceutical company in Shanghai. We chose this company because a part-time MBA student of the corresponding author invited the author to do survey research in her company, which emphasized leadership effectiveness and WFB. It was thus important for the company to know how and when authentic leadership can promote follower WFB. With the assistance of the pharmaceutical company's human resource manager, who also briefed potential participants on the purpose of the study and the data collection procedure, we distributed questionnaires to 230 employees. Each participant received a cover letter outlining the voluntary nature of participation, an assurance of anonymity, and a questionnaire with a return envelope. The questionnaires asked the participants to provide their perceptions of authentic leadership, traditionality, LMX, WFE, WFB, job social support (a control variable), and their demographic details. We used a cross-sectional research design because the organization allowed us to contact the respondents only once. Single source data were obtained, as all of our measures were subjective perceptions (e.g., authentic leadership, LMX, WFE, and WFB) or personal characteristics (e.g., traditionality). Research has indicated that self-reporting is an appropriate way to examine perceptions of leadership and work–family issues (Wang *et al.*, 2017).

We received 206 usable responses, indicating a response rate of 89.57%. Among the 206

respondents, 37.4% were female, the average age was 33.80 years ($SD = 8.41$), the average

job tenure was 11.98 years ($SD = 8.71$), 47.1% held a bachelor's degree or higher, 27.2% had

graduated from community colleges, and 25.7% had received a high school education or

lower.

Measures

A 7-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree) was

used in all of the measures in the study, with the exception of demographic variables. All of

the key measures except for traditionality were originally developed in English, but had been

translated and used in other studies conducted in a Chinese setting.

Authentic leadership. A 16-item scale originally developed by Walumbwa, Avolio,

Gardner, Wernsing, and Peterson (2008) and later applied in China (Li *et al.*, 2014) was used

to measure authentic leadership. A sample item is "My supervisor seeks feedback to improve

interactions with others." Cronbach's alpha for this measure was 0.97.

Traditionality. A 5-item scale originally developed by Yang, Yu, and Yeh (1989) and later

applied by Farh, Earley, and Lin (1997) was used to measure traditionality. A sample item is

"The best way to avoid mistakes is to follow the instructions of senior persons." Cronbach's

alpha for this measure was 0.83.

LMX. A 7-item scale originally developed by Graen and Uhl-Bien (1995) and later

applied in China (Yang *et al.*, 2014) was used to measure LMX as perceived by followers. A

sample item is "My supervisor defends my work actions to a superior, even without complete

knowledge of the issue in question." Cronbach's alpha for this measure was 0.93.

WFE. A 9-item scale developed by Carlson, Kacmar, Wayne, and Grzywacz (2006) and

later applied in China (Kwan *et al.*, 2010) was used to measure WFE. A sample item is "My involvement in my work puts me in a good mood and this helps me be a better family member." Cronbach's alpha was 0.97.

WFB. A 6-item scale developed by Carlson, Grzywacz, and Zivnuska (2009) and later applied in China (Wang *et al.*, 2017) was used to measure WFB. A sample item is "I do a good job of meeting the role expectations of critical people in my work and family life." Cronbach's alpha for this measure was 0.95.

Control variables. Because of the potential demographic effects on family outcomes (e.g., Zhang *et al.*, 2012), we controlled for employee gender, age, education, and job tenure in our data analysis. Job social support was also controlled because it was an important work resource that could facilitate WFE (Zhang *et al.*, 2012) and WFB (Frone, 2003). Job social support was measured based on a 4-item scale originally developed by Van Yperen and Hagedoorn (2003) and later applied in China (Zhang *et al.*, 2012). A sample item is "I can rely upon my co-workers when things get tough at work." Cronbach's alpha was 0.79.

Results

Confirmatory factor analyses

We first performed confirmatory factor analysis (CFA) to evaluate the distinctiveness of all of the multi-item variables. Because the model would exceed the recommended parameters to sample size ratio for estimation (1:5) if all the measurement items were included as observed indicators, we used item parceling to estimate the structural relationships among different latent constructs (Landis, Beal, & Tesluk, 2000). We first combined the items with the highest and the lowest factor loadings as an aggregated indicator.

Thereafter, the second-highest and second-lowest items were averaged to form the second new indicator, followed by the third-highest and the third-lowest items, and so on. After that, we ran factor analysis again for all the new indicators, and repeated the procedure until all the items were parceled into three indicators. The six-factor model achieved a good fit to the data: χ^2 (137) = 268.20, $p < 0.01$; TLI = 0.93; CFI = 0.94; RMSEA = 0.07. The six-factor model provided a significantly better fit than did the alternative models, indicating convergent and discriminant validity. For more information on any of these analyses, please contact the corresponding author.

To test for the presence of the common method bias, we tested a common method model in which all of the items loaded on a higher-order latent factor that we called self-rating. The result indicated that the fit of the common method model (χ^2 (118) = 208.55, $p < .01$, TLI = .94, CFI = .96 and RMSEA = .09) was not significantly better than that of the measurement model ($\Delta\chi^2$ (Δdf = 19) = 59.65, *n.s.*). Thus, the common method variance was not a serious problem in this study.

Descriptive statistics

Table I lists the descriptive statistics, correlations, and scale reliabilities for the variables.

---------Insert Table I about here---------

Hypothesis testing

We used Mplus 7.4 to conduct structural equation modeling (SEM) with the same latent variables as in the CFA analyses section to test the hypotheses. Hypothesis 1 proposed that authentic leadership is positively related to LMX. As shown in Figure 1, authentic leadership was positively related to LMX ($\beta = 0.98$, $p < 0.01$). Hypothesis 1 was supported. Figure 1

also showed that LMX was positively related to WFE ($\beta = 0.54$, $p < 0.01$) and that WFE was positively related to WFB ($\beta = 0.61$, $p < 0.01$), hence supporting Hypotheses 2 and 3. Hypothesis 5 proposed that traditionality moderates the relationship between authentic leadership and LMX. To test Hypothesis 5, we used the numerical integration technique recommended by Klein and Moosbrugger (2000) and computed slopes one standard deviation above and below the mean of traditionality. As illustrated in Figure 1, the latent interaction between authentic leadership and traditionality was significantly related to LMX ($\beta = .10$, $p < .05$). We then plotted the interaction effects using Stone and Hollenbeck's (1989) procedure, as shown in Figure 2. The positive relationship between authentic leadership and LMX was significantly stronger when traditionality was high (+1SD) rather than low (-1SD), thus supporting Hypothesis 5. Hypothesis 4 proposed that LMX and WFE jointly mediate the relationship between authentic leadership and WFB. To test Hypothesis 4, we employed bootstrapping approach with 2,000 randomly selected samples. Results showed that the indirect effect of authentic leadership on WFB through LMX and WFE was significant (indirect effect = .30, 95% CI = [.20, .46]), thus supporting Hypothesis 4.

---------Insert Figures 1 and 2 about here---------

Discussion

The present study explored how and when authentic leadership affected followers' WFB. The study found that authentic leadership contributed to the enhancement of LMX, which in turn promoted WFE and elicited WFB. In addition, traditionality strengthened the positive relationship between authentic leadership and LMX. These results not only validate the effects of authentic leadership on the family life of followers (c.f. Braun and Nieberle, 2017),

but also help open up the underexplored "black box" of these effects. Although two recent meta-analyses have identified various predictors of WFE (Lapierre *et al.*, 2018) and WFB (Casper *et al.*, 2018), the work–family effects of authentic leadership were not considered. Our findings not only respond to a recent call to investigate the effects of leadership at work on the family life of followers (Li *et al.*, 2017), but also provide important theoretical contributions and practical implications for the literature on leadership and the work–family interface.

Theoretical implications

Our paper makes several theoretical contributions worth noting. First, as people face demands in both work and family domains, it is of great importance for them to achieve balance between their work and family roles. This study thus goes beyond previous work by examining the effects of authentic leadership on WFB, thereby extending the understanding of authentic leadership by integrating it with work–family research. We also provide a guideline for future studies to investigate the potential effects of authentic leadership on other domains (e.g., community, leisure).

Second, to unravel the implicit influencing mechanism of authentic leadership's effects on WFB, we draw on the work–family balance model (Greenhaus and Allen, 2011) and work–family enrichment theory (Greenhaus and Powell, 2006). Our findings demonstrate for the first time how the resources emerging from work (authentic leadership) can nurture a quality exchange (LMX), enrich family life (WFE), and lead to WFB. Our focus on the sequential mediators of LMX and WFE provides not only a new perspective for understanding the authentic leadership literature, but also evidence for the claims that LMX

plays an important role in the work–family spillover process (Litano *et al.*, 2016).

Third, we further plot the picture of how authentic leadership interacts with the personal values of followers to cultivate a high degree of LMX. Using the contingency theory of leadership, we demonstrate that traditionality can serve as an important boundary condition between authentic leadership and LMX. This paper thus extends previous studies by identifying an important boundary condition under which authentic leadership can exert effects. In addition, the inclusion of traditionality adds insights to the literature on authentic leadership and work–family issues and suggests that traditionality should be considered when exploring the work–family interface.

Finally, we conducted this study in the context of China. Although authentic leadership has been the subject of a large body of research, studies have been restricted mainly to Western samples. As stated by Hofstede (1993), the leadership theories demonstrated in Western samples are not necessarily applicable in Eastern countries; thus, this study provides further support for the theory of authentic leadership in China. Moreover, as Chinese society strongly emphasizes interpersonal relationships and reciprocity (Yang, 1993), people in China usually strive to meet the expectations of both their supervisors and family members. It is hence a great challenge and of great importance for Chinese people to achieve WFB. Our study is a timely addition to the literature on authentic leadership and WFB in China because it helps to identify situational factors that can help Chinese people to obtain the benefits of an ideal work–family state.

Practical implications

Given the tremendous pressure people face in their daily life and the importance of

finding a balance between work and family life, it is most important for organizations to

nurture a beneficial environment for attaining WFB. To the extent that authentic leaders

facilitate LMX and WFE, which then contribute to the emergence of WFB, organizations

should encourage authentic leadership and create a suitable context for its expression.

Organizations should take leadership style into consideration when selecting supervisors.

Those with a great deal of positive psychological capital or who emphasize the delivery of

genuine feelings and real information should be given priority when promotion decisions are

made (Jensen and Luthans 2006). Organizations should also strive to cultivate transparency

and morality. A well-constructed organizational climate that strongly encourages sincerity

may also help to promote authentic leadership.

Moreover, as LMX is an important conduit in the promotion of WFB, the development

of a quality LMX relationship is critical to improve employee WFB. To generate a quality

exchange, managers should consider the internal needs of their followers, provide them with

care and support, and build an unimpeded channel of communication (Wayne *et al.*, 1997).

Furthermore, the results of our study indicate that a focus on employees' work-related

resources should be of interest to organizations. Managers should cultivate positive emotions

and experiences at work for employees because these can spill over to the family domain and

exert positive effects on employee WFB.

Finally, as traditionality serves as an important boundary condition that strengthens the

effects of authentic leadership, organizations need to seek unique ways to treat followers with

different personal values. For those with high traditionality, leaders could attempt to use

authentic leaders to guide them, as our study has demonstrated that this is particularly

effective for such employees. However, for those with low traditionality, authentic leadership may be less effective, and organizations should adopt additional methods to achieve LMX.

Limitations and future directions

Despite these contributions and implications, our research possesses several limitations that warrant attention. First, our study was susceptible to reverse causal relationships because all of the variables were reported in the same period (Stone-Romero and Rosopa, 2010). Perceptions of WFB may lead employees to perceive LMX and authentic leadership. To reduce the potential internal validity problems associated with our cross-sectional research design, we followed Stone-Romero and Rosopa's (2011) suggestion to estimate the significance of the structural parameters, and received a significant indirect effect. Nevertheless, we encourage future research to apply a longitudinal research design to ask the respondents to rate all variables three times, which can provide relatively strong evidence for the causality among the key variables. Moreover, the risk of common method bias and social desirability bias might have been increased because the data were rated by the same respondents. Thus, the endogeneity of the data might have inflated the correlations between variables. However, past research has concluded that the findings of moderating effects should also be free from common method bias (Siemsen *et al.*, 2010). A potential way to alleviate this risk in the future would be to apply a longitudinal research design and request respondents' supervisors to rate LMX and spouses to rate WFB.

Second, because of the limited questionnaire length, this study only controlled for job social support from supervisors and coworkers to exclude the potential effects of other types of leader behavior. We chose to control job social support because it is often controlled in

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work–family research (e.g., Zhang *et al.*, 2012). Nevertheless, other types of potential leader behavior can influence followers' work–family outcomes. For instance, servant leadership has been demonstrated to induce WFE (Zhang *et al.*, 2012) and WFB (Wang *et al.*, 2017) in Chinese society. We cannot determine whether the effects of authentic leadership would remain the same if perceptions of servant leadership were incorporated, although a recent meta-analysis indicated that this is a relatively standalone leadership construct (Hoch *et al.*, 2018). Nevertheless, future research could investigate the effects of authentic leadership on work–family variables by simultaneously considering other leadership styles.

Third, by investigating only a Chinese sample, the generalizability of our findings is limited, although it may help to rule out the effects of extraneous factors. Future research should conduct a cross-cultural study to validate our findings in other cultural contexts.

Finally, although the sample we used is applicable to test our hypotheses, the use of convenience sample suggests that caution should be exercised when we generalize our findings to the general Chinese population. Our respondents were frontline manual employees in a pharmaceutical company, where employees frequently interact with their supervisors. Hence, we have confidence that our findings can be generalized to employees who have a high degree of interactions with supervisors. However, our findings may not be generalized to professionals in other organizations (e.g., accountancy and consultancy firms) because those professionals have different work practices, including the frequent business trips away from office and a low degree of interactions with supervisors. Thus, we encourage future research to examine the effect of authentic leadership on WFB using samples from other jobs or industries.

Conclusion

Applying work–family enrichment theory and the contingency theory of leadership, the present research provides important insights into how the effects of authentic leadership spill over to the family domain. The findings reveal that authentic leadership is effective at improving the quality of exchange between leaders and followers, which can promote WFE and in turn WFB. The value of traditionality is also demonstrated to alter the strength of authentic leadership's effects on LMX. This study should be helpful in inspiring future research to further study the field of authentic leadership and its benefits in both the work and family domains.

References

Avolio, B.J., Gardner, W.L., Walumbwa, F.O., Luthans, F., and May, D.R. (2004), "Unlocking

the mask: A look at the process by which authentic leaders impact follower attitudes and

behaviors", *Leadership Quarterly,* Vol. 15, pp. 801–823.

Carlson, D.S., Grzywacz, J.G., and Zivnuska, S. (2009), "Is work-family balance more than

conflict and enrichment?" *Human Relations,* Vol. 62, pp. 1459–1486.

Carlson, D.S., Kacmar, K.M., Wayne, J.H., and Grzywacz, J.G. (2006), "Measuring the

positive side of the work-family interface: Development and validation of a work-family

enrichment scale", *Journal of Vocational Behavior,* Vol. 68, pp. 131–164.

Casper, W.J., Vaziri, H., Wayne, J.H., DeHauw, S., and Greenhaus, J. (2018), "The

jingle-jangle of work–nonwork balance: A comprehensive and meta-analytic review of

its meaning and measurement", *Journal of Applied Psychology,* Vol. 103, pp. 182–214.

Chan, X.W., Kalliath, T., Brough, P., Siu, O-L., O'Driscoll, M.P., and Timms, C. (2015),

"Work–family enrichment and satisfaction: the mediating role of self-efficacy and

work-life balance", *International Journal of Human Resource Management,* Vol. 27, pp.

1755–1776.

Farh, J.L., Earley, P.C., and Lin, S.C. (1997), "Impetus for action: A cultural analysis of

justice and organizational citizenship behavior in Chinese society", *Administrative*

Science Quarterly, Vol. 42, pp. 421–444.

Frone, M.R. (2003), "Work-family balance", In Quick, J.C. and Tetrick, L.E. (Eds.),

Handbook of occupational health psychology, American Psychological Association,

Washington, DC, pp. 143–162.

Gardner, W.L., Avolio, B.J., Luthans, F., May, D.R., and Walumbwa, F.O. (2005), "Can you

see the real me?" A self-based model of authentic leader and follower development. *Leadership Quarterly,* Vol. 16, pp. 343–372.

George, B., Sims, P., McLean, A., and Mayer, D. (2007), Discovering your authentic leadership. *Harvard Business Review, 85*(2), 129–138.

Graen, G.B., and Uhl-Bien, M. (1995), "Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective", *Leadership Quarterly,* Vol. 6, pp. 219–247.

Greenhaus, J.H., and Allen, T.D. (2011), "Work–family balance: A review and extension of the literature", In Quick, J.C. and Tetric, L.E. (Eds.), *Handbook of Occupational Health Psychology*, 2nd edition, American Psychological Association, Washington, DC, pp. 165–183.

Greenhaus, J.H., and Powell, G.N. (2006), "When work and family are allies: A theory of work–family enrichment", *Academy of Management Review,* Vol. 31, pp. 72–92.

Haar, J. M., Russo, M., Sune, A., and Ollier-Malaterre, A. (2014), "Outcomes of work–life balance on job satisfaction, life satisfaction and mental health: a study across seven cultures", *Journal of Vocational Behavior,* Vol. 83, pp. 361–373.

Hinojosa, A.S., Mccauley, K.D., Randolph-Seng, B., and Gardner, W.L. (2014), "Leader and follower attachment styles: Implications for authentic leader–follower relationships", *Leadership Quarterly,* Vol. 25, pp. 595–610.

Hoch, J.E., Bommer, W.H., Dulebohn, J.H., and Wu, D. (2018), "Do ethical, authentic, and servant leadership explain variance above and beyond transformational leadership? A

meta-analysis", *Journal of Management*, Vol. 44 No. 2, pp. 501–529.

Hofstede, G. (1993), "Cultural constraints in management theories", *Academy of Management Executive,* Vol. 7, pp. 81–94.

Jensen, S.M., and Luthans, F. (2006), "Relationship between entrepreneurs' psychological capital and their authentic leadership", *Journal of Managerial Issues,* Vol. 18, pp. 254–273.

Keller, T., and Dansereau, F. (1995), "Leadership and empowerment: A social exchange perspective", *Human Relations,* Vol. 48, pp. 127–145.

Klein, A. and Moosbrugger, H. (2000), "Maximum likelihood estimation of latent interaction effects with the LMS method", *Psychometrika,* Vol. 65, pp. 457–474.

Kwan, H.K., Mao, Y., and Zhang, H. (2010), "The impact of role modeling on protégés' personal learning and work-to-family enrichment", *Journal of Vocational Behavior,* Vol. 77, pp. 313–322.

Landis, R. S., Beal, D. J., and Tesluk, P. E. (2000), "A comparison of approaches to forming composite measures in structural equation models", *Organizational Research Methods,* Vol. 3, pp. 186–207.

Lapierre, L.M., Li, Y., Kwan, H.K., Greenhaus, J.H., DiRenzo, M.S., and Shao, P. (2018), "A meta-analysis of the antecedents of work–family enrichment", *Journal of Organizational Behavior,* Vol. 39, pp. 385–401.

Li, A, McCauley, K.D., and Shaffer, J.A. (2017), "The influence of leadership behavior on employee work-family outcomes: A review and research agenda", *Human Resource Management Review*, Vol. 27, pp. 458–472.

Li, F., Yu, K.F., Yang, J., Qi, Z., and Fu, J. H.-Y. (2014), "Authentic leadership, traditionality,

and interactional justice in the Chinese context", *Management and Organization Review,* Vol. 10, pp. 249-273.

Litano, M.L., Major, D.A., Landers, R.N., Streets, V.N., and Bass, B.I. (2016), "A meta-analytic investigation of the relationship between leader-member exchange and work-family experiences", *Leadership Quarterly,* Vol. 27, pp. 802–817.

Liu, J., Kwan, H.K., Wu, L., and Wu, W. (2010), "Abusive supervision and subordinate supervisor-directed deviance: the moderating role of traditional values and the mediating role of revenge cognitions", *Journal of Occupational and Organizational Psychology,* Vol. 83, pp. 835–856.

Liu, S.M., Liao, J.Q., and Wei, H. (2015), "Authentic leadership and whistleblowing: mediating roles of psychological safety and personal identification", *Journal of Business Ethics,* Vol. 131, pp. 107–119.

Luthans, F., and Avolio, B. J. (2003), "Authentic leadership development", In K.S. Cameron, J.E. Dutton, and R.E. Quinn (Eds.), *Positive organizational scholarship*, Berrett-Koehler, San Francisco, 241–258.

Morganson, V.J., Major, D.A., and Litano, M.L. (2016), "A multilevel examination of the relationship between leader–member exchange and work–family outcomes", *Journal of Business and Psychology*, Vol. 32 No. 4, pp. 1-15.

Odle-Dusseau, H.N., Britt, T.W., and Bobko, P. (2012), "Work–family balance, well-being, and organizational outcomes: investigating actual versus desired work/family time discrepancies", *Journal of Business and Psychology,* Vol. 27, pp. 331–343.

Rahimnia, F., and Sharifirad, M.S. (2015), "Authentic leadership and employee well-being:

the mediating role of attachment insecurity", *Journal of Business Ethics,* Vol. 132, pp. 363–377.

Schwartz, S.J. (1992), "Universals in the content and structure of values: Theory and empirical tests in 20 countries", In Zanna, M. (Ed.), *Advances in experimental social psychology,* Vol. 25, Academic Press, Orlando, FL, pp. 1–65.

Siemsen, E., Roth, A., and Oliveira, P. (2010), "Common method bias in regression models with linear, quadratic, and interaction effects", Organizational Research Methods, *Vol. 13*, pp. 456–476.

Stone, E.F., and Hollenbeck, J.R. (1989), "Clarifying some controversial issues surrounding statistical procedures for detecting moderator variables: Empirical evidence and related matters", *Journal of Applied Psychology,* Vol. 74, pp. 3–10.

Stone-Romero, E.F., and Rosopa, P.J. (2010), "Research design options for testing mediation models and their implications for facets of validity", *Journal of Managerial Psychology,* Vol. 25, pp. 697–712.

Stone-Romero, E.F., and Rosopa, P.J. (2011), "Experimental tests of mediation models: Prospects, problems, and some solutions", *Organizational Research Methods,* Vol. 14, pp. 631–646.

Van Yperen, N. W., and Hagedoorn, M. (2003), "Do high job demands increase intrinsic motivation or fatigue or both? The role of job control and job social support", *Academy of Management Journal,* Vol. 46, pp. 339–348.

Walumbwa, F.O., Avolio, B.J., Gardner, W.L., Wernsing, T.S., and Peterson, S.J. (2008), "Authentic leadership: Development and validation of a theory-based measure", *Journal*

of Management, Vol. 34, pp. 89–126.

Walumbwa, F.O., Wang, P., Wang, H., Schaubroeck, J., and Avolio, B.J. (2010),
"Psychological processes linking authentic leadership to follower behaviors", *Leadership Quarterly,* Vol. 21, pp. 901–914

Wang, H., Law, K., Hackett, R.D., Wang, D., and 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,* Vol. 48, pp. 420–432.

Wang, M., Kwan, H.K., and Zhou, A. (2017), "Effects of servant leadership on work–family balance in China", *Asia Pacific Journal of Human Resources*, Vol. 55, 387–407.

Wayne, J.H., Randel, A.E., and Stevens, J. (2006), "The role of identity and work–family support in work–family enrichment and its work-related consequences", *Journal of Vocational Behavior,* Vol. 69, pp. 445–461.

Wayne, S.J., Shore, L.M., and Liden, R.C. (1997), "Perceived organizational support and leader-member exchange: a social exchange perspective", *Academy of Management Journal,* Vol. 40, pp. 82–111.

Yang, K. S. (1993), "Chinese social orientation: An integrative analysis", In Cheng, L. Y., F., Cheung, M. C, and Chen, C-N. (Eds.), *Psychotherapy for the Chinese: Selected Papers from the First International Conference,* Chinese University of Hong Kong, Hong Kong.

Yang, K.S., Yu, A.B., and Yeh, M.H. (1989), "Chinese individual modernity and traditionality: Construction definition and measurement (in Chinese)", *Proceedings of the Interdisciplinary Conference on Chinese Psychology and Behavior,* pp. 287–354.

Yang, Z., Wu, X., and Kwan, H.K. (2014), "Effects of leader-member exchange on family undermining: A moderated-mediation model", *Journal of Psychological Science,* Vol. 37, pp. 1039–1046 (in Chinese).

Yukl, G. (2013), *Leadership in organizations (8th Eds.).* Pearson/Prentice Hall, Upper Saddle River, NJ.
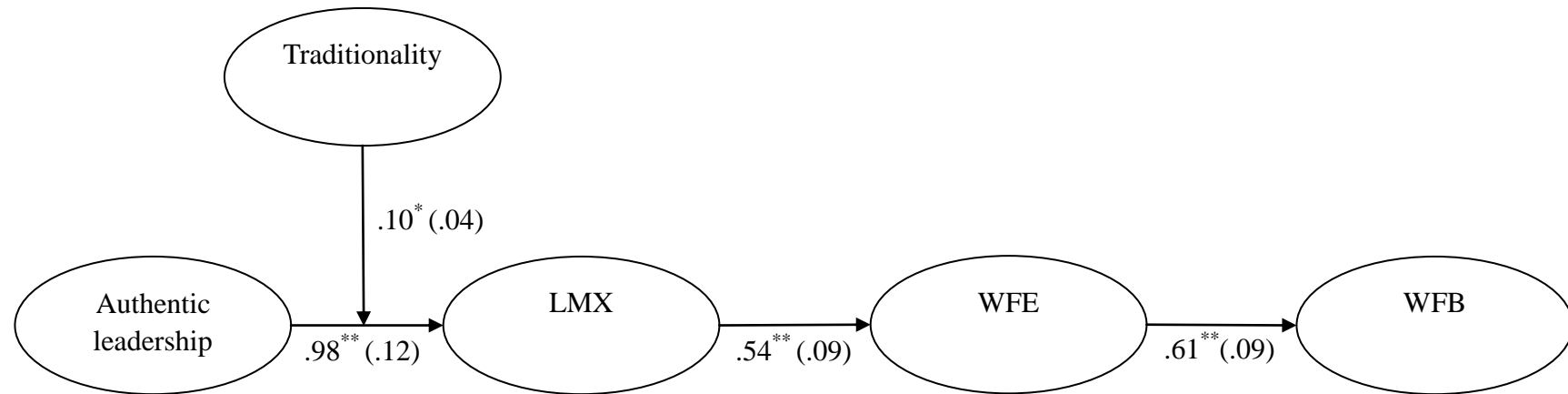
Zhang, H., Kwan, H.K., Everett, A.M., and Jian, Z. (2012), "Servant leadership, organizational identification, and work-to-family enrichment: The moderating role of work climate for sharing family concerns", *Human Resource Management,* Vol. 51, pp. 747–767.

Table I. Means, Standard Deviations, and Correlations

	Mean	S.D.	1	2	3	4	5	6	7	8	9	10
1. Gender	1.63	0.48	–									
2. Age	33.80	8.41	.12	–								
3. Education	3.20	0.85	-.48**	-.20**	–							
4. Job tenure	11.98	8.71	.17*	.94**	-.32**	–						
5. Job social support	5.21	1.02	-0.07	.02	.10	-.01	(.79)					
6. Authentic leadership	5.50	1.03	.10	.04	-.06	.03	.33**	(.97)				
7. Traditionality	4.18	1.25	.40**	.20**	-.33**	.20**	.16*	.16*	(.83)			
8. LMX	5.25	1.11	.01	-.01	.03	-.03	.32**	.78**	.12	(.93)		
9. WFE	5.17	1.13	.17*	.05	-.20**	.03	.25**	.54**	.29**	.50**	(.97)	
10. WFB	5.43	1.00	.15*	.02	-.15*	.01	.32**	.58**	.31**	.54**	.75**	(.95)

Notes: $N = 206$. *$p < 0.05$; **$p < 0.01$. Internal consistency reliability estimates appear in parentheses on the main diagonal.

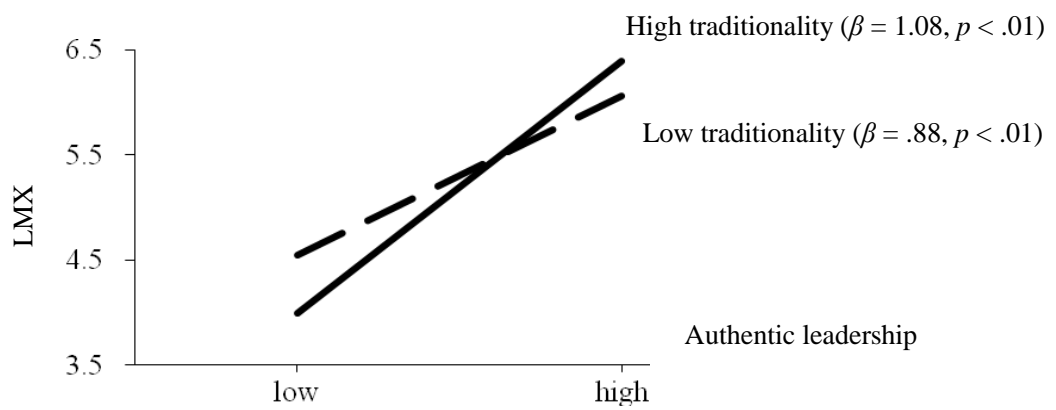LMX refers to leader−member exchange, WFE refers to work−family enrichment, and WFB refers to work−family balance.

Figure 1. Results of Path Analysis

Notes: $N = 206$. $^{*}p < 0.05$; $^{**}p < 0.01$.
LMX refers to leader–member exchange, WFE refers to work–family enrichment, and WFB refers to work–family balance.

Figure 2. The Moderating Effect of Traditionality on the Relationship between Authentic Leadership and LMX

High traditionality ($\beta = 1.08$, $p < .01$)

Low traditionality ($\beta = .88$, $p < .01$)

Authentic leadership

Notes: LMX refers to leader–member exchange.