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Dual-Path Effects of the Relationship between Multiple Identities and Employee Innovative Behavior: The Moderating Role of the Situational Aesthetic

Yen-Feng Chiang¹, Chi-Tung Tsai², Jui Chih Peng³, Sz-Yan Lin⁴
¹²⁴Changhua University of Education, ³National Chung Hsing University

yenfenf0623@gmail.com, ctt sai@cc.ncue.edu.tw, lydiapeng1001@gmail.com, madonnafan1114@gmail.com

Abstract. Multiple identities of employees are different and will tangibly or intangibly influence innovative behavior of employees. Based on social identity theory, this study examines the relationship between multiple identities of employees and innovative behavior of dual paths (future time perspective and work-family conflict), and further explores whether employees have a moderating effect on the aforementioned relationship under the situational aesthetic. In this study, 1,019 cross-industry employees were selected as research objects. Results include: (1) the higher the level of multiple identities, the more the employees exhibit innovative behavior; (2) the future time perspective mediates the relationship between multiple identities and innovative behavior; (3) multiple identities reduce the performance of employees' innovative behavior through increases in work-family conflict.; and (4) the situational aesthetic has a moderating effect on the relationship between work-family conflict and innovative behavior. When the situational aesthetic is high, the higher the employee’s work-family conflict, the greater the employee’s innovative behavior. By contrast, when the situational aesthetic is low, the higher the employee’s work-family conflict, the lower their innovative behavior. Finally, this study discusses the theoretical and managerial implications.

Keywords. Multiple Identities, Future Time Perspective, Work-family Conflict, Innovative Behavior, Situational Aesthetic

Introduction
Socrates once said that "To find yourself, think for yourself." In today's highly organized world, the identities of which organizations or group categories people belong to, such as the question of "who we are," often trump gender, age, or nationality categories (Xu & Zheng, 2003). Fiol (1991) emphasized the role of the identity in connecting social meanings and behaviors in an organization and advocated that the organizational identity will affect organizational members’ interpretation of meaning and decision-making behavior. Reviewing previous studies, Foreman and Whitten, (2002) found that the development of organizational identity had far surpassed the actual concept of operations. Multiple identities are defined as two or two or more identities existing in individuals or organizations (Foreman & Whetten, 2002; Rydell, McConnell, & Beilock, 2009; Thoits, 1983). The concept of multiple identities...
was developed by social identities theory, which posits that people classify themselves and others into different organizational, team groups, and demographic groups. According to social identification theory proposed by Tajel (1974), individuals' perceptions of specific social groups affect their attitudes and behaviors within and between groups. (Brewer & Gardner, 1996; Brickson, 2000; Nikomo & Cox, 1996). Therefore, this study explores the multiple identities of employees in the organization, and uses employees' organizations, departmental teams, and individuals as the prominent objects of the identities.

Studies suggest that when an employee has a high degree of identification with the organization, it will have an adverse effect on the employee’s innovation and performance. The reason is that when an employee has a high degree of recognition of the organization, they are more inclined to conform to the characteristics of the organization instead of thinking about disruptive innovations (Conroy, Henle, Shore, & Stelman, 2017). Different from this viewpoint, this research combines the theory of social identity with the future time perspective and explores the positive impact of multiple identities on innovative behavior through the future time perspective. Bandura (1986) emphasized that individual time view is close related to social cognitive theory. He believed that human behavior has a purpose and is often guided by goals. The concept of future time refers to an individual’s thoughts on the remaining time of his life, that is, either sufficient or limited perception of future time affects the individual’s goal setting and attitude (Carstensen, Isaacowitz, & Charles, 1999). In addition, it will affect the individual's degree of enthusiasm for future goals (Vázquez & Rapetti, 2006). Therefore, this study explores the mediating effect of the future time perspective on the relationships of employees who have future time perspectives and innovative behavior.

To further understand the circumstances under which multiple identities will have a negative effect on innovative behavior, this study uses multiple identities of employees through work-family conflicts to influence innovative behavior. Kahn, Wolfe, Quinn, Snoek, and Rosenthal (1964) defined occupational conflict as the conflict between roles, which comes from the confrontation between individuals in a certain aspect when facing work and family pressure. Multiple identities depend on one's own knowledge, skills, and abilities, although there are various strategies (behavior, time, and physical aspects) to try to achieve the ideal work level (family segmentation or integration) (Kreiner & Sheep, 2009). There are also coping strategies to cope with the stress associated with work and family clutter (Schnittger & Bird, 1990), since work-family conflict has an adverse effect on well-being and career success (Amstad, Meier, Fasel, Elfering, & Semmer, 2011). Thus, multiple identities will affect innovative behavior due to professional conflicts.

This study also attempts to explore whether there is a moderating mechanism of the situational aesthetic on the relationship between the future time perspective and the work-family conflict. Aesthetic is an important factor because it is the soul of innovation (Godoe, 2012). The work environment provided by each company gives people a look and a feel of its situational aesthetic. Employees will improve their learning ability through perception (Baer, Werff, Colquitt, Rodell, Zipay, & Buckley, 2018) and in turn find that aesthetic orientation is positively related to aesthetic innovations and technological innovations (Ozkaya, Hult, & Calantone, 2015).

In sum, the contributions of this study are as follows. (1) This research uses social identity theory to examine how multiple identities, via the future time perspective, can influence employees’ innovative behavior. (2) This study examines how multiple identities, through work-home conflict, influence employees to demonstrate their innovative behavior. (3) Based on the scale items of situational aesthetics used by Baer et al. (2018), this study further tests
whether situational aesthetics can have a moderating effect on the relationship between the time perspective and innovative behavior. (4) This study also examines whether the situational aesthetic has a moderating effect on the relationship between work-family conflict and innovative behavior.

**Ethics Statement:** This research aims to investigate the impact of various factors on employees' innovative behaviors. Specifically, the study focuses on innovative behaviors among Taiwanese employees. The procedure is approved and conducted in accordance with the Research Ethic Committee of <ANONYMISED> of Education and with the Declaration of Helsinki.

This research is part of a Doctoral (Ph.D.) study, and the resulting Doctoral Thesis will be published by the university; also, this research is not funded. It may also be partially or fully published in academic journals, utilized for teaching and learning purposes related to the effective implementation of strategy, and disseminated by <ANONYMISED> of Education. The researcher responsible for this study is the first writer of this paper and it is under the provision of his/her academic supervisor.

The research methodology involves interpretative critical analysis of data collected from Taiwan, with a specific focus on the innovative behaviors of employees. The study will adopt an inductive process of research, following the approach suggested by Marin and Ruiz (2007), as well as insights from Bhattacharya and Sen (2003), Hobman, Bordia, and Gallois (2003), Carlson, Kacmar, & Williams (2000), Janssen (2000), and Baer et al. (2018).

Data will be collected through primary research, utilizing a questionnaire based on the supervisor-employee matching system (where a manager is paired with four direct subordinates). To ensure confidentiality, participants will remain anonymous, and interview codes will be assigned to each set of collected data. Care will be taken to address the issue of deductive disclosure (Kaiser, 2009), including providing participants with information on the study's purpose, scope, types of questions, the use of results, method of anonymization, and the extent of their utterances in reports (Richards & Schwartz, 2002).

The presentation of quotes in the published dissertation will be carefully considered, and participants will have the opportunity to request anonymization if necessary to feel comfortable with their portrayal in the final work. All organizational identifiers will be removed from the raw data set. Additionally, there will be a 5-year embargo on the data set, after which it will be made available to other researchers through the South Wales University library.

The participants are anonymous and completely confidential, and they have consented to provide their feedback as part of the data being studied, which is not related to the company’s performance evaluation of individuals. The questionnaire consists of 2 pages that are read carefully and answered by individuals.

**Method**

**Multiple identities and innovative behavior**

In the experience of many social selves, individuals may have disharmonious splits, or may be in a state of complete harmony (James, 1890). Though there many types of relationships between multiple identities, three recur in perspective: (1) conflict or tension (2) enhancement, coordination, and complementarity, and (3) overlap or fusion (Ramarajan, 2014). First, in "conflict or tension" relationships, conflict and tension often arise when individuals experience psychological stress in different identities, experiencing "conflicting identities" and "identity interference". (Settles 2004) and Van Sell, Brief, & Schuler (1981), contend that the multiple identities of an individual may conflict with each other. Individuals experience conflict between
multiple work identities or between work and non-work identities to the extent that they fail to meet their own and others’ expectations or demands (Greenhaus & Beutell, 1985; Settles, 2004; Creed, DeJordy, & Lok, 2010; Kreiner, Hollensbe, & Sheep, 2006). The second is the relationship of "enhancement, coordination and complementarity". People will use the skills, knowledge, positive emotions and resources generated when one role intersects with another, and will benefit from multiple role identities (Rothbard & Ramarajan, 2009; Creary & Pratt, 2014; Dutton, Roberts, & Bednar, 2010; Greenhaus & Powell, 2006; Rothbard, 2001). Pratt and Foreman (2000) refer to this as "identity synergy". Caza and Wilson (2009) describe how multiple job identities enable individuals to meet multiple job demands. For example, a construction engineer can be both an engineer and a designer, giving him more leeway. The more likely they are, the less likely the people who host them are to experience identity conflict (Van Sell et al., 1981; Brook et al., 2008). The third is the "overlap or fusion" relationship, which integrates different cultural identities as overlaps of concepts, conceptualized and measured (Benet-Martinez & Haritatos, 2005; Fitzsimmons, 2013; Cheng, Hines, & Ian, 2008).

For an individual, in the same context, it is possible to have multiple role identities, which are stimulated or manifested at the same time (Ramarajan, 2014; Ramarajan, Rothbard, & Wilk, 2017). In the past, many scholars have discussed the concept of multiple identities (James, 1983; Markus & Nurius, 1986; Tofts, 1983). However, multiple identities have not been the focus of organizational research (Hogg, & Terry, 2014; Pratt & Foreman, 2000; Ramarajan, 2014). The idea of multiple identities has been widely discussed in the fields of psychology and sociology. However, there has been little research in organizational management, an applied science that combines psychology and sociology. In a complex and changeable practical organizational environment, employees will have a variety of group categories and identity cues (Ashforth & Mael, 1989). Is the individual most affected by the team? Does the organization itself have a greater impact on the individual? Or do the influences of the team and team members have a greater impact? This study considers that all three may have influence at the same time.

Kleysen and Street (2001) stated that personal innovative behavior is applicable to any level in the organization, and its main actions are to improve working relationships and increase efficiency. In addition, Kleysen and Street (2001) divided personal innovative behavior into five dimensions: exploring opportunities, generating ideas, forming investigations, supporting and applying. Therefore, innovation is seen as a multi-stage process, each of which requires different actions and individual behaviors (Schroeder, Van de Ven, Scudder, & Polley, 1989). In 1996, Amabile proposed that creativity and innovation have a mutual influence: creativity can affect innovation in the work environment while innovation can stimulate creativity. Creativity is built upon individuals. When the individual has new knowledge and ideas that are converted into substances, innovative behavior will occur. At the same time, the overall process of successfully implementing the new concept is the focus (Tsai, Chi-Tung & Kao, Chuan-Feng, 2004).

When the degree of recognition of the individuals’ team and other team members is high, their intrinsic motivation will be stimulated, leading them to be willing to invest themselves in the group (Blader & Tyler, 2009). Empirical studies have also confirmed that social identity affects the behavior of employees with the multiple identities in the group (Turner, 1975). When the advantages of employee creativity are enhanced, better competitive position and department performance will result (Very, 1993). In sum, this study posits that multiple identities are positively related to innovative behavior. Thus, we propose hypothesis 1:
Hypothesis 1: The higher the multiple identities, the more the employee will exhibit innovative behavior.

Influence of multiple identities on innovative behavior through the future time perspective

Rydell, R. J., McConnell, A. R., & Beilock, S. L. (2009). The time perspective concept was first proposed by the father of psychology, Lewin (1935). It recognizes the importance of the "future" in individual motivation and behavior. He regarded the time perspective as a guide to future goals and the ability to predict behavioral consequences. The concept of the future time perspective can generate meaningful psychological representations of future events, enabling people to take actions with features such as planning and achieving future goals (Zimbardo & Boyd, 1999). Therefore, when the individual perceives that there is plenty of time in the future and recognizes that the future is still far away or even infinite, knowledge-related goals will be given priority, and they will be more willing to work for longer goals (De Volder & Lens, 1982). The individual will value future events and feel a sense of time, while planning future goals and setting the degree of importance (Husman & Lens, 1999). At this time, the individual will face the sense of time in the "future" and exhibits behaviors based on the future thinking mode. They work hard to plan and achieve future goals. Through pre-thinking, planning and acting, the individual purposefully affects self-achievement, career success, interpersonal relationships, and organizational decision-making (Belschak & Den Hartog, 2010).

Albert and Whetten (1985) noted that identity provides a strong sense of self-worth. It is both difficult to withdraw from yet, has the opportunity to overflow. We believe that the identity itself contain the "time change" concept of the identity breakthrough, the identity retention, and the identity projection, mitigating personal identity threats (Dahm, Kim, & Glomb, 2019). Therefore, by projecting personal identity into the future, the individual believes that they can successfully developed their ideal career or family identity in the past, or has the ability to believe in themselves in the future. Thus, the individual can change over time to achieve their ideal self-concept (Dahm, Kim, & Glomb, 2019). In sum, the "future time perspective" lies in our ability to predict the consequences of specific behaviors. Such predictions will guide us in implementing current behaviors and in deciding the degree to which we invest our efforts. Therefore, for the role of multiple identities in the relationship between the future time perspective and innovative behavior, we propose hypothesis 2:

Hypothesis 2: The future time perspective mediates the relationship between multiple identities and innovative behavior.

The impact of multiple identities on innovative behavior through the work-family conflict

Kahn et al. (1964) defined two types of work-family conflict: the conflict that affects the needs of the family due to work requirements is called work-interfering, while the conflict that impacts the work because of family-related needs is called family-interfering. As for the feeling of role incompatibility, Stoeva, Chiu, and Greenhaus (2002) explained that "work-family conflict" is the pressure generated by the relationship between roles, meaning that when one role hinders the effective participation of another, the feeling of incompatibility between roles occurs. Facing the challenge of work-family conflict, the individual will experience the psychological pressure of different identities, that is, a conflicting or tense relationship (Van Sell, Brief, & Schuler, 1981). Especially when the individual cannot meet the expectations of themselves and others, work-family conflict will occur. Work-family conflict is a concept of mutual restraints. Work and family are like a tug-of-war between two ends. When personal
work goals and responsibilities must be performed, family obligations that need to be fulfilled will interfere. These unfulfilled family obligations will in turn interfere with the individual working situations. In the same way, when an individual’s family problems and responsibilities interfere with their work tasks, these unfinished work tasks will interfere with their family life (Frone, Russell, & Cooper, 1992) and adversely affect the individual’s work tasks on increased team and organizational requirements, resulting in a negative impact on employees' work attitudes and behaviors. Further, as conflicts increase, the employee’s job satisfaction and organizational commitment decrease, resulting in an increase in turnover intention (Eby, Casper, Lockwood, Bordeaux, & Brinley, 2005).

Therefore, when the work pressure is large enough to affect family roles and cause work-home conflict, work-family conflict may in turn impact work activities, leading to more work conflicts, creating a vicious circle (Boyar, Scott, Maertz, Jr, Pearson, & Keough, 2003). This conflict will affect an individual's innovative behavior at work, because individuals cannot draw on enhanced, coordinated, and complementary relationships when facing role and identity conflicts. Consequently, when individual roles in conflict, the individual will not be able to benefit from identities of the organization and the team (Creary & Pratt, 2014; Dutton, Roberts, & Bednar, 2010; Greenhaus & Powell, 2006; Rothbard, 2001; Rothbard & Ramarajan, 2009). Therefore, this research contends that work-family conflict mediates the relationship between multiple identities and innovative behavior. Thus, we establish hypothesis 3:

Hypothesis 3. Multiple identities decrease innovative behavior through the increased work-family conflict.

The moderating roles of the situational aesthetic on the relationship between the future time perspective and innovative behavior as well as the relationship between the work-family conflict and innovative behavior

The term "aesthetic" comes from the Greek word “aisthetikos,” which originally meant "the ability to observe and perceive through the senses." According to Jalongo and Stamp (1997), an aesthetic is the individual's personal feelings, via various sensory perception abilities, toward the information and the stimuli of the surrounding environment, which in turn have a connection with the individual's own thinking. These simultaneously trigger deep emotions, resulting in feelings of pleasure, joy, and happiness. Therefore, the key to gaining a sense of aesthetic lies in the interaction between the subject and the object of aesthetic. The interaction between an individual and the surrounding environment enables the individual to look over the beautiful appearance and feel the beautiful sensory experience, so as to achieve the pleasing and pleasant feeling of aesthetic (Moon, et.al, 2013). At the same time, an aesthetic is a subjective feeling, which relies on the aesthetic experience cultivated in life. Everyone's growth environment and life experience are different, resulting in different aesthetics. Therefore, the judgment and the criteria for the aesthetic vary. The aesthetic is thus determined by the common measurement mechanism of mankind.

The moderating role of the situational aesthetic on the relationship between future time perspective and innovative behavior

Enterprises constantly pursue innovation and performance growth. Many enterprises create suitable, comfortable and beautiful working environments. Therefore, the physical environment of the enterprise, especially the display and the environment design of the space, can stimulate the behaviors of employees in the workplace (McGuire & McLaren, 2009; Hyman, 2014). The physical environment in the work environment is extremely important for the satisfaction of employees who provide mental health counseling services (Rogers, Edwards, & Perera, 2018). Therefore, the individual's work environment affects their own behavior and
that of others, and the process of the innovation is generated by the interaction between the individual and the work environment (Simonton, 1995). Baer, Werff, Colquitt, Zipay, and Buckley (2018) stated that the situational aesthetic affects learning behaviors through employees’ trust and recognition of the company. We have also observed international companies emphasizing environmental changes and situational aesthetics in order to increase employee output and encourage employees’ innovative behavior. Apple has created a beautiful environment for employees, while Facebook has given attention to the creation of the environment and the arrangement of the spatial movement. These famous companies provide beautiful and comfortable environments, which will stimulate employees’ innovative behavior. Given the foregoing discussion, we propose hypothesis 4:

Hypothesis 4: The situational aesthetic has a moderating effect on the relationship between the future time perspective and innovative behavior. When the situational aesthetic is high, the more attention the employee pays to the future time perspective, and the more innovative behavior the employee will exhibit; when the situational aesthetic is low, the future time perspective and innovative behavior are less relevant.

The moderating role of the situational aesthetic on the relationship between the work-family conflict and innovative behavior

The aesthetic is a response to the appearance and feeling of people, spaces, and objects. It is also an art of communication that does not require a language (Postrel, 2004). Turley and Milliman (2000) noted that the design and the configuration of internal and external environments, product display and human factors are the main influencing factors of the environmental atmosphere. Johnson (2001) found that with the support of the work environment, employees can reduce the tension between work and family. The working environment is the workplace which employees are most closely related. Therefore, the situational experience of the working environment can affect the individual’s sensory perception and cognition, and this psychological perception state can influence the employees’ emotions and behaviors (James & Jones, 1974; Yoshida et al., 2016). Eby et al. (2005) argued that organizations can create a cultural environment for family supports, change the aesthetic of the work environment and the design of the space decoration in order to change the dual pressures of balancing work and family. Therefore, this study proposes that the situational aesthetic moderates the influence of the work-family conflict on innovative behavior. Based on the above discussion, we propose hypothesis 5:

Hypothesis 5: The situational aesthetic has a moderating effect on the relationship between work-family conflict and innovative behavior. When the situational aesthetic is high, the higher the employee’s work-family conflict, more innovative behavior the employee will exhibit, when the situational aesthetic is low, the higher the employee’s work-family conflict, the less the employee will engage in innovative behavior.
The questionnaire in this research is based on the supervisor-employee (a manager paired with four direct subordinates) matching questionnaire. A total of 260 paired questionnaires were issued. After the preliminary data collation, 254 “a manager paired with four subordinates” sets with 1016 questionnaires were collected, one “a manager paired with three subordinates” set with three questionnaires were also collected, resulting in valid samples of 255 managers and a total of 1019 effective matched questionnaires. The rate of valid responses was 98%. Among the employees, there were more women than men, with women accounting for 61.7% and men accounting for 38.3%. Unmarried respondents accounted for 46.2%, while married accounted for 54.7%. At 23.7%, two children was the most common number of children. The largest proportion were 26 to 35 years old (37.4%), followed by 36 to 45 years old (34.3%).

Of the managers, males accounted for 52.2%, 80.4% were married, and 46.3% had two children. 47% of respondents were over 46. Respondents with college degrees accounted for 42.4%. 53.3% of respondents were supervisors, and the remainder were middle and high level executives. Managers with over ten working years in their current company accounted for 37.3%, followed by over 20 years (35.2%). The largest group of respondents by sector were in the military, public education, and police sectors, (25.9%), followed by the traditional manufacturing sector (16.9%), followed by culture and education (12.9%), then technology manufacturing (10.6%). Last, 22.7% of respondents were in business departments, followed by police departments (21.2%), teaching departments (8.6%), and human resource departments (8.2%).

Research Instruments

This study’s "multiple identities scale: organizational identity scale" is adapted from the identity attractiveness scale used in the study of Marin and Ruiz (2007). According to the suggestion of Bhattacharya and Sen (2003), this scale is divided into four dimensions: identified attractiveness, identify uniqueness, identify similarity, and identified sense of honor, a total of 4 items. The "multiple identities scale: team identity scale" is divided into four dimensions: identified attractiveness, identify uniqueness, identify similarity, and identified sense of honor, a total of 4 items. The "multiple identities scale: individual identity scale" adopts the perceived dissimilarity scale compiled by Hobman, Bordia, and Gallois (2003) to measure the perception of employees and the degree of common attributes with colleagues. This scale is divided into three dimensions: information, visibility and sense of worth. The scale has a total of six items (Cronbach's α .86). The "time perspective scale" contains five major constructs, namely,
past negative, past positive, present fatalistic, present hedonic, and future-focus, for a total of 56 questions. This study only uses the future time perspective scale, which has 13 questions in total (Cronbach's $\alpha_.80$). The “work-family conflict scale” of this study is adopted from the “work-family conflict” scale compiled by Carlson, Kacmar, & Williams (2000), focusing on “work family conflict” and three main connotations: time-based, tension-based, and behavior based. There are a total of nine questions (Cronbach's $\alpha_.91$). We uses Janssen’s (2000) scale for the "innovative behavior scale," which was modified from the Scott and Bruce (1994) scale. There are three main aspects: the generation of new ideas, promotion of new ideas, and the implementation of new ideas. The scale has a total of nine questions (Cronbach's $\alpha_.77$). The "situational aesthetics scale" is from Baer et al. (2018), which measures the respondent’s aesthetic perception of the surrounding environment, There are a total of five questions (Cronbach's $\alpha_.96$).

**Research Results and Discussion**

As shown in Table 1, the correlation coefficient between multiple identities and innovative behavior is $.10$ (p < .01), indicating that multiple identities are positively correlated with innovative behavior, which can preliminarily confirm the main effects of multiple identities and innovative behavior. The correlation coefficients between multiple identities, the future time perspective, and innovative behavior are $.31$ (p < .01) and $.13$ (p < .01), respectively, meaning that multiple identities are related to the future time perspective and innovative behavior. The coefficients between multiple identities, the work home conflict, and innovative behavior are -.19 (p < .01) and -.09 (p < .01), respectively, which shows that the multiple identities are related to the work home conflict and the innovative behavior. In addition, correlation coefficients between the situational aesthetic, the work-family conflict, and innovative behavior are -.10 (p < .01) and .11 (p < .01), respectively. The relationships among the situational aesthetic, work-family conflict and innovative behavior are significant. The correlation coefficients, show that the relationships of the variables are in line with the expectations of this research.

**Table 1 Descriptive statistics and correlation coefficient matrix**

<table>
<thead>
<tr>
<th></th>
<th>Average</th>
<th>SD</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>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Age</td>
<td>37.72</td>
<td>9.43</td>
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<tr>
<td>2. EDU</td>
<td>15.98</td>
<td>1.47</td>
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<td>3. POS</td>
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<td>.13**</td>
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<tr>
<td>4. COM</td>
<td>7.68</td>
<td>7.11</td>
<td>.62**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.14**</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>5. Multiple Identities</td>
<td>4.63</td>
<td>.76</td>
<td>.13**</td>
<td></td>
<td></td>
<td></td>
<td>.09**</td>
<td>.02</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Future Time Perspective</td>
<td>3.98</td>
<td>.39</td>
<td>.14**</td>
<td>.01</td>
<td></td>
<td>.06</td>
<td>.08*</td>
<td>.31**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Work Family Conflict</td>
<td>2.50</td>
<td>.74</td>
<td>.30</td>
<td>-.03</td>
<td>.06</td>
<td>.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Situational Aesthetic</td>
<td>3.33</td>
<td>.86</td>
<td>.03</td>
<td>-.05</td>
<td>.11**</td>
<td></td>
<td>.52**</td>
<td>.19**</td>
<td>-.07*</td>
<td>.07*</td>
<td>.10*</td>
</tr>
</tbody>
</table>

* * *
To ensure that the measurement model can appropriately represent the relevant constructs of this research, AMOS software is used for the confirmatory factor analysis. The framework includes five potential variables: multiple identities, the future time perspectives, the work-family conflict, innovative behavior, and the situational aesthetic. There are 14, 13, 9, 9, and 5 observed variables, respectively. After testing with the measurement model, the results in Table 2 show that the fit testing of the five-factor model has a good fit ($\chi^2$/df=2.61 (2982.359/1139), CFI=.94, GFI=.89, IFI=.94, RMSEA=.04). The five-factor theoretical model provides the best fit, showing a good fit between variables.

Table 2 Summary table of fit detections and fit indices of measurement model 1 analyses

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$/df</th>
<th>CFI</th>
<th>GFI</th>
<th>IFI</th>
<th>RMSEA</th>
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<tr>
<td>Five-factor model</td>
<td>2.61(2982.359/1139)</td>
<td>.94</td>
<td>.89</td>
<td>.94</td>
<td>.04</td>
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<tr>
<td>Four-factor model</td>
<td>8.57(10029.202/1169)</td>
<td>.74</td>
<td>.61</td>
<td>.74</td>
<td>.08</td>
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<td>Three-factor model</td>
<td>12.53(14695.721/1172)</td>
<td>.61</td>
<td>.52</td>
<td>.61</td>
<td>.10</td>
</tr>
<tr>
<td>Two-factor model</td>
<td>17(19979.003/1174)</td>
<td>.45</td>
<td>.41</td>
<td>.45</td>
<td>.12</td>
</tr>
<tr>
<td>One-factor model</td>
<td>22.5(26528.539/1175)</td>
<td>.50</td>
<td>.44</td>
<td>.50</td>
<td>.14</td>
</tr>
</tbody>
</table>

As shown in Table 3, the relationship between multiple identities and innovative behavior is examined by the regression analysis. The result shows that there is a significant positive correlation between multiple identities and innovative behavior ($\beta = .09$, $p < .01$). Thus the higher multiple identities, the higher innovative behavior will be. Conversely, the lower multiple identities of the employee, the lower their innovative behavior will be, supporting hypothesis 1: the higher multiple identities, the higher the innovative behavior of the employee. After further adding one of the two paths of the future time perspective, the relationship between multiple identities and the future time perspective is significant $\beta = .29$ ($p < .001$), and the multiple identities have a significant change in the $R^2$ interpretation of the future time perspective, which means multiple identities can effectively predict the future time perspective. The relationship between the future time perspective and innovative behavior is significant $\beta = .12$ ($p < .001$). Finally, when the future time perspective is added, the influence of multiple identities on innovative behavior decreases from .09 to .06, and there is no statistically significant explanatory power between the two, meaning the future time perspective mediates the relationship between multiple identities and innovative behavior. In other words, multiple identities of an employee can influence innovative behavior through the future time perspective. Therefore, the second hypothesis is supported: the future time perspective mediates the relationship between multiple identities and innovative behavior.
Table 3 The mediating effect of the future time perspective on the relationship between the multiple identities and innovative behavior (N=1019)

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Future Time Perspective</th>
<th>Innovative behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>Model 1</td>
<td>Model 2</td>
</tr>
<tr>
<td>Marital Status</td>
<td>.05</td>
<td>.04</td>
</tr>
<tr>
<td>Children</td>
<td>.00</td>
<td>.01</td>
</tr>
<tr>
<td>Age</td>
<td>.00</td>
<td>.02</td>
</tr>
<tr>
<td>Educational level</td>
<td>.06</td>
<td>.07</td>
</tr>
<tr>
<td>Official rank</td>
<td>.04</td>
<td>.02</td>
</tr>
<tr>
<td>Total working year</td>
<td>.07</td>
<td>.06</td>
</tr>
<tr>
<td>Working year of this company</td>
<td>-.02</td>
<td>.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Multiple Identities</th>
<th>.29***</th>
<th>.09**</th>
<th>.06</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mediating Variable</td>
<td>Future Time Perspective</td>
<td>.12***</td>
<td>.10**</td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>.03***</td>
<td>.11***</td>
<td>.28***</td>
<td>.36***</td>
</tr>
<tr>
<td>ΔR²</td>
<td>.03***</td>
<td>.08***</td>
<td>.28**</td>
<td>.008**</td>
</tr>
<tr>
<td>F value</td>
<td>4.03***</td>
<td>4.16***</td>
<td>4.8**</td>
<td>4.75***</td>
</tr>
</tbody>
</table>

Note: 1.*p < .08, *p < .05, **p < .01, ***p < .001.

After adding another dual-path to the work-family conflict, as shown in Table 4, the relationship between multiple identities and the work-family conflict is significant, β = .20 (p < .001), and the R² interpretation of multiple identities to the work-family conflict significantly changes, indicating that multiple identities can effectively predict the work-family conflict. The relationship between the work-family conflict and innovative behavior is significant β = -.08 (p < .01). Finally, when the work-family conflict is added, the influence of multiple identities on innovative behavior decreases from .09 to .07, and there is no statistically significant explanatory power between the two. The work home conflict has a complete mediating effect on the relationship between innovative behavior and multiple identities. Thus, multiple identities of an employee can affect their innovative behavior through the work-family conflict. Therefore, hypothesis 3 is supported.

Table 4 The mediating effect of the work family conflict on the relationship between the multiple identities and the innovative behavior (N=1019)

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Work-Family conflict</th>
<th>Innovative behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>Model 1</td>
<td>Model 2</td>
</tr>
<tr>
<td>Marital Status</td>
<td>.08</td>
<td>.07</td>
</tr>
<tr>
<td>Children</td>
<td>-.08</td>
<td>-.08*</td>
</tr>
<tr>
<td>Age</td>
<td>-.03</td>
<td>-.01</td>
</tr>
<tr>
<td>Educational level</td>
<td>.01</td>
<td>.03</td>
</tr>
<tr>
<td>Official rank</td>
<td>-.04</td>
<td>-.05</td>
</tr>
<tr>
<td>Total working year</td>
<td>.05</td>
<td>.06*</td>
</tr>
</tbody>
</table>

Note: 1.*p < .08, *p < .05, **p < .01, ***p < .001.
At the same time, we used the Sobel test to verify the mediating effect of the future time perspective on the relationship between multiple identities and innovative behavior and the mediating effect of work-family conflict on the relationship between multiple identities and innovative behavior. Following the suggestion of Preacher and Hayes (2004), we adopted the non-standardized path coefficient and standard error methods to measure. The P value must be less than .05 and the absolute Z value must be greater than 1.96 to indicate that there is a significant mediating effect. For the mediating effect of the future time perspective on the relationship between multiple identities and innovative behavior, when the Z value is 2.95 (p value < .05), greater than the standard 1.96, the mediating effect of the future time perspective on the relationship between multiple identities and innovative behavior is significant. For the mediating effect of the work-family conflict on the relationship between multiple identities and innovative behavior, when the Z value is 2.11 (p value < .05), greater than the standard 1.96, the mediating effect of the work-family conflict on the relationship between multiple identities and innovative behavior is significant.

In addition, structural equation model was used to verify the mediating effects of the future time perspective and the work-family conflict. The results showed that the direct effect model of this study reaches an acceptable level, indicating that variables have good fits to each other. Finally, we used Bootstrap to repeatedly sample 5,000 times to verify the mediating effect. This study showed that the indirect effect (.02) with the confidence intervals (.02 - .09), not including 0, reaches significant (p < .05), indicating that the future time perspective and work-family conflict have mediating effects. The mediating effect of work-family conflict is a negative. The direct effect (.06) with the confidence intervals (.02-.14), including 0 of multiple identities on innovative behavior is not significant. The total effect (.11) with the confidence intervals (.04-.18), not including 0, is significant, indicating that the future time perspective and the work-family conflict have complete mediating effects on the relationship between multiple identities and innovative behavior.

This research further conducted structural equation modeling (SEM) using the Amos 24 version to re-examine the mediating effect of the future time perspective on the relationship between the work-family conflict and innovative behavior and review various indicators of the measurement model. The research results are shown in Figure 2.
We conducted the analysis of the moderating effect using hierarchical multiple regression analysis and orderly controlled variables, pre-variables, moderating variables, and interaction items in order to check whether moderating effects occurred. Table 4 shows that the future time perspective and innovative behavior are significantly correlate ($\beta = .11$) (P value < .01). After adding the interaction items of the future time perspective and the situational aesthetic, the change in $R^2$ is .00 (P value > .08), which does not reach significance. Following the method of Aiken and West (1991), we drew the interaction diagram as shown in Figure 3. The results of the simple slope test show that when the employees have a higher situational aesthetic, the relationship between his future time perspective and innovative behavior is significant. When the employee has a lower situational aesthetic, the relationship between their future time perspective and innovative behavior is also significant. These results are different from the originally hypothesized expected moderating effects. These findings shows that when the situational aesthetic is high, the more the employee pays attention to the future time perspective, the more they will demonstrates innovative behavior. When the situational aesthetic is low, the relationship between the future time perspective and innovative behavior still exists. In sum, since these research results only support half of the moderating effect hypothesis, hypothesis H4 is not supported.
There is a significant correlation between work-family conflict and innovative behavior, $\beta=-.08$ (P value < .05). After adding the interaction items of work-family conflict and situational aesthetic, the change in $R^2$ is .01 (P value < .05), reaching significance. We drew the interaction diagram according to the method of Aiken and West (1991), as shown figure 4. The results of the simple slope test show that when the employee is in a higher situational aesthetic, the relationship between their work-family conflict and innovative behavior is significant. When an employee is in a lower situational aesthetic, the relationship between their work-family conflict and innovative behavior will not be relevant. These results are the same as the expected originally hypothesized moderating effect. These show that when the situational aesthetic is high, the employees will exhibit innovative behavior when facing work-family conflict. When the situational aesthetic is low, there is no correlation between the future time perspective and innovative behavior. In sum, the research results indicate that the moderating effects are as expected, supporting hypothesis H5.

Figure 4. The moderating effects of the situational aesthetic on the relationship between the work family conflict and the innovative behavior
Discussion and Suggestions

Social identity theory, posits that social identity affects the behavior of the employee in the group (Turner, 1975). Therefore, when an employee recognizes that the advantages of creativity are enhanced, they will create a better competitive position and improved performance for their department (Very, 1993). Driven by high multiple identities, employees will actively exhibit innovative behaviors.

There are few empirical studies of multiple identities in organizational researches (Ramarajan, 2014). Only a handful of publications and related scholarly articles may be found. Therefore, a theoretical contribution of this study, exploring of multiple identities with multiple structures, the empirical evidence it provides, and the verification of the theory.

In this study, the relationship between multiple identities and innovative behavior is explored using the future time perspective. When individuals can give meaningful psychological representations of future events, they can take further actions and plans to achieve goals (Zimbardo & Boyd, 1999). At the same time, the future time perspective will also affect the motivation and the development of work growth (Kooij, Bal, & Kanfer, 2014). This research confirms that the future time perspective of the employee mediates the relationship between multiple identities and innovative behavior.

For employees, work-family conflict is an ongoing dilemma between work and family, which will cause conflicts of time, pressure and behavior (Greenhaus & Beutell, 1985). Using the work-family conflict as the mediator, this study explores the positive relationship between multiple identities and innovative behavior. When work-family conflict is treated as a mediating variable, the rise of the work family conflict indeed weakens the performance of the employee’s innovative behavior. This research confirms that the multiple identities, via the increase of the work home conflict, decreases the performance of the employee’s innovative behavior.

The situational aesthetic of the work environment affects personal sensory perception and cognition, and then impacts personal emotions and behaviors (James & Jones, 1974; Yoshide et al., 2016). The results show that the situational aesthetic does not moderate the relationship between the future time perspective and the innovative behavior. This may be due to the high goal direction and the plan driving force of the employee's future time perspective, and the individual will not adjust his/her behavior to fill future goals because of any environmental changes. In the study of the relationship between the work family conflict and the innovative behavior, the moderating effect of situational aesthetic is very significant. The organization can create a cultural environment that supports the family, change the situational aesthetic of the work environment and the design of space, so as to balance the employee from the dual pressure of work and family (Eby et al., 2005).

Practical Implications

The results of this study show how organizational managers can improve and enhance employee engagement in innovative behaviors. First, when recruiting employees, companies can consider the aspect of multiple identities and at the same time use their training to stimulate employees' positive multiple identities and sense of the identity, to help them develop innovative behaviors. Employees can use newcomer training courses and regular organizational cultural activities, to build up their understanding and experiences of the organization, their teams and their colleagues, connecting with the core values, the philosophy, and the future vision of the company.

Second, the survival of an enterprise lies in how to enable employees to perform their work abilities independently without interference. This research demonstrates that the future
time perspective of the employee has a high correlation with the social identity theory, and the individual’s behavior is purposeful and can put forward a future-oriented self-regulation perspective to plan, delay enjoyment and personal traits as well as abilities (Bandura, 1986). Therefore, an employee with multiple identities and the future time perspective can further enhance their ability to demonstrate innovative working skills. Conversely, work-family conflict represents an inability to effectively regulate the pressure and conflicts from work and family. Pressure occurs because of work needs, causing role conflicts that hinder family responsibilities (Netmeyer, Boles, & McMurrian, 1997).

Third, companies create the situational aesthetic of the working environment to stimulate employees' workplace behaviors through space design and planning (McGuire & McLaren, 2009; HymN, 2014). This study used situational aesthetic as a moderator, and found that the situational aesthetic has a strong moderating influence on work-family conflict. Through the organization's spatial aesthetic and situational aesthetic planning, employees can transform emotions and relieve stress. This can reshape the work-family conflict.

Finally, the company should give attention to the situational aesthetic, creating an organizational environment with a positive aesthetic atmosphere for employees. Companies that fairly value employees will gain their trust and recognition of the company, and will be less likely to experience negative conflicts that affect their work performance.

**Research Limitations and Suggestions for Future Research**

Individual multiple identities are driven by relationships between the organization, the team, and the departmental colleagues. These relationship require further exploration. In addition, the relationship of multiple identities within the individual related self-worth and self-identity, People constantly update their self-definitions as time changes, reshaping the individual's identity relationships (Albert & Whetten, 1985).

This study suggests that in the future, we can measure the individual changes and emotional fluctuations of identities across different situational aesthetics. In addition, scholars should explore the different impacts and effects of different industry characteristics for aesthetic recognition and situational needs.

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