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Service Workers’ Job Performance: The Roles of Personality Traits, Organizational Identification, and Customer Orientation

Abstract

**Purpose:** Organizational identification refers to employees’ perceived oneness and belongingness to their work organization, and has been argued to be associated with higher employee performance. This research aims to advance the literature by testing the boundary of this relationship with reference to a key construct in employee performance in the service domain: employee customer orientation.

**Design/methodology/approach:** We collected data based on a sample of call center service workers. Employees rated their organizational identification, customer orientation, and personality traits. Supervisors independently rated their subordinates’ performance. Variables statistic tools were employed to analyse the data and test a series of hypotheses.

**Findings:** We found that customer orientation strengthens the relationship between organizational identification and service workers’ job performance, and enhances the mediating effect of organizational identification on the relationship between service workers’ personality trait (i.e., agreeableness) and their performance.

**Originality/value:** This research advances an argument that employee customer orientation moderates the relationship between employee organizational identification and employee job performance in the call center service provision domain. In addition, this is a pioneering study examining the roles of personality traits on employee organizational identification.

**Keywords**
organizational identification, customer orientation, personality traits, job performance, call center, service workers.
Introduction

Understanding how to manage service workers and motivate them to deliver superior customer service is a crucial issue for the service management (Grizzle et al., 2009; ). Commonly, frontline customer-contact employees are poorly remunerated but are required, almost continuously, to deal with challenging customer interactions, frequently with aggressive and unpleasant customers (Yang et al., 2010). Consequently, a central task of service management is to recruit service workers with the suitable personality traits and to enhance their intrinsic interests to serve customers of their companies. It is not surprising that personality traits and customer orientation have been widely examined as potential predictors of service workers’ job performance (Brown et al., 2002; Liao and Chuang, 2004). More recently, from a social identity perspective, scholars have argued that organizational identification enhances workers’ services (Homburg et al., 2009; Wieseke et al., 2012).

Organizational identification refers to employees’ perceived oneness with and belongingness to their organization (Ashforth and Mael, 1989; Dutton et al., 1994). That is, organizational identification involves a high level of emotional ties with the focal organization and the internalization of the organization’s success to personal success (Mael and Ashforth, 1992). Indeed, many studies have claimed that organizational identification leads to improved employee work performance (Ashforth et al., 2008; Hirst et al., 2009; Riketta, 2005). One way to advance this literature is to identify potential moderators of the relationship between organizational identification and employee performance. We argue that organizational identification’s relationship with service workers’ job performance may depend on whether they exhibit task-facilitating values toward the job (e.g., customer orientation). Organizational identification refers to an employee’s organizational-based belongingness especially to his or her working company; however, customer orientation represents an employee’s personal value that refers to the amount
of his or her affect for or against customers that is not necessarily related to a certain organization. Customer orientation is defined as employees’ work values and attitudes toward their customers, such as enjoyment and need of serving customers (Brown et al., 2002). Understanding service workers’ customer orientation and their performance is a pivotal issue for service management (Cross et al., 2007; Donavan et al., 2004; Homburg et al., 2011) because both factors may contribute to consumers’ perceptions of added value of a specific product or the quality of a service (Mishra and Bhatnagar, 2010). Organizational identification represents employees’ desire to perform better for the mutual benefit of the organization and themselves, whilst customer orientation captures service workers’ intrinsic interest in improving their performance. Moreover, compared to less customer-oriented service workers, more customer-oriented ones are normally more willing to exert extra efforts and possess desire to learn necessary skills to provide services. Hence, we argue that customer orientation enhances the relationship between organizational identification and job performance.

However, an explication of organizational identification-job performance dynamics should ideally incorporate personality traits which, as noted previously, are often considered as important personal factors for service management (e.g. Barrick and Mount, 1991; Brown et al., 2002; Hurtz and Donovan, 2000; Salvaggio et al., 2007). Social theorists generally recognize that employees’ behavior is a joint result of the influence of their working context and individual differences (Chatman, 1989; Meyer et al., 2010). The extant literature also supports the important role of employees’ personality traits in their job performance. For example, early work by Hurley (1998) on the service industry has indicated that employees’ agreeableness is an important predictor for their performance. Similarly, the studies by Brown et al (2002) and Liao and Chuang (2004) both noted the significance of the personality traits in the performance of food service workers. Therefore, it is important to incorporate personality traits in the model of the organizational
identification–performance link, which allows: (a) testing the relationship of personality traits (e.g. agreeableness) with organizational identification; and (b) examining the potential mediation effect of organizational identification on personality traits’ relationship with job performance. Recent reviews of organizational identification literature (He and Brown, 2013) posit that the role of individual difference in organizational identification is an under-researched yet important issue regarding the development of organizational identification. Figure 1 illustrates our conceptual model.

We tested this model with a sample of 967 service workers in call centers. The results support the proposed theoretical model. We find that organizational identification has a positive relationship with job performance when customer orientation is medium and high, but not when customer orientation is low. Further, we find that organizational identification mediates the effects of the personality trait of agreeableness on service workers’ job performance.

These findings make several valuable contributions to the literature. First, this research advances the extant literature on the relationship between employee organizational identification and employee performance by identifying a conditional factor that is related to employees’ work value (i.e., customer orientation). Second, this research offers a preliminary test of the effects of the personality trait of agreeableness on employee organizational identification. Third, this research shreds new insights into how service workers’ personality traits relate to their job performance by identifying the pivoting mediation mechanism of organizational identification.

**Conceptual framework and hypotheses**

*Organizational identification and job performance*
Organizational identification occurs when individuals’ organizational membership is salient to their self-definitional need and when they view an organization’s defining essence as self-defining (e.g. Ashforth et al., 2008). During the past two decades, organizational identification has been widely studied as a psychological construct that has unique power in explaining various work- and organization-related employee attitudes, behaviors, and performance (e.g. Dukerich et al., 2002; Hekman et al., 2009;).

Organizational identification can enhance employee performance through an identity-based motivation (e.g. Ashforth et al., 2008; Homburg et al., 2009). Social identity theory posits that when group members strongly identify with the focal group, they are more likely to engage in pro-group behaviors for the purpose of enhancing the collective identity and image of the group, which in turn enhances their own self-concept (e.g. Haslam, 2001; Tajfel and Turner, 1985) and meets fundamental human needs, such as belongingness and affiliation (see Pratt, 1998). Employees with strong organizational identification are more likely to engage in pro-organization behaviors (e.g. Tangirala and Ramanujam, 2008), such as performing tasks better (Mael and Ashforth, 1995).

Although no direct evidence exists on the positive effect of organizational identification on service workers’ job performance, Riketta’s (2005) meta-analysis presents a positive correlation between organizational identification and employee performance. Indeed, recent studies have confirmed the positive effect of organizational identification on the sales performance (Millward and Postmes, 2010) and on emotional well-being of business teams (Mishra and Bhatnagar, 2010), both of which help enhance performance.

*Moderating role of customer orientation*

In addition to examining the direct effect of organizational identification on employees’ job performance, we also intend to investigate the moderating role of the employee’s customer
orientation over this direct relationship. Customer orientation represents an employee’s work value that refers to the amount of his/her affect for or against customers (Zablah et al., 2012). In the seminal work of Brown and colleagues (2002), customer orientation is defined as an employee’s tendency to meet customer needs in an on-the-job context. Consistent with this perspective, Zablah et al. (2012) define customer orientation as “a work value that captures the extent to which employees’ job perceptions, attitudes, and behaviors are guided by an enduring belief in the importance of customer satisfaction” (p. 24). Especially, Brown et al. (2002) propose that employee customer orientation comprises two dimensions: need and enjoyment. The need dimension refers to employees’ beliefs of their ability to satisfy customer needs, while the enjoyment dimension represents the degree to which serving customers is enjoyable for an employee. These two dimensions of customer orientation constitute an overall construct that is “necessary to fully understand a service workers’ ability and motivation to serve customer by meeting their needs” (Brown et al., 2002, p.111). Employees with high customer orientation tend to place top priority on continuously finding ways to provide superior customer value and meet customers’ needs (Babakus et al., 2009; Homburg et al., 2011; Mowen et al., 2010; Zablah et al., 2012).

We argue that, for front-line staff, the relationship between their organizational identification and their job performance depends on their customer orientation. Before elaborating this relationship, we note that prior research has examined the relationship between organizational identification and customer orientation. For example, research has found that employees’ organizational identification enhances their customer orientation (Wieseke et al., 2007; Homburg et al., 2009). Research has also suggested that organizational identification enhances the relationship between employee perceived job meaningfulness and customer orientation (Thakor and Joshi, 2005). These insights suggest that customer orientation is malleable and can be nurtured
through organizational manipulation/experience (Latham, 2007). Nevertheless, despite the merit of these proposed relationships between organizational identification and customer orientation, we argue that these prior empirical explorations have ignored an important conceptual attribute of customer orientation, which means that customer orientation is the work value that is independent from (although related to) organizational identification. We argue that organizational identification and customer orientation represent two related but distinct motivators for service workers to achieve better performance. On one hand, as noted earlier, organizational identification may positively relate to job performance, because doing so would help enhance the status, reputation, and performance of the organization. Such enhancements are important for service workers with higher organizational identification, because they tend to internalize the organization’s success into their personal achievement. On the other hand, customer orientation, as an employee’s work value, represents his or her intrinsic interest in delivering better service to customers (Brown et al., 2002). Specifically, employees with higher customer orientation have a stronger intrinsic motivation and desire to (1) help customers in general, (2) help customers assess their needs, (3) find and deliver solutions to customers’ problems, (4) maintain a consistent level of kindness and emotionality toward customers, and (5) avoid the use of high-pressure tactics (Babakus et al., 2009; Saxe and Weitz, 1982). In this sense, such employees can understand and satisfy customers’ wants more effectively and communicate with their customers more effectively (Babakus et al., 2009; Donavan et al., 2004), while meeting customers’ expectations, helping them diagnose problems, and developing functional long-term relationships (Dean, 2004; Homburg et al., 2011). Thus customer orientation offers an additional means to match the intrinsic interest to the mutually reinforcing interests of serving customers better for service workers with higher organizational identification. For service workers with low customer orientation, although they might have higher organizational identification, they may not be able to provide high-quality service to customers
due to the lack of intrinsic motivation.

Moreover, based on the proposal of Brown et al. (2002), customer orientation is an overall construct that is composed of not only the enjoyment dimension but also the need dimension. Self-consistency theory posits that people are motivated to preserve and stabilize their self-views by ‘thinking and behaving in ways that perpetuate their conceptions of self’ (Swann et al., 1987, p. 881). Since customer-oriented service workers possess the beliefs about their ability to satisfy customers (Brown et al., 2002), they are normally desiring and willing to exert extra efforts to learn necessary skills to provide services during their work (Blocker et al., 2011; Zablah et al., 2012). For example, they possess customers’ extra information, maintain consistent friendliness toward customers, avoid direct argument with furious customers, and find original ways to serve each customer’s unique demands (Sousa and Coelho, 2011), which will help them to act more consistently with their organizational identification to deliver better and high-quality services to customers. Indeed, without extra desire and efforts to learn service skills, it is difficult for employees to convert their higher levels of organizational identification into delivering better service to customers. Based on the above argument, we posit:

**Hypothesis 1:** Customer orientation moderates the relationship between organizational identification and service workers’ job performance.

*Personality traits and organizational identification*

We incorporate personality traits into the organizational identification-performance relationship for several reasons. First, as noted earlier, personality traits are important antecedents of job performance especially in service industries (Barrick and Mount, 1991; Brown et al., 2002). Second, organizational identification can derive from the need to fulfill some basic human needs, such as belongingness, affiliation, and self-development (Ashforth et al., 2008). As such,
personality traits are important but hitherto under-researched factors in affecting the impact of organizational identification. Third, including personality traits also advances the literature by examining the potential mediating effect of organizational identification on their effects on employees’ performance.

Personality traits are defined as “generalized and personalized determining tendencies – consistent and stable modes of an individual’s adjustment to his environment” (Allport and Odbert, 1936, p.38). Recent research has focused on a “universal taxonomy” of the Big Five personality traits, namely, conscientiousness, agreeableness, introversion, neuroticism (also labeled emotional instability), and openness to experience (Goldberg, 1990; McCrae and Costa, 1987). Conscientiousness, the tendency to show self-discipline and strive for competence and achievement (Greenberg and Baron, 2007), is one of the most consistent personality predictors of service workers’ job performance (Barrick and Mount, 1991; Hurtz and Donovan, 2000). This is because conscientious employees are more persistent and dependable because they spend more effort, work harder, and prepare themselves better for their service jobs and skills (Neal et al., 2012). Agreeableness refers to a tendency to be compassionate toward others (Greenberg and Baron, 2007). A highly agreeable person is normally cooperative, helpful, friendly, warm, and trusting. Thus there is a reason to expect a positive relationship of agreeableness with service performance (Hurtz and Donovan, 2000). Introversion is the opposite of extraversion, which refers to the tendency to seek stimulation and enjoy the company of other people, which also positively affects job performance (Greenberg and Baron, 2007). Extant literature proposes that service workers high in extraversion tend to perform better on their jobs because they are enthusiastic, motivated, cooperative, and possess pro-social behavior (Liao and Chuang, 2004; Robbins and Judge, 2008). Emotional instability, which refers to the tendency to experience unpleasant emotions easily, is widely believed to negatively influence job performance (Greenberg and
Baron, 2007). Workers with high emotional instability are often depressed, anxious, and inconsistent. Therefore, it is difficult for them to have warm, sincere, and consistent performance in their customer interactions. Openness to experience refers to a tendency to enjoy new experiences and new ideas (Greenberg and Baron, 2007). Normally open people are fascinated by novelty and innovation as they are imaginative, original, witty, and intelligent. Openness to experience describes the extent to which individuals are curious, imaginative, amenable to new ideas, and willing to learn (Barrick and Mount, 1991; Goldberg, 1990). Prior research suggests that personality traits are consistent and stable over time (McCrae and Costa, 1996), can be generalizable across diverse cultures (McCrae and Terracciano, 2005) and affect job-related attitudes and performance (Black et al., 2010; Neal et al., 2012).

Not all personality traits are necessarily relevant for employee organizational identification, due to not only a lack of theoretical explanation but also the unique nature of different traits (e.g., Ilies et al., 2006). Conscientiousness has been found to be positively associated with job performance (Hurtz and Donovan, 2000), but striving for competence and achievement does not necessarily mean a high belongingness to the organization. For example, a conscientious academic scholar might spend more effort, work harder, and prepare better for achieving personal success, but this does not necessarily mean that he or she has a stronger personal belongingness to their employing university. The relationship between introversion/extroversion and service workers’ organizational identification is also not straightforward. On one side, it seems that extroverted individuals are more likely to seek out social relationships, and to have links to others within their organization (McCrae & Costa, 1987). While on the other side, introverted employees tend to be reserved and are more comfortable with solitude. Especially in the current call center context, customer service advisors typically tend to work alone without much face-to-face interactions (Sawyerr et al., 2009). Also, it is not clear if introverted service workers might compensate their
lack of personal identification with identification with their work organization. For emotional unstable and open employees, there is also a lack of theoretical and empirical evidence to support that individuals who are nervous, anxious, or imaginative, original, and intelligent will have different levels of organizational identification compared to their counterparts. We did not expect that the aforementioned four Big Five dimensions would have relationships with employee organizational identification due to the unique nature of different traits. This is consistent with extant literature. For example, the retailing managers’ service quality orientation is argued and found to be only related to their personality traits of conscientiousness and neuroticism (Salvaggio et al., 2007). The study of Homan and colleagues (2008) indicates that only employees’ openness to experience affects the performance of the diverse team. De Hoogh and De Hartog (2009) note that the relationship of autocratic leadership with followers’ burnout is moderated only by individuals’ emotional instability.

We expect the personality traits of agreeableness to be relevant to employee organizational identification. Agreeableness is the tendency to be compassionate toward others. The need to form and maintain interpersonal relationships with others is a fundamental human motivation (Baumeister and Leary, 1995). A highly agreeable person is normally cooperative, helpful, friendly, warm, and trusting. In contrast, an individual who is at the low end of agreeableness tends to be insincere, antagonistic, temperamental, and argumentative (Barrick and Mount, 1991). Agreeable employees value a cooperative environment and strive to foster pleasant and harmonious interpersonal relationships with co-workers (Ilies et al., 2009); in doing so, they are more likely to establish positive relationships and strong ties with colleagues in the organization. Interactions are sources for individuals collectively to construct their membership status in the organization (Bartel and Dutton, 2001), and thus employee organizational identification. Ilies et al. (2006) also noted that agreeable employees normally value and strive for intimacy and solidarity.
Accordingly they tend to make themselves part of a group and have a positive awareness of the membership of the organization.

Focusing on belongingness, Baumeister and Leary (1995) find that positive feelings are associated with inclusion, and negative feelings are linked to exclusion. Possessing positive relationships and strong ties to people within the organization, agreeable employees tend to have positive feelings that are associated with inclusion in the organization. Therefore, they may develop a higher level of belongingness and hence identification with the organization. Furthermore, agreeable employees tend to have a positive view of their jobs because of their pleasant and congruous interpersonal relationship with their colleagues (Judge et al., 2002; Zimmerman, 2008). Hence, agreeableness is closely linked to constituent motivation and organizational embeddedness (Ng and Feldman, 2009), which determine employees’ perceptions of their job fitness and their affiliation with the organization and colleagues. Our arguments suggest that service workers high in agreeableness are more likely to link themselves with their work environment, colleagues, and work activities and are psychologically attached to the organization (i.e., organizational identification). Hence,

**Hypothesis 2:** Agreeableness positively relates to service workers’ organizational identification.

We have argued that agreeableness positively relates to organizational identification and that agreeableness in general tends to relate positively to job performance in the service context. Given that organizational identification also tends to have a positive effect on service workers’ job performance, we expect that agreeableness will also have an indirect effect on job performance through organizational identification. Moreover, as explained previously, organizational identification tends to have a stronger positive effect on job performance when customer
orientation is higher, whilst when customer orientation is lower, organizational identification tends to have a weaker effect on job performance. Therefore, we expect that the indirect effects of agreeableness, through organizational identification, on job performance tend to be stronger when customer orientation is higher, and vice versa. Thus:

**Hypothesis 3a**: Agreeableness has a positive indirect relationship with job performance through organizational identification.

**Hypothesis 3b**: The positive indirect relationship between agreeableness and job performance through organizational identification is stronger (weaker) when customer orientation is higher (lower).

**Methods**

**Sample and Data Collection**

The sample for this study comprised 967 customer service advisors working in 10 inbound call centers in Beijing, China. The 10 call centers were operated by different companies that either sell laptops, printers, and telecommunication products, such as facsimile machines, telephones, etc., or provide intangible services, such as life insurance, and pension consultancy. We examined customer service advisors working in call centers for several reasons. First, call centers are dedicated operations focusing entirely on the function of customer service (Dean, 2004). Second, in such contexts, customer service advisors are not salespeople whose performance is measured with sales revenues and customer acquisition; rather, their performance pertains more to their ability to identify customers’ needs, help customers to achieve their wants, and develop a good working relationship with their customers. Thus, in call centers, the performance is arguably the most important indicator of service employees’ overall job performance. Third, because the main role of service advisors in the call center is to maintain good relationships with customers, they
constitute a suitable sample to test the proposed relationships in this study. China is one of the fastest-growing emerging economies, and the second largest economy in the world, thus attracting increasingly large numbers of international companies to establish operations there (Kriss, 2005). Similarly to domestic Chinese enterprises, foreign investment companies also face many kinds of challenges within the Chinese market. Moreover, testing our model in the Eastern context is especially appropriate given that many multinational companies operate their call centers in China and other Eastern countries (Call Center Magazine, 2002).

Since the study is to investigate service workers’ job performance, consistent with extant studies, we collect our data for employees’ customer orientation, employees’ organizational identification, and individuals’ personality traits based on their self-report (Brown et al., 2002; Cross et al., 2007; Donavan et al., 2004; Liao and Chuang, 2004; Mael and Ashforth, 1992; Sousa and Coelho, 2011). One of the authors and a research assistant from a local marketing research company administered the fieldwork. First, we contacted the managing directors of local call centers and explained the purpose of the study. After gaining their cooperation, we received descriptive information about the call centers and their list of employees. Only employees whose primary role centered on customer contact were invited to participate in the study.

In each call center, before we approached the participants, the call center manager introduced the researchers to all employees eligible for the research. This is an important procedure to show the support from the management team. The data collection was mainly conducted during paid breaks from work. To maximize privacy and minimize bias, participants were assured of confidentiality and that their responses would not be shown to managers. After participation, respondents received a small incentive. Participants sealed the questionnaires and returned them to the research team directly. Participants’ names appeared on the envelopes to enable matching between self-reported questionnaires and supervisors’ rated job performance.
Within the 10 call centers, 1786 employees form the total population for the study. As most call centers adopt the policy of having holidays and breaks by turns, by visiting each call center several times, we managed to distribute 1161 questionnaires in total during a six-week period. One thousand and thirteen distributed packets were returned. Of these, 46 questionnaires could not be used because of too many missing values, resulting in a sample of 967 usable responses (response rate = 83.3%, effective response rate = 54.1%). Based on the collected 967 responses, we then contacted the immediate supervisors of these respondents to rate their job performance. All supervisors provided their feedback, resulting in a response rate of 100%. Female service workers accounted for 82% of the total sample, reflecting the highly feminized workplace of call center contexts (Deery and Kinnie, 2002). A majority (32.9%) of participants held no degrees, 31.5% held diplomas, and 35.6% had bachelor or higher degrees. The respondents were between 16 and 37 years of age, with an average age of 22.48 (s.d. = 3.31) and average tenure of 9.99 months (s.d. = 9.15).

Measures
A structured questionnaire was compiled in English and then translated into Chinese following the double-translation rules (Sperber et al., 1994). The final questionnaire in Chinese was then pretested in four stages. First, we distributed the surveys to a Professor of Chinese literature, a fieldwork manager in a local Chinese marketing research company, and a call center supervisor for their comments. Second, we made changes based on the feedback from these three people. Third, we piloted the revised questionnaire among a group of customer service advisors (n = 50) in a call center to test the reliability of these measures and to allow test respondents to comment on potential misunderstandings or misinterpretations. Fourth, we reworded and revised the questionnaire to account for any final minor concerns. All questions, unless otherwise stated, were
scored on a seven-point scale with response options ranging from 1 (strongly disagree) to 7 (strongly agree). Appendix A presents all the measures and their construct properties.

Organizational identification

We measured organizational identification with a five-item scale from Mael and Ashforth (1992). It is extensively validated and is the most widely used measure of organizational identification. The Cronbach’s Alpha score is .76.

Service workers’ job performance

Call center managers assessed subordinate service workers’ job performance. We measured job performance with a three-item scale anchored by “among the worst/among the best” (Brown et al., 2002; Licata et al., 2003). To ensure the performance scales actually measures the overall job performance, we explicitly instructed managers to rate the performance based on the quality, quantity, and overall performance delivered by the service workers. In addition, for all these call centers, overall job performance is the major indicator for performance appraisal. The Cronbach’s Alpha score is .91.

Customer orientation

We measured customer orientation using the Brown et al. (2002) 12-item measure, which comprises a two-dimension scale of customer orientation enjoyment and needs. We removed two inappropriate items not reflected in the work characteristics of customer service advisors in the call centers. The two items we deleted are “I find it easy to smile at each of my customers” and “I enjoy remembering my customers’ names.” Deleting these two items fit the unique context of call centers. The Cronbach’s Alpha score is .88.
Personality traits

We measured personality traits (incl. conscientiousness, agreeableness, introversion, emotional instability, and openness to experience with a 20-item (Brown et al., 2002) seven-point scale (1 = never happen; 7 = always happen). Although, as we argued, agreeableness is believed to positively associate with organizational identification, we included the comprehensive list of personality traits in our study because a) we wanted to control their confounding effects; and b) we expect to find some evidence for the relationships of personality traits with customer orientation and service workers’ job performance. Therefore, four Big Five dimensions (i.e. conscientiousness, introversion, emotional instability, and openness to experience) are treated as control variables in the present study, which is consistent with extant literature (e.g. Homan et al., 2008). The Cronbach’s Alpha scores are .89 for conscientiousness, .76 for agreeableness, .77 for introversion, .93 for emotional instability, and .83 for openness to experience.

Analyses and results

We employed structural equation modeling to analyze the data. First, we ran a confirmatory factor analysis (CFA) of the measurement scales. The proposed model achieved adequate fit: $\chi^2 = 2424.436$ (635), $\chi^2/df = 3.82$, CFI = .91, and RMSEA = .054. For a large model such as ours, CFI greater than or equal to .90 is acceptable (Strizhakova et al., 2008) because as the number of variables increases, CFI tends to worsen (Kenny and McCoach, 2003). All indices exceeded recommended thresholds (Hair et al., 2006).

Furthermore, we compared the proposed eight-factor measurement model with a number of alternative measurement models that combine the pairs of variables with the highest correlations (i.e., organizational identification and customer orientation, and agreeableness and customer
orientation). Descriptive statistics (including bivariate correlations) of the measures are shown in Table 1. Table 2 presents the model fit indices of these models. Table 2 clearly shows that the proposed model is superior to all the alternative models, which provides further evidence on the discriminant validities of the scales used in this study.

All factor loadings of indicators for the underlying constructs (see Appendix A) are greater than the .50 benchmark (Hair et al., 2006) and are significant (i.e., \( p < .001 \)). The average variance extracted (AVE) of eight constructs exceeded the .50 benchmark (Fornell and Larcker, 1981). We compared the AVE of each measure with the squared correlation between-measure pairs (Fornell and Larcker, 1981), and all the AVEs exceeded the squared correlations (See Table 1). To gauge further discriminant validity, we examined pairs of measures using the constrained model and unconstrained model. For each pair of constructs, the two-factor oblique model always provided the best fit. Taken together, the tests suggest that there are no concerns with convergent or discriminant validity for our measures.

Testing of Hypotheses

As our hypotheses involve both mediation and moderation effects, we applied path modeling method in estimating our proposed model \cite{Edwards and Lambert, 2007}. We standardized all variables for the analyses. We conducted the mediated moderation path analysis to test the hypotheses using the Mplus 6.0 \cite{Muthén & Muthén, 2010}, because this tool can perform better in testing complex models involving both mediation and moderation than traditional regression analyses \cite{Iacobucci et al., 2007}. Mplus can also deal with non-independence of ratings by employees who worked in the same call center for OID, customer orientation, and personality, as
well as ratings of job performance by the same supervisor in the same call center. Through the command of “type = complex,” Mplus provides a way to adjust for clustering or classification in data analysis, taking into account non-independence of the endogenous variables. We used Mplus software to examine simultaneously the moderation and mediation model involving the mediator (i.e., organizational identifications) and DV (performance). This model can examine the moderated mediation in one model and calculate the conditional direct and indirect effects, indirect effects of products, and total indirect effect across all IVs simultaneously\(^1\).

In our path model, we also controlled for the relationships of personality traits with customer orientation. Prior research has demonstrated the relationship between service workers’ personality traits and their customer orientation (Brown et al., 2002; Harris et al., 2005; Licata et al., 2003). Brown et al. (2002) noted that agreeableness is positively related to customer orientation. This is because service workers who are friendly, cooperative, helpful, supportive, and active naturally tend to feel an empathy with their customers and a desire to solve their problems through service activities. Conscientious service workers tend to be more responsible, organized, dependable, and task oriented, and thus normally display greater attention to customer requirements and reflect a need to do their jobs according to management prescriptions. Introverted employees tend to be quiet, cautious, and shy and to avoid roles that involve a high level of interpersonal communication and social interaction. Therefore, introverted service workers tend to be less customer-oriented as these employees may not enjoy consistently serving customers or providing extended warm-hearted service to their customers. We do not present formal hypotheses regarding the effects of personality traits on customer orientation since many studies (e.g. Brown et

\(^1\) Therefore, Mplus can accomplish the same functions that are featured in the INDIRECT or PROCESS software (Hayes, 2012; 2013). In addition, Mplus enables us to examine the significance of the indirect effects of multiple mediators, and to obtain confidence intervals for specific indirect effects and their significance levels (MacKinnon et al., 2004; Preacher and Hayes, 2008).
Hypothesis 1 predicts that customer orientation positively moderates the relationship between organizational identification and service workers’ job performance, so that when customer orientation is higher, the positive relationship is stronger. Table 3 shows that the organizational identification has a significant positive relationship with job performance ($\beta = .19, p < .01$); whilst customer orientation’s relationship with job performance is not significant ($\beta = .17, \text{ns}$). The interaction between organizational identification and customer orientation significantly predicts job performance ($\beta = .23, p < .001$). We plotted Figure 2 to illustrate the pattern of this interactive effect, based on a standard procedure with one standard deviation above and below representing higher and lower values of the moderator and testing the significance of the simple slopes [Aiken and West, 1991; Edwards and Lambert, 2007]. Figure 2 shows that when customer orientation is higher, organizational identification has a stronger positive relationship with job performance ($\beta = .42, p < .001$). When customer orientation is lower, the relationship is not significant ($\beta = -.04, \text{ns}$). Thus H1 is supported.

Hypothesis 2 states that agreeableness positively relates to service workers’ organizational identification. H2 is supported ($\beta = .49, p < .001$). H3a predicts that agreeableness has a positive
indirect relationship with job performance through organizational identification. Table 4 presents the significant mediation effects that are relevant to testing our mediation hypotheses. Table 4 shows that H3a is supported ($\beta = .09, p < .01$).

Hypothesis 3b predicts that the positive indirect relationship between agreeableness and job performance through organizational identification is stronger (weaker) when customer orientation is higher (lower). We calculated and presented the moderated indirect effect in Table 4. Figure 3 visually illustrates this effect. It shows that when customer orientation is higher, agreeableness has a significant positive indirect effect on job performance through organizational identification ($\beta = .20, p < .001$). When customer orientation is lower, the indirect effect is not significant ($\beta = -.02, ns$). Thus H3b is supported.

Discussion

Theoretical Implications

First, this research advances the argument that task-related work values (i.e. customer orientation) moderate the effect of organizational identification on employee performance. Prior studies on organizational identification find mixed results regarding the effect of organizational identification on employee performance. We argue that one of the explanations for these conflicting results is that organizational identification does not necessarily always enhance employee performance. Instead, whether organizational identification positively relates to employee performance may depend on employee attitude toward the task. Specifically, our research finds that for call center service workers, organizational identification positively relates to performance, especially for those workers with stronger customer orientation (i.e. need and enjoyment of serving customer),
whilst for service workers with weaker customer orientation, their job performance does not differ significantly and tends to be lower regardless of organizational identification. In general, this finding supports the view that for service workers to serve customers better, they need to be willing to not only contribute to the organization’s success and hence personal success (due to organizational identification) by delivering better customer service, but also have an intrinsic interest and belief to do so (due to customer orientation). This finding contributes significantly to our understanding of the conditions that facilitate a positive link between employee organizational identification and employee performance.

Second, the study reveals the significant merit of understanding service workers’ job performance from a social identity perspective, which in turn resonates with recent notions of identity-based motivation in the workplace (e.g. Ashforth et al., 2008). In this sense, the finding of the conditional relationship between organizational identification and performance has implications for service management literature. Examining this relationship enhances our understanding on employee performance. Earlier research has demonstrated that personality traits and customer orientation are important drivers of employee job performance (e.g. Babakus et al., 2009; Brown et al., 2002; Grizzle et al., 2009; Hurtz and Donovan, 2000; Liao and Chuang, 2004) However, this research found that when personality traits and customer orientation are controlled for, organizational identification has an immediate significant relationship with performance ($\beta = .19, p < .01$). More interestingly, we found that actually when organizational identification is controlled for, customer orientation seems to have limited effect on job performance ($\beta = .17, ns$), although it does enhance the effect of organizational identification on performance.

Third, this research extends prior understanding on the effects of personality traits on job performance. Although prior research finds that personality traits, organizational identification, and customer orientation affect job performance respectively, no research integrates the effects of
all three factors. These three perspectives of performance have unique focuses in explaining job performance: personality traits are at the loci of individual invariant traits, organizational identification is at the loci of employee–company relationships, and customer orientation is at the loci of personal attitudes at the job level. Therefore, their integration has the potential to offer further insights into the interrelationship among different levels and loci of antecedents to job performance. Our study also provides several insights into the relationship between personality traits and job performance with regard to its mechanism. Extant studies investigating the direct relationships between employees’ personality traits and their job performance have presented some mixed results. For example, although theorists (e.g. McCrae and Costa, 1996; Greenberg and Baron, 2007) and extant literature (e.g. Ilies et al., 2006; Stewart et al., 2005) have noted the positive effect of agreeableness on employees’ performance, some meta analyses (e.g. Barriack and Mount, 1991) and empirical studies (Brown et al., 2002; Licata et al., 2003) have failed to support this relationship. One explanation for the inconsistent findings produced by extant studies is that a mediating mechanism might be present. In our study, we found that organizational identification mediates the indirect effect of agreeableness on employee job performance.

Fourth, this study is one of the first empirical studies to examine the effect of personality traits on organizational identification, which may act as a psychological mechanism of the effects of some personality traits on job performance. Ashforth et al. (2008) note that though organizational identification can occur through a top-down process (an issue that has received broad empirical attention in the extant literature), empirical research on the effect of personal factors on organizational identification is rare. As we expected, agreeableness is found to relate positively to organizational identification since agreeable employees tend to have positive feelings that are associated with inclusion from the organization and a higher level of organizational belongingness. To our surprise, openness to experience is also found to positively associate with
organizational identification. Individuals’ openness to experience describes the extent to which individuals are curious, imaginative, amenable to new ideas, and willing to learn. Although extant literature has no empirical evidence to explain the relationship of openness to experience with organizational identification, we propose that, on the basis of person-situation interaction theory (Chatman, 1989) and social learning theory (Bandura, 1977), the personality of openness may encourage individuals to accept environment encouragement so that they are more likely to exhibit certain tendencies of values such as positively viewing the work environment. Consequently, employees with high openness to experience tend to have a high belongingness to the organization due their positive viewing toward the working environment.

Fifth, regarding the effects of control variables, this study offers new evidence on the direct effects of the personality traits on customer orientation and job performance. Consistent with extant literature, agreeableness is found to associate positively with employee customer orientation (Brown et al., 2002). An unexpected finding of agreeableness is its negative and direct association with service workers’ job performance. This result is the same as the study of Brown et al. (2002). In order to reduce concerns of common method bias and to have good reliability, employees’ job performance is rated by their immediate supervisors. Therefore they might view agreeable service workers as spending too much time interacting with colleagues and customers on some issues that are unrelated to their job. Sometimes their agreeableness can be a source of annoyance to their supervisor. Consistent with Brown and colleagues (2002), we believe that managers should maximize the positive side of employees’ agreeableness on their organizational identification, and minimize the negative aspects on their service work. Openness to experience also influences positively customer orientation. As we argued previously, employees with high openness to experience, especially within the current call center context of customer service, are witty, intelligent, and imaginative, so that they prefer novelty, variety and intense experience and can find different ways to meet
For the personality traits of introversion, the findings are particularly interesting. Consistent with extant literature, introversion is found to negatively influence customer orientation. This is because introverted employees tend to be quiet, cautious, and shy, and, accordingly, avoid work that involves more interpersonal communications and high social interaction. To our surprise, we find that introversion is positively related to job performance in the call center context. This might be explained by the fact that the customer service advisors serve customers through telephone calls (not face-to-face communications), dealing with customer queries and responding to complaints rather than selling products. Therefore, within the current study context, introverted employees who are more inclined to listen to customers’ interests and enquiries tend to have a better service than extraverted employees who are more fond of face-to-face communications, more inclined to be the center of attention to dominate conversations, and easy to neglect others’ perspectives (Grant et al., 2011). Moreover, this finding is also consistent with the traditional Chinese culture, i.e. Confucianism, which encourages people to stick close to the golden mean, be self-restrained, introverted, and committed to work organizations. Thus introverted employees, although less likely to seek social and personal interactions, could be more focused and concentrate more on some jobs that need to be completed alone such as call center advisors. Conscientiousness is found to marginally influence employees’ customer orientation ($\beta = .09$, $p < .10$). This is because conscientious service workers tend to be more responsible, organized, and dependable, thus normally display greater attention to customer requirements and reflect a need to do their jobs according to management prescriptions. Emotional instability has no impact on both customer orientation and job performance. Although the study of Brown et al. (2002) has also presented a non-significant relationship between emotional instability and job performance, we expected a negative result. This is because people who are calm and secure would do better in their service work than people
who are anxious and insecure. Our findings might be due to 1) only people who have relatively high emotional stability retain their jobs; therefore, the range of the people studied tends to be quite small (Robbins, 2012); and 2) some negative aspects of service workers’ emotional stability, such as nervousness or insecurity, might actually help them in their service since they are cautious about their job and performance (Robbins and Judge, 2008).

Managerial Implications

The results of this study also generate several managerial implications. First, this study identified the development and monitoring of organizational identification among service workers as effective tactics for ultimately maintaining and enhancing employees’ job performance. Our findings suggest that the relationship between service workers’ organizational identification and their performance depends on their customer orientation. Therefore, managers should not only develop relevant programs to develop employees’ identification and affiliation with their organizations, but also recruit and train service workers with stronger customer orientation. In fact, the combination of organizational identification and customer orientation seems to provide both the right type of motivation to create customer value and provide high quality service. In terms of identifying candidates’ level of customer orientation, managers may design a difficult customer service scenario that individuals may experience, and ask them to provide solutions to this situation. Managers may also cultivate employees’ customer orientation by reinforcing the importance of customers to the followers such as designing a customer-based mission statement, striving to develop an understanding of what is expected of them, and having certain policies and practices to reward them to present customer-orientated behaviors.

Second, although customer orientation is defined as an employee’s work value, it can be trained, cultivated, and developed (Sousa and Coelho, 2011; Wieseke et al., 2007). Therefore, it is
particularly important for organizations to develop and cultivate customer orientation among their service workers. For example, managers can guide and educate employees on how the organization values excellent service or deploy certain programs to reward service workers with incentives for their customer-oriented performance. Our results suggest that service workers’ organizational identification may indirectly enhance their job performance, and their customer orientation acts as an effective motivation to strengthen the relation between organizational identification and performance. Indeed, the combination of both organizational identification and customer orientation would provide stronger motivation to generate high-quality performance.

Third, this study clearly indicates an association between the personality traits of agreeableness and important employee outcomes, such as organizational identification and job performance, which provides several useful insights into organizations’ recruitment strategy. For example, in terms of having employees with high identification within the organization, the recruitment and selection of frontline service workers should incorporate an assessment of the levels of personality traits. Given the nature of the work of frontline customer service advisors in call centers, managers should focus on factors specifically associated with agreeableness and openness when interviewing candidates. In fact, our findings echo some extant studies in the service industry. For example, the study of Thoresen and colleagues (2004) indicate that managers may want to consider personality traits that relate to openness and agreeableness when making hiring decisions. It is interesting to find that, in the call center context, employers could consider recruiting service workers who are more introverted. As we have explained earlier, introverted employees are more likely to find comfort in the call center working environment. Moreover, introverted service workers, compared to extraverted individuals, are more cautious, attentive, and focused on their jobs in the call centers when they need to deal with customer queries and complaints, respond to inquiries, and provide information.
**Limitations and Future Research**

This study has several limitations that suggest important future research avenues. First, the sample is from inbound service-oriented call centers. There are some unique working characteristics of employees working in the call centers (e.g., serving customers through phone interaction). Therefore, future research could apply the model to other types of service contexts. Second, we test the effect of organizational identification on employee performance by examining the moderating role of customer orientation in the context of service workers. Future research may apply our model to other contexts by examining other conditions of the organizational identification–performance link. Third, although the Chinese research context has its own merit, future research could explore East–West differences and idiosyncrasies. Future studies may examine the current model by introducing cultural variables in both East and West contexts. Fourth, a major feature of this study is the pioneering examination of the effects of personality traits on organizational identification, which can be characterized as one bottom-up process for developing organizational identification (Ashforth *et al.*, 2008). Future research should examine the effects of other personal factors on organizational identification development and incorporate both personal and organizational factors in explaining organizational identification.

Fifth, personality traits were measured with a 20-item scale borrowed from Brown *et al.* (2002). Although this measurement has been validated and used in extant literature (Licata *et al.*, 2003; Donavan *et al.*, 2004), it has relatively fewer items than other personality scales from psychology literature. For example, the Five-Factor Inventory (NEO FFI) has 60 items (Costa and McCrae, 1992); Big Five Inventory (BFI) has 44 items (Benet-Martínez and John, 1998). We used a shorter version of scale because we wanted to keep our questionnaires to a reasonable length. A questionnaire with too many questions can make employees have some resistance that may
influence the quality of the feedback. However, we acknowledge the limitations of the current personality scale. For example, the measurements of introversion and agreeableness have only three items each; and some items of openness to experience are more related to individual’s creativity. Therefore, we suggest that future research may use other personality scales from psychology literature. Sixth, the results of the effects of personality traits on performance should be interpreted with caution. The study sample comes from call centers, which could explain the unique results of some personality traits on job performance compared with prior studies. Future research should further investigate the effects of personality traits on service performance to understand the unexpected results in the present and prior studies (Brown et al., 2002) (e.g. agreeableness and introversion on job performance). Seventh, customer orientation was argued and confirmed as the sole moderator in the relationship of organizational identification with job performance in the current study. Future research may explore other important conditional boundary factors in this relationship. For example, service climate: employees’ shared perceptions of the practices, procedures, and behaviors that get rewarded, and are supported and expected in regard to customer service and service quality (Schneider et al., 1998). The extant literature indicates that the service climate might have direct and indirect impacts on employees’ service performance (Jong et al., 2004; Liao and Chuang, 2004). Or employees’ psychological empowerment: a sense of control by an employee in relation to their work (Spreitzer, 1995). Findings in the service literature show that psychologically empowered service employees are likely to provide high quality customer service (e.g. Seibert et al., 2011). Eighth, although our study explored the interactive effects of employees’ organizational identification and customer orientation, another interesting future research can investigate how employees with high organizational identification but low customer orientation may express their identification within the organization. Finally, this research is limited by the cross-sectional nature of the survey,
although we collected the data from multiple sources. Future research can apply longitudinal research design to test this research’s theoretical model.

**Conclusion**

Organizational identification has been suggested as a principal motivation for employee work performance (Ashforth *et al.*, 2008). However, research has produced inconsistent results on the effect of organizational identification on employee performance. This study argues that the effect of organizational identification on front-line service workers’ job performance may be conditional task-related work attitudes and values (e.g. customer orientation). We successfully supported this view by finding that customer orientation positively moderates the effect of organizational identification on service workers’ job performance. Specifically, we found that organizational identification has a stronger positive relationship with job performance for service workers with higher customer orientation, whilst for those with lower customer orientation, organizational identification does not significantly relate to job performance. Moreover, this research finds that agreeableness positively relates to organizational identification, and in turn has conditional indirect relationships with job performance through organizational identification and being moderated by customer orientation.
### Appendix A: Variables, measures and factor loadings

<table>
<thead>
<tr>
<th>Measurement Items</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Customer Orientation</strong> (Brown et al., 2002): alpha = .88</td>
</tr>
<tr>
<td><strong>Enjoyment dimension</strong></td>
</tr>
<tr>
<td>It comes naturally to have empathy for my customers.</td>
</tr>
<tr>
<td>I enjoy responding quickly to my customers' requests.</td>
</tr>
<tr>
<td>I get satisfaction from making my customers happy.</td>
</tr>
<tr>
<td>I really enjoy serving my customers.</td>
</tr>
<tr>
<td><strong>Need dimension</strong></td>
</tr>
<tr>
<td>I try to help customers achieve their goals.</td>
</tr>
<tr>
<td>I achieve my own goals by satisfying customers.</td>
</tr>
<tr>
<td>I get customers to talk about their service needs with me.</td>
</tr>
<tr>
<td>I take a problem-solving approach with my customers.</td>
</tr>
<tr>
<td>I keep the best interests of the customer in mind. (.72)</td>
</tr>
<tr>
<td>I am able to answer a customer's questions correctly. (.66)</td>
</tr>
<tr>
<td><strong>Organizational Identification</strong> (Mael and Ashforth, 1992): alpha = .87</td>
</tr>
<tr>
<td>When someone criticizes my organization, it feels like a personal insult.</td>
</tr>
<tr>
<td>I am very interested in what others think about my organization.</td>
</tr>
<tr>
<td>When I talk about this organization, I usually say ‘we’ rather than ‘they’.</td>
</tr>
<tr>
<td>This organization’s successes are my successes.</td>
</tr>
<tr>
<td>When someone praises this organization it feels like a personal compliment.</td>
</tr>
<tr>
<td>If a story in the media criticized this organization, I would feel embarrassed.</td>
</tr>
<tr>
<td><strong>Personality Traits</strong> (Brown et al., 2002)</td>
</tr>
<tr>
<td><strong>Introversion</strong>: alpha = .77</td>
</tr>
<tr>
<td>Feel bashful more than others.</td>
</tr>
<tr>
<td>Quiet when with people.</td>
</tr>
<tr>
<td>Shy.</td>
</tr>
<tr>
<td><strong>Conscientiousness</strong>: alpha = .89</td>
</tr>
<tr>
<td>Precise.</td>
</tr>
<tr>
<td>Organized.</td>
</tr>
<tr>
<td>Sloppy.</td>
</tr>
<tr>
<td>Orderly.</td>
</tr>
<tr>
<td><strong>Emotional instability</strong>: alpha = .93</td>
</tr>
<tr>
<td>Moody more than others.</td>
</tr>
<tr>
<td>Temperamental.</td>
</tr>
<tr>
<td>Envious.</td>
</tr>
<tr>
<td>Emotions go way up and down.</td>
</tr>
<tr>
<td>Testy more than others.</td>
</tr>
<tr>
<td><strong>Openness to experience</strong>: alpha = .83</td>
</tr>
<tr>
<td>Frequently feel highly creative.</td>
</tr>
</tbody>
</table>
Imaginative.
Appreciate art.
Find novel solutions.\(^a\)
More original than others.

*Agreeableness*; alpha = .76
Tender hearted with others.
Sympathetic.
Kind to others.

**Service Workers’ Job Performance** (Brown et al., 2002; Licata et al., 2003); alpha = .91
Overall quality of work performed.
Overall quantity of work performed.
Overall job performance

\(^a\) Removed due to low item-to-total correlation.
References


Kriss, S. (2005), *The China Call Centre Industry: A Whitepaper on the Positive and Negative Aspects*, available at:


multilevel linking mechanism for individual traits and team outcomes”, Personnel Psychology, Vol. 58 No. 2, pp. 343-65.


Table 1. Descriptive statistics and bivariate correlations.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Introversion</td>
<td>.86</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Conscientious</td>
<td>-.12**</td>
<td>.73</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Emotional Instability</td>
<td>.25**</td>
<td>-.32**</td>
<td>.81</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Openness</td>
<td>.04</td>
<td>.03</td>
<td>.23*</td>
<td>.74</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Agreeableness</td>
<td>.01</td>
<td>.31**</td>
<td>-.04</td>
<td>.19**</td>
<td>.76</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. OID</td>
<td>.01</td>
<td>.15**</td>
<td>.04</td>
<td>.20**</td>
<td>.36**</td>
<td>.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Customer orientation</td>
<td>-.15**</td>
<td>.28**</td>
<td>-.07*</td>
<td>.24**</td>
<td>.46**</td>
<td>.52**</td>
<td>.89</td>
<td></td>
</tr>
<tr>
<td>8. Job performance</td>
<td>.05</td>
<td>-.06</td>
<td>.05</td>
<td>.03</td>
<td>-.02</td>
<td>.14**</td>
<td>.08*</td>
<td>.91</td>
</tr>
</tbody>
</table>

Mean 3.78 4.96 3.97 4.99 5.64 5.22 5.49 4.98
SD 1.27 1.19 1.38 1.08 .94 .96 .72 1.09
AVE .73 .53 .66 .54 .58 .54 .78 .83
Cronbach’s alphas .77 .89 .93 .83 .76 .87 .88 .91

Note: Diagonal represents squared roots of AVE scores. Full measurement items and their factor loadings are available on request. OID = Organizational identification.
*p < .05
**p < .01
Table 2. Measurement model testing.

<table>
<thead>
<tr>
<th>Structure</th>
<th>$\chi^2$</th>
<th>df</th>
<th>$\chi^2$/df</th>
<th>CFI</th>
<th>RMSEA</th>
<th>$\Delta\chi^2$/df$^a$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1: Eight-factor</td>
<td>2424.436</td>
<td>635</td>
<td>3.82</td>
<td>.91</td>
<td>.054</td>
<td></td>
</tr>
<tr>
<td>Model 2: Seven-factor combining OID and CO</td>
<td>2893.638</td>
<td>642</td>
<td>4.51</td>
<td>.89</td>
<td>.060</td>
<td>67.03</td>
</tr>
<tr>
<td>Model 3: Seven-factor combining CO and Agreeableness</td>
<td>2776.886</td>
<td>642</td>
<td>4.33</td>
<td>.89</td>
<td>.059</td>
<td>50.35</td>
</tr>
<tr>
<td>Model 4: One-factor model</td>
<td>13860.845</td>
<td>663</td>
<td>20.91</td>
<td>.33</td>
<td>.144</td>
<td>408.44</td>
</tr>
</tbody>
</table>

Note: OID = Organizational identification; CO = Customer orientation.

$^a\chi^2$ tests relative to model 1.
Table 3. Structural equation path coefficients

<table>
<thead>
<tr>
<th></th>
<th>β</th>
<th>S.E.</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introversion → OID</td>
<td>.01</td>
<td>.028</td>
<td>.38</td>
</tr>
<tr>
<td>Openness to experience → OID</td>
<td>.09**</td>
<td>.032</td>
<td>2.81</td>
</tr>
<tr>
<td>Conscientiousness → OID</td>
<td>.00</td>
<td>.035</td>
<td>.13</td>
</tr>
<tr>
<td>Agreeableness → OID (H2)</td>
<td>.49***</td>
<td>.049</td>
<td>10.23</td>
</tr>
<tr>
<td>Emotional instability → OID</td>
<td>.04</td>
<td>.037</td>
<td>1.19</td>
</tr>
<tr>
<td>OID → Job performance</td>
<td>.19**</td>
<td>.066</td>
<td>2.82</td>
</tr>
<tr>
<td>Introversion → Job performance</td>
<td>.07*</td>
<td>.031</td>
<td>2.32</td>
</tr>
<tr>
<td>Openness to experience → Job performance</td>
<td>-.03</td>
<td>.063</td>
<td>-.51</td>
</tr>
<tr>
<td>Conscientiousness → Job performance</td>
<td>-.06</td>
<td>.058</td>
<td>-.96</td>
</tr>
<tr>
<td>Agreeableness → Job performance</td>
<td>-.19**</td>
<td>.080</td>
<td>-2.82</td>
</tr>
<tr>
<td>Emotional instability → Job performance</td>
<td>.03</td>
<td>.031</td>
<td>1.05</td>
</tr>
<tr>
<td>CO → Job performance</td>
<td>.17</td>
<td>.094</td>
<td>1.82</td>
</tr>
<tr>
<td>CO x OID → Job performance (H1)</td>
<td>.23***</td>
<td>.053</td>
<td>4.39</td>
</tr>
</tbody>
</table>

Additional results

<table>
<thead>
<tr>
<th></th>
<th>β</th>
<th>S.E.</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intorversion → CO</td>
<td>-.16***</td>
<td>.025</td>
<td>-6.41</td>
</tr>
<tr>
<td>Openness to experience → CO</td>
<td>.17***</td>
<td>.040</td>
<td>4.32</td>
</tr>
<tr>
<td>Conscientiousness → CO</td>
<td>.09</td>
<td>.049</td>
<td>1.77</td>
</tr>
<tr>
<td>Agreeableness → CO</td>
<td>.62***</td>
<td>.040</td>
<td>15.84</td>
</tr>
<tr>
<td>Emotional instability → CO</td>
<td>-.05</td>
<td>.031</td>
<td>-1.46</td>
</tr>
</tbody>
</table>

R squared

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<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>OID</td>
<td>.27***</td>
</tr>
<tr>
<td>CO</td>
<td>.54***</td>
</tr>
<tr>
<td>Job performance</td>
<td>.13***</td>
</tr>
</tbody>
</table>

Note: All outputs are based on the standardized outputs from Mplus. CO = Customer orientation, OID = Organizational identification. Standardized coefficients are presented. We correlated CO and OID in the model due to their significant correlation.
* p < .05 (two-tailed test).
** p < .01 (two-tailed test).
*** p < .001 (two-tailed test).
Table 4. Mediation and moderated mediation hypotheses tests results.

<table>
<thead>
<tr>
<th>Indirect effects</th>
<th>Standardized Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreeableness → OID → Job performance</td>
<td>.09** (H3a)</td>
</tr>
<tr>
<td>Indirect effects when customer orientation is higher (+1 SD)</td>
<td>.20*** (H3b)</td>
</tr>
<tr>
<td>Agreeableness → OID → Job performance</td>
<td></td>
</tr>
<tr>
<td>Indirect effects when customer orientation is lower (-1 SD)</td>
<td>-.02 (H3b)</td>
</tr>
<tr>
<td>Agreeableness → OID → Job performance</td>
<td></td>
</tr>
</tbody>
</table>

Note: OID = Organizational identification.
* $p < .05$ (two-tailed test).
** $p < .01$ (two-tailed test).
Figure 1. Conceptual model
Note: OID = Organizational identification; CO = Customer orientation; low or high CO refers to -1/+1 SD.
For low CO, $\beta = -.00$ ns (two-tailed test).
For medium CO, $\beta = .23^{**} p < .01$ (two-tailed test).
For high CO, $\beta = .46^{***} p < .001$ (two-tailed test).

**Figure 2.** Moderating effect of customer orientation on the relationship between organizational identification and job performance (H1)
Note: CO = Customer orientation; ; low or high CO refers to -1/+1 SD.
For low CO, $\beta = -0.02$ ns (two-tailed test).
For medium CO, $\beta = .09** p < .01$ (two-tailed test).
For high CO, $\beta = .20 *** p < .001$ (two-tailed test).

**Figure 3.** Moderating effect of customer orientation on the indirect relationship between agreeableness and job performance through organizational identification (H3b)