

Employee Creativity and Innovation in Organizations: Review, Integration, and Future Directions for Hospitality Research

Abstract

Purpose – The purpose of this paper is twofold. First, the study considers research on creativity and innovation in the field of general management and hospitality. Second, the paper develops a theoretical model to integrate individual- and group-level creativity particularly for service organizations.

Design/methodology/approach – This paper provides a comprehensive, albeit non-inclusive, review of research on creativity and innovation in organizations. The review reveals that hospitality research on creativity and innovation has not matched the new advances in management research, particularly the multilevel nature of creativity and the outcomes of creativity. Thus, to advance research in hospitality, this paper proposes a multilevel model of creativity based on a strategic contingency power theory. This model examines how individual- and group-level uncertainties hinder creativity. Moreover, the model also considers several uncertainty coping strategies and examines individual- and group-level outcomes of creativity.

Findings – The proposed theoretical model integrates individual- and group-level uncertainty determinants of creativity and yields a multilevel approach to creativity. Several testable hypotheses are proposed.

Research/Practical implications – This paper highlights the strategic contingency power approach between individual- and group-level uncertainties in creativity. Uncertainty coping practices that alleviate the negative effects of uncertainties on creativity will be useful to managers and service organizations.

Originality/value – The proposed model provides plausible guidelines that advance creativity research in hospitality management.

Paper type: Conceptual paper

Key words: employee creativity, innovation, uncertainty coping strategy, outcome interdependence, strategic contingency power theory, service

Introduction

Employee creativity is considered one of the prerequisites of firm innovation (Hon, 2012; Scott and Bruce, 1994). Although often costly and risky, innovation has been found to enhance competitive advantages and firm performance in business and hospitality sectors (Hon, 2013; Hon and Lu, 2015). Janssen, 2003). Amabile (1988) defined individual creativity as the creation of a valuable and useful product, service, idea, procedure, or process by individuals working in a social system. On the other hand, the successful implementation of an individual's novel idea in an organization is considered organizational innovation.

Individual creativity in the workplace occurs when individuals work separately or together in groups on job tasks. It is well documented that individuals are more creative when they work together as a team than individually (Anderson *et al.*, 2014; De Dreu and West, 2001; Hon and Chan, 2013). This trend posed an important challenge for creativity researchers and managers (Chen and Kanfer, 2006) because team members often generate various issues of interpersonal and task conflicts that might hinder creativity (Hon, 2012; Hon and Chan, 2013; Hülshager and Anderson, 2009). Accordingly, organizational learning and leadership research has devoted considerable attention to creativity and innovation models (Crossan and Apaydin, 2010; Hon and Lu, 2015; Shalley and Gilson, 2004), as well as to various related factors, such as personality (George and Zhou, 2001), job tasks, group and organizational characteristics (Kim, Hon, and Lee, 2010; Shalley *et al.*, 2009), and their interactions that can facilitate or hinder individual and team creativity.

Creativity research tends to focus either (1) on individual creativity while ignoring the contextual influence of the group or (2) on group creativity while ignoring individual factors within the group. From a theoretical viewpoint, relatively little is known on the interrelationships among individuals, innovative mechanisms, and consequences of team-level innovation. For example, creativity requires individuals to contribute their

competencies, skills, ability, and willingness to work cohesively (Shalley and Gilson, 2004; Shalley *et al.*, 2009; Zhang and Bartol, 2010). However, knowledge on the specific individual- and group-level creativity processes affected by these factors remains ambiguous. From a practical viewpoint, understanding when and how individual and group creativity functions are important for managing employee creativity and firm innovation. The primary purpose of this paper is to address this gap in previous studies on creativity in hospitality settings. A strategic contingency power theory of creativity that identifies individual- and group-level uncertainty as a critical link between individual and group creativity is conceptualized, and the implications of a multilevel system approach on outcomes of creativity are considered.

This paper proposes a model that contributes to the development of a multilevel conceptualization of organizational creativity in three aspects. First, studies indicate that people tend to be particularly sensitive to the uncertainties, apparent riskiness, and potential for failure that accompany creative efforts, which stymies creativity and innovation (Hon *et al.*, 2014; Zhou and George, 2001). Hence, identifying the specific uncertainties on creativity that employees encounter is important because it can enable organizations to establish coping strategies to encourage employee creativity and team innovation.

Second, given that organizations consider creativity to be a key factor for survival and long-term success, the outcomes of individual and group creativity should also be examined. Most studies examined creativity as the ultimate dependent variable and only a small number of studies explored the outcomes of creativity (Anderson *et al.*, 2014; Janssen *et al.*, 2004; Kim, Hon, and Crant, 2009). Verifying expected outcomes from creativity will enable firms to deploy better their investments in employee creativity and team innovation.

Finally, recent advances in multilevel research in hospitality and general business (Cappelli and Sherer, 1991; House *et al.*, 1995; Wong, 2015) have suggested the necessity of more studies on antecedents and outcomes of creativity at both the individual and group

levels. Uncertainty conditions may hinder individual and group creativity, and considering creativity at multiple levels would help explain the differences in individual- and group-level outcomes. Multilevel approaches incorporate the interaction effects of individual, group, and organizational factors and advance understanding of the complex social dynamics of service industries to explain creativity in organizations better.

A Review of Management Literature on Creativity and Innovation

Management literature has often considered creativity to be the first step for innovation (Scott and Bruce, 1994; Shalley and Gilson, 2004). However, Anderson *et al.* (2014) recently advocated an integrated definition of innovation and creativity by considering creativity and innovation as two continuous stages of the process of introducing new and improved ways of doing things at work. Specifically, they argued that creativity and innovation are related constructs (p. 3). Thus, creativity and innovation should not be separated, but rather combined to unveil an organizational phenomenon of immense innovativeness.

Research on creativity and innovation in business management is growing (Anderson *et al.*, 2014). No fewer than 14 reviews in major management journals can be found at the individual (Shalley and Gilson, 2004; Shalley *et al.*, 2004), group (Hülshager *et al.*, 2009; Sivasubramaniam *et al.*, 2012; West, 2002), organizational (Camison-Zomoza *et al.*, 2004; Crossan and Apaydin, 2010; Damanpour, 1991; 1992; 2010; Damanpour and Aravind, 2012; Wolfe, 1994), and mixed levels (Anderson *et al.*, 2004, 2014; Rosing *et al.*, 2011). These reviews suggested that most innovation studies in management literature are concerned with either the understanding or prediction of creativity and innovation.

Studies on innovation attempted to understand and define innovation to establish a boundary for the scope of study. Researchers (e.g., Camison-Zomoza *et al.*, 2004; Gopalakrishnan and Damanpour, 1997) reviewed innovation at different levels (industry,

organizational, unit), stages (generation, adoption), and types (technical–administrative, product–process, radical–incremental). Wolfe (1994) identified three research streams that investigate innovation from different angles. The first stream focuses on the diffusion of innovation, the second addresses the determinants of innovation, and the third examines the process of innovation within organizations. Crossan and Apaydin (2010) provided a parsimonious two-group categorization of the dimensions of innovation found in previous research, namely, those that study innovation as a process and those that study innovation as an outcome. Creativity research also distinguished between process and outcome (Shalley *et al.*, 2004, p. 951).

Another concern in creativity and innovation research is identifying the key drivers of innovation. The abundance of research in this area resulted in several meta-analyses and studies on the relative effects of predictors and moderators of innovation (e.g., Damanpour, 1991, 1992, 2010; Hulsheger *et al.*, 2009; Rosing *et al.*, 2011; Sivasubramaniam *et al.*, 2012). For example, with the aim of providing a conceptual mapping of the various predictors identified in individual studies, Crossan and Apaydin (2010) proposed three meta-determinants of innovation, namely, leadership, managerial levers, and business processes. Group-level research attempted to understand the determinants of innovation using an input-process-output model and unveiled crucial antecedents of team innovation such as team diversity, leadership, communication, and goal clarity (Hulsheger *et al.*, 2009; Sivasubramaniam *et al.*, 2012). Individual-level research emphasized the person-context interactions in the study of how personal characteristics (such as personalities and cognitive styles) and context characteristics (such as job complexity, work setting, relationships at work, and leadership) interact to affect individual creativity and innovation (Hon and Lu, 2015; Shalley *et al.*, 2004).

Both Janssen *et al.* (2004) and Anderson *et al.* (2014) noted that a limited number of studies empirically verify the supposedly positive effects of innovation and creativity on

business profit and competitive advantages. Anderson *et al.* (2014) suggested the existence of an innovation maximization fallacy that innovation or factors leading to innovation should be maximized under any situation. This claim, however, may not be true as innovations are risky and costly.

In summary, the reviews of creativity and innovation research acknowledged the fragmented theoretical approaches and conflicting empirical findings in the current state of science (Crossan and Apaydin, 2010; Shalley *et al.*, 2004; Wolfe, 1994). These reviews also pointed out that most of studies examined innovation at a single level of analysis, with lesser multilevel studies than single-level studies (Anderson *et al.*, 2014) in service and hospitality sectors. Crossan and Apaydin (2010) were unable to find a theory of innovation that could operate across levels in their review (p. 1177). Considering the complex and diffuse nature of creativity and innovation that tend to travel across levels within an organization, determining a multilevel approach toward individual creativity and group/firm innovation is vital.

A Review of Hospitality Literature on Creativity and Innovation

The service and hospitality sectors (e.g., hotel, tourism, and airlines) have also focused on innovation because firms in these industries are currently immersed in a highly competitive and changing environment that requires a creative and innovative workforce to provide high-quality service (Hon, 2012, 2013; Hon *et al.*, 2013; Hyun and Han, 2012; Stierand and Dörfler, 2012). For example, firms in the hotel industry rely on innovative services to fill empty hotel rooms during low season and to maintain a good relationship with customers. In the tourism industry, the Disney Corporation needs to be innovative to create different movie- and media-synergized theme parks to attract local and international tourists. In the airline industry, Air China recently developed a new Introductory Fare Program to attract more tourists from mainland China and opened more routes for long-haul

leisure travelers. Despite the importance of innovation in the hospitality field, systematic analyses on creativity and innovation and empirical tests of innovation are scarce (Brooker *et al.*, 2012; Enz, 2012; Hjalager, 2010).

Hjalager (2010) suggested that hospitality analysts are slow to transfer innovation theories, concepts, and methodologies already understood and applied in other sectors for several decades. Recently, an increasing number of hospitality researchers have begun to focus on creativity/innovation research and expand the methodological scope of multilevel research (Hon and Chan, 2013; Hon *et al.*, 2013). For example, adopting the intrinsic motivation principle, Hon (2012) found that a sense of autonomous motivation among employees played a significant role in predicting creativity, but a controlling or coercive management style appeared to be antithetical to creativity. Wong (2015) also supported the argument that a new research avenue for multilevel methods could represent a leap forward in the promotion of rigorous hospitality research. These methods could also bridge the gap between research and practice. These innovative studies represent a meaningful and valuable means of understanding the dynamic environment of the hospitality sector. Theoretical and methodological insights will help decision makers promote innovation in their organizations.

However, as indicated by the present review of previous studies on creativity and innovation, studies on innovation in hospitality rely mostly on explorative and qualitative cases or student samples (Horng and Lee, 2009; Johnson, 2009; Khan and Khan, 2009). The phenomenon is also investigated and explained in less systematic and fragmented approaches. In hospitality, the success rate of innovation is relatively low (Kotler *et al.*, 2006; Ottenbacher, 2007) because creativity/innovation is risky, requiring individuals to change, think, act differently, and deviate from conventional practices. Griffin (1997) pointed out that four out of 10 innovation projects fail in the marketplace. This high failure rate might be related to the limited knowledge or lack of in-depth and sophisticated

empirical studies on innovation, lack of the means to deal with innovation issues such as uncertainty barrier, and potential for failure at individual and group levels in organizations. As a result, managers might rely on their own limited knowledge or experience to encourage innovation (Ottenbacher, 2007), which often results in failure.

Another possible reason for the failure may be the lack of understanding on the change that accompanies innovation. Indeed, most people are afraid of change, which is associated with uncertainty and risk taking. Research found that employees tend to be particularly sensitive to uncertainty, apparent riskiness, and potential for failure that accompany innovative efforts (Hon *et al.*, 2014). As a result, they resist changing their old way of thinking and doing, consequently inhibiting innovation (Hon, 2013; Hon *et al.*, 2013). For example, Wong and Pang (2003) identified over 15 job-related barriers to innovative behavior in a sample of Hong Kong employees in hospitality organizations.

Despite the uncertainty associated with innovation and the potential for failure, creativity scholars have suggested that features of the work environment might help mitigate the detrimental effects of uncertainty on innovation (Hon *et al.*, 2014; Hon and Lu, 2015). These scholars emphasized that organizational factors play a critical role in fostering or inhibiting innovation. However, they also highlighted the need to address organizational factors at multiple levels, namely, the individual, group, and work unit or organizational levels (Anderson *et al.*, 2014; Hon *et al.*, 2014; Wong, 2015).

Examining organizational factors, such as firm culture, job characteristics, and leadership style may be necessary to alleviate innovation uncertainty and failure. These factors help managers to understand the importance of change to encourage innovation and provide employees with the necessary social, emotional, and technical support to overcome barriers when they innovate. More studies on business, service, and hospitality innovation are necessary to increase knowledge and understand the uncertainties and risks associated in innovation. Consequently, a systematic analysis with a theoretical argument should be

conducted to develop a set of multilevel innovation frameworks and methods that deal with the complex and emergent business environment. The next section focuses on providing such a model on creativity by addressing two key topics missing in hospitality research: multi level influences and outcomes of creativity.

First Missing Piece: Multi-Level Influences of Creativity

Modern businesses have increasingly reorganized work based on various forms of work groups (Cohen and Bailey, 1997) to accomplish a variety of organizational tasks (Chen and Kanfer, 2006; Gilson and Shalley, 2004; Hon, 2013; Lai *et al.*, 2014). For example, work teams in the hospitality industry are divided into several teams including (1) front-of-house teams, which include the front office, housekeeping, food and beverage, and the club floor and (2) back-of-house teams, which include human resources, sales and marketing, reservations, and the kitchen. Accordingly, employee creativity in these teams is required to improve organizational performance and maintain customer satisfaction and loyalty. However, few comprehensive theories address the dynamic directly and integrate influences of the relationships between individual and group levels. Anderson *et al.* (2014) suggested that more research on multilevel nature is one of the two most important issues for creativity and innovation research (the other is meta-analysis).

Currently, the two dominant theoretical models concerning creativity in the workplace are componential model of individual creativity of Amabile (1988) and interactional model of organizational creativity of Woodman *et al.* (1993). Amabile (1988) suggested that the componential model of creativity has three key components of creativity, namely, task motivation, individuals' domain-related skills, and creative ability. These components supposedly interact within the organization level to generate creative behaviors. This line of argument posits that specific contextual factors positively or negatively influence individuals' intrinsic motivation, which in turn influences creative performance

and innovation.

By contrast, Woodman *et al.* (1993) explicitly declared that creativity is affected by the interaction between personal and organizational factors. This model proposed creativity to be an individual-level phenomenon that can be affected by both dispositional and environmental variables. Woodman *et al.* (1993) argued that cross-level influences are essential for identifying and understanding organizational characteristics that can affect creative behavior in a complex social system. In other words, creative performance in organizations is a complex system that includes individual, group, and organizational characteristics that interact to enhance or constrain employee creativity and innovation.

These perspectives, with their emphases on different aspects of either the individual or group, led House *et al.* (1995) to suggest the necessity of examining how group or organizational characteristics encourage interactions between diverse individuals and individual members within groups to understand the link between creativity and innovation. Cappelli and Sherer (1991) suggested that the integration of both individual and group determinants of creativity should focus on an intermediate or multilevel approach. This integration requires the interaction effects of these factors to deal with the negative effects of individual- and group-level uncertainty to determine creativity and innovation.

A Strategic Contingency Power Theory of Creativity

Drawing on the strategic contingency power theory as proposed by Hickson *et al.* (1971) and subsequently developed by Salancik and Pfeffer (1974), this paper suggests that individuals or groups who can cope with individual, group, or organizational uncertainty problems accrue power in an organization. The central idea of this theory is that organizational effectiveness is determined by the internal and external uncertainties an organization faces, which in turn influences the decisions of the organization. In other words, an organization is aligned with the realities it faces in both internal and external

environments. For the external environment, power aids the organization to adapt and survive in its competitive market.

In the internal environment, power is derived from a social situation in which a person or a group has the capacity to do something and another person or group cannot, but wants it done (Salancik and Pfeffer, 1974). Thus, individuals and groups who can cope with uncertainty problems will acquire power and influence. For instance, when employees propose novel ways of thinking, doing, and solving problems that help the organization to adapt to the external environment and sustain its competitive advantages, these employees will accrue power. This paper focuses on the uncertainties of the internal environment because they are related to individual and group creativity within an organization.

When individuals and groups help resolve critical internal uncertainties (via individual and group creativity), they gain power and influence in the organization. Thus, creativity helps organizations to adapt to the environment such that employee creativity would be a strategic contingency in solving critical problems and helping the organization improve its effectiveness. The proposed model involves organizational, social, and psychological factors that influence creativity at individual and group levels and the possible outcomes at these two levels. This model integrates individual- and group-level creativity under a common umbrella wherein employee creativity is important. This model combines the two levels because work outcomes directed at individuals can facilitate individual outcomes. At the same time, work outcomes directed at groups can facilitate group outcomes.

Uncertainties Affecting Individual Creativity

Organizations maintain effectiveness by valuing and encouraging individual creativity (Amabile *et al.*, 1996; Woodman *et al.*, 1993). Extending the logic of strategic contingency power theory, creativity is based upon an individual's ability to manage

personal or group problems. At the individual level, problems that may hinder a person from working creatively are derived from three psychological or habitual determinants, namely, (1) an individual's inability to be creative at work (low creative efficacy), (2) an individual's unwillingness/resistance to change, and (3) a heavy workload/job stress. When an individual overcomes these uncertainties, he or she controls a strategic contingency and accrues power/influence in the organization.

Low creative efficacy. Bandura (1986) argued that high self-efficacy is a necessary condition for individual creativity because it influences motivation and the ability to engage in specific behavior. Creative efficacy is an individual-level concept defined as the belief one has in the ability to produce creative outcomes (Tierney and Farmer, 2002). Creativity requires a specific set of skills, knowledge, and expertise (Amabile, 1988). Whether a person can develop new ideas and generate solutions for problems depends on his or her relevant competence and capability to be creative.

People perceive a lack of ability to be creative at work, although the job requires them to be creative. Consistent with this argument, Shalley (2008) argued that creating new ways of doing things requires a broad variety of abilities from individuals, such as substantial cognitive and creative skills, and devoting effort and investment at work. People with low creative self-efficacy or those who lack creative competence may find creativity a difficult task. People with less creative ability are also more likely to choose routine tasks than those with high creative ability. Therefore, individuals with low creative efficacy will generate less creativity than those with high creative efficacy.

Resistance to change. People are inclined to resist change and prefer to maintain the status quo by adhering to routine and habitual behaviors (Ford *et al.*, 2008; Hon *et al.*, 2014). Ford (1996) emphasized that, "even in circumstances that favor creative action, people will likely choose familiar behavioral options that are relatively more attractive based on their past success, relative ease, and certainty" (p. 1116). From a psychological viewpoint,

resistance to change is a common workplace phenomenon because change is often associated with greater urgency, pressure, and risks than normal organization activities (Ford *et al.*, 2008; Hon, 2013). Consequently, scholars posited that resistance to change can stymie creative performance (Hon *et al.*, 2014; Woodman *et al.*, 1993). Overcoming this tendency is usually viewed as a prerequisite to creative performance. From a practical viewpoint, being creative at work is risky because it requires individuals to challenge existing rules or management practices. Given that creativity involves uncertainty, risk, and ambiguity, people are usually unclear whether and how their efforts to change and be creative will succeed. Consequently, people resist changing their conventional practices, which inhibits innovation (Zhou and George, 2001).

Job stress. Work stress is one of the most widely studied research topics in social psychology and management mainly because stress can affect employees' service quality and performance, foster depersonalization, and reduce personal accomplishment, thereby influencing the psychological health and organizational effectiveness of employees (Hon, 2013; Kahn and Byosiere, 1992; Xie and Johns, 1995). One typical type of work stress is work overload, which is defined as too much work with too little time (Hon, 2013; Hon *et al.*, 2013; Xie and Johns, 1995). For instance, the hospitality industry is a high-contact, people-oriented service industry involving frequent interaction between front-line employees and customers. In this industry, employee service performance is regarded as the most important factor for determining service quality.

However, creativity is time consuming and requires experimentation, trial and error, or even failure. Generating new and useful ideas requires considerable time. Thus, time pressure and work overload appear to hinder creativity (Anderson *et al.*, 2004; Hon, 2013; Hon *et al.*, 2013). Consistent with this argument, individuals with high workloads and high pressure to meet deadlines may have no room to generate creative ideas because they may be busy dedicating their time and effort to accomplishing routine tasks and busy work. Thus,

work overload or time pressure appears to be an obstacle to creativity. In summary, the strategic contingency power approach states that individual creativity decreases when uncertainty is created by individuals' cognition, skills, abilities, and personal characteristics.

Uncertainties Affecting Group Creativity

At the group level, problems that may hinder members from producing creatively have three determinants, including (1) a group's inability to maintain cohesion, (2) a group's inability to develop a constructive climate such as destructive competition between individual members, and (3) a group's inability to deal with interpersonal conflict between members. When people in groups can address these problems, they are said to control a strategic contingency, which enables them to accrue influence in organizations.

Interpersonal conflict. Conflict within the group is common and rated as the greatest source of stress in the workplace (Hon and Chan, 2013; Janssen, 2003). Interpersonal conflict (e.g., conflicts on personal taste, political preferences, values, and interpersonal styles) refers to interpersonal incompatibility accompanied by tension, annoyance, and frustration among individual members, and is expected to be detrimental to a variety of work outcomes. Interpersonal conflict causes negative emotions such as anxiety, annoyance, fear, and anger. The byproducts of interpersonal discord (e.g., stress, anger, retaliatory behavior, and fights) also lead to poor group performance (Amason, 1996; Jehn, 1995).

People have different responses to creativity. Some people may favor creativity or want to change, while others may oppose change. Creative activity is likely to challenge existing rules or policies and deviate from traditional ways of doing things. Such challenge may trigger resistance in other people or cause them to engage in personal conflict with the worker who initiated the change. Prior studies showed that interpersonal conflict is negatively related to job attitudes and work performance (e.g., Janssen, 2003). Research also

found that interpersonal conflict yields detrimental consequences such as reduction in creative ideas advocated by people who are disliked (Jehn, 1995).

Low group cohesiveness. Social psychology has a long tradition of investigating the effects of group cohesiveness on group processes and outcomes. Group identification theory posited that people who identify strongly with their group should focus more efforts in cooperating toward group interests and exert considerable efforts on behalf of the group (Kramer, 1991). However, given that business firms (e.g., hospitality) deal with a highly mobile and demographically diverse labor force (e.g., expatriates), dissimilarities in demographic backgrounds, skills, and abilities between members are likely to influence group cohesiveness.

People tend to establish their social identity through an in-group/out-group discrimination mechanism and categorization process to organize themselves and other group members into different social categories (Hogg and Terry, 2000). The degree to which members are alike in terms of personal attributes, attitudes, values, or demographic characteristics increases interpersonal attraction and cohesion (Williams and O'Reilly, 1998). When people have similar experiences, they feel attracted to and want to be attractive to others similar to them.

By contrast, when people have dissimilar experiences, they are less likely to feel attracted and committed toward each other. This experience of dissimilarity is likely to hinder group cohesiveness during creative activities. When group cohesiveness is low, members might feel less warm and supportive, thereby disturbing effective communication and cooperation with others, which consequently becomes detrimental to group creativity.

Destructive competition. "Destructive competition" refers to individuals' intentional suppression of information or ideas for fear that others may use them (Steinel and De Dreu, 2004). Thus, people tend to focus on information they have in common rather than on sharing their unique expertise because they are afraid that novel ideas may be used or copied

by others. Creativity involves competence and the knowledge that idea exchange or sharing is an important part of group interaction (Gong *et al.*, 2012). However, creative idea generation and information sharing may be impeded when group interaction prevents the sharing of new ideas among members (Diehl and Stroebe, 1991).

Runco (1994) argued that constructive competition within families enables children to develop creativity through learning from the adult. Conversely, destructive competition limits the beneficial effects of idea sharing and restricts the free flow of information (Nagasundaram and Dennis, 1993). This destructive competition results in hostile attributions about each other's intentions and behavior, decreases willingness to tolerate opposition, and consumes time and energy that would be used to work on the creative task (Gong *et al.*, 2012; Jehn, 1995). On the basis of these detrimental consequences, destructive competition inhibits creativity among group members.

In summary, group creativity decreases because of uncertainties created by group characteristics and contextual influences from the environment. Hence, organizations should concentrate their resources and energies into solving these uncertainties to achieve effectiveness and long-term success.

Coping Strategies to Minimize Barriers Affecting Creativity

The negative effect of individual- and group-level uncertainties associated with creativity is a major concern for organizations. According to the strategic power theory, organizations value creative workforces because they help determine the organizational powers of innovation and effectiveness (Salancik and Pfeffer, 1974). Extending this argument, four organizational characteristics that may reduce the negative effects of uncertainties on creativity and innovation are conceptualized. This paper posits that several human resource management (HRM) practices, such as task interdependence, supervisor support for creativity, and a climate of participation in decision-making can mitigate the

negative effects of individual- and group-level uncertainties on creativity. Knowledge on these potential HRM factors can help managers produce a creative workforce, as well as maintain and sustain organizational competitive advantages. These HRM factors are considered in the subsequent overview.

Task interdependence. Teamwork involves interaction and collaboration, and task interdependence is the key to encouraging teamwork. “Task interdependence” refers to the extent to which members in a group must exchange or share information and resources or actually work together to complete their job tasks (Vegt *et al.*, 2000). Work teams can be structured to be highly interdependent, requiring individual members to support one another by exchanging information, resources, and materials to perform their job (Campion *et al.*, 1993) and contribute to idea generation among group members. Research found that task interdependence can facilitate creativity among individual members (Wageman, 1995). Gilson and Shalley (2004) also found that as the task is more interdependent, individual members are more frequently engaged in creative activities. Extrapolating from this notion, this paper proposes that task interdependence should attenuate the negative effect of creative uncertainty at the individual- and group-levels because it enhances interpersonal relationships, collaboration, contact, communication, and problem solving.

Participative climate. Research suggests that participation in decision making or problem solving enhances individuals’ sense of responsibility and ownership of their work (De Dreu and West, 2001). Participation in decision making requires full exchange of ideas, which increases idea generation. Supporting this conclusion, individuals who participate in decision making improve the quality of decisions by sharing and exchanging information with each other (Campion *et al.*, 1993). Considering the issue of creative uncertainty, research found that high levels of participation in decision making are associated with less resistance to change, improved learning, and enhanced creative efficacy; thus, individuals in groups are more likely to generate creative ideas (e.g., Gilson and Shalley, 2004).

Participation stimulates the exchange and integration of information, reduces work stress, and facilitates decision making (De Dreu and West, 2001) because participation fosters learning through sharing of knowledge among group members. Moreover, participation in decision making improves group collaboration and effectiveness (Edmondson, 1999), which in turn will trigger more creativity. Taken together, when participation in decision making is high, the individual- (in terms of lower creative efficacy, resistance to change, and work stress) and group-level uncertainties (in terms of lower cohesion, destructive competition, and interpersonal conflict) will be attenuated.

Supportive leadership. Supervisor support for creativity is the extent to which a supervisor provides supportive behavior to his or her subordinates for creativity such as offering creativity-relevant feedback and information (Hon *et al.*, 2013; Madjar *et al.*, 2002). Gilson and Shalley (2004) suggested that supervisory supportive behavior facilitates individual creativity. When supervisors provide employees with creativity-relevant support, they indicate to employees that the top management level is concerned with creativity (cf., Amabile *et al.*, 1996), and hence perceptions of creative ideas being effective should be high. As a result, high supervisor support for creativity can increase employees' attention to creativity by indicating that organizations care about creative performance.

However, if supervisors do not support creativity, it may signal that the risk or failure associated with creativity is high. Hence, employees would become reluctant to take risks by challenging current management practices (Zhou and George, 2001). Consistent with this finding, Bliese and Halverson (2002) found that a highly supportive climate initiated by leaders mitigated the negative relationship between work stress and task performance. Extrapolating from this idea, supervisor support for creativity can reduce unfavorable conditions on creativity.

Strategic contingency power theory asserts that an organization has to deal with many uncertainty problems to achieve creativity and effectiveness. However, creativity

generates many challenges that people may not want to face. Confronted with these difficulties, organizations must think strategically and nurture a supportive environment. The three categories of coping strategies offer venues that can promote creativity.

Strategic Contingency Power Model of Creativity

Research Framework and Propositions

Figure 1 summarizes the ideas, variables, and relationships explored in a theoretical framework in the previous sections. This model suggests that individual, group, and organizational characteristics affect employee creativity, resulting in organizational effectiveness and success. Creativity, at both individual and group levels, along with organizational characteristics (e.g., HRM practices), is essential for a comprehensive understanding of creative work outcomes in complex social systems. Organizations can adopt uncertainty coping strategies, which are the HRM practice, within which individual and group behaviors are performed. Creativity in the organization results in career success among individuals and innovative performance in organization.

Insert Figure 1 about here

Figure 1 presents the preliminary formulation of a strategic contingency power theory of organizational creativity in a form directly amenable to empirical investigation. Several basic propositions that guide the development of testable hypotheses for each level of analysis in the model are presented below, followed by a discussion across these levels.

First proposition. The creative performance of individuals in a complex social setting is a function of individual personality, along with social influences (e.g., supervisor support) that enhance or constrain individual creativity and organizational influences (e.g., participative climate) that facilitate individual and group creativity.

The construct of task interdependence captures much of group influence on the

individual. Thus, task interdependence promoting frequent interaction and information exchange and sharing should facilitate individual and group creativity (Vegt *et al.*, 2000). Additionally, high task interdependence helps employees who lack creative efficacy or skills to complete a task faster and succeed in their attempt become more creative than low task interdependence. In this situation, less creative person or one who has undertaken a heavy workload might attempt to be creative to prevent wasting the time of other coworkers (Hon and Kim, 2007). Moreover, when individuals have high workload, they may have more room to generate new ideas to improve their current unpleasant job situations (i.e., their work overload) if they are not pressured to accomplish the tasks in a time-driven manner and receive support from their coworkers. Thus, work overload can result in creative outcomes depending on the extent to which the tasks require workers to work interdependently. Following this logic, when task interdependence is high, the negative and linear effects of individual-level uncertainties (in terms of lower creative efficacy, resistance to change, and work stress) will be attenuated, leading to the following propositions:

Proposition 1a: *The negative relationship between low creative efficacy and individual creativity will be weaker if task interdependence is high.*

Proposition 1b: *The negative relationship between resistance to change and individual creativity will be weaker if task interdependence is high.*

Proposition 1c: *The negative relationship between work overload and individual creativity will be weaker if task interdependence is high.*

Another important HRM practice that influences individual behavior is participative climate. Participation in decision making and involvement can reduce attitudes of resistance to change. A study found that creativity is high if the task requires workers who resist change to participate in organizational policy, process, and administration (De Dreu and West, 2001). When the opportunity for participation increases, individuals communicate and

cooperate with others. This collaboration facilitates creative idea generation and problem solving, thereby minimizing their unwillingness or inability to change. Evidence suggests that creativity is enhanced in an environment that encourages and supports participation in decision making on important issues (Amabile, 1988; De Dreu and West, 2001). Thus, a climate that allows for this participation should increase creativity and problem solving, leading to the following propositions:

Proposition 1d: *The negative relationship between low creative efficacy and individual creativity will be weaker if participation in decision-making is high.*

Proposition 1e: *The negative relationship between resistance to change and individual creativity will be weaker if participation in decision-making is high.*

Proposition 1f: *The negative relationship between work overload and individual creativity will be weaker if participation in decision-making is high.*

A considerable number of studies have suggested that a supportive leadership style can facilitate an individual's creative performance. For example, Zhou and George (2001) found that unhappy individuals exhibited a high level of creativity when supervisors supported their creativity. Scott and Bruce (1994) also supported the conclusion that employees may attempt to be creative when they perceive that creativity is valued and supported by organizations and leaders. Thus, the following propositions are propounded:

Proposition 1g: *The negative relationship between low creative efficacy and individual creativity will be weaker if supervisor support for creativity is high.*

Proposition 1h: *The negative relationship between resistance to change and individual creativity will be weaker if supervisor support for creativity is high.*

Proposition 1i: *The negative relationship between work overload and individual creativity will be weaker if supervisor support for creativity is high.*

Second Proposition. The creativity of groups in a complex social setting is a function of individual creativity, salient aspects of the group itself (e.g., level of cohesiveness), and organizational influences (e.g., participative climate) on group functioning. The construct of task characteristic captures much of the group's influence, not only on individuals, but also on groups. Task interdependence among group members strengthens social communication and cooperation and allows for information flow, which in turn leads to the development of new ideas (Hogg and Terry, 2000). Moreover, the negative and linear effects of group-level uncertainties (in terms of lower cohesion, destructive competition, and interpersonal conflict) are attenuated when task interdependence among group members is high. Therefore, task interdependence reduces the negative effect of group-level creative uncertainties. Based on this finding, the following propositions are proposed.

Proposition 2a: *The negative relationship between lack of cohesion among group members and group creativity will be weaker if task interdependence is high.*

Proposition 2b: *The negative relationship between destructive competition and group creativity will be weaker if task interdependence is high.*

Proposition 2c: *The negative relationship between interpersonal conflict and group creativity will be weaker if task interdependence is high.*

Organizational climate provides good evidence of the influence of HRM practices on group-level creativity and innovation. Participative climate is an implicit frame that shapes individual attitudes and behaviors within the group context (Glisson and James, 2002). Gilson and Shalley (2004) suggested that participation in the decision-making process has a positive effect on creative behavior in groups. In a highly participative climate, the competence, skills, and liberation of individuals are all highly valued. Such a climate recognizes the importance of each member of the team (Glisson and James, 2002). The discussion above leads to the following propositions:

Proposition 2d: *The negative relationship between the lack of cohesion among group members and group creativity will be weaker if participation in decision-making is high.*

Proposition 2e: *The negative relationship between destructive competition and group creativity will be weaker if participation in decision-making is high.*

Proposition 2f: *The negative relationship between task conflict and group creativity will be weaker if participation in decision-making is high.*

Research also suggested that influence processes used by group leaders could foster group creativity (Shalley and Gilson, 2004). Specifically, leaders can stimulate employees' creative thinking in terms of novel ideas, solutions, and work processes, and generate creative behaviors (Elenkov and Manev, 2005; Hon, 2013). The theoretical framework is grounded in strategic contingency power theory, particularly in the notion that creativity is best understood as the result of organizational coping practices to deal with both individual- and group-level uncertainty problems. These practices address social and contextual factors in organizations that can promote or constrain creativity at multiple levels, leading to the following propositions:

Proposition 2g: *The negative relationship between the lack of cohesion among group members and group creativity will be weaker if supervisor support for creativity is high.*

Proposition 2h: *The negative relationship between destructive competition and group creativity will be weaker if supervisor support for creativity is high.*

Proposition 2i: *The negative relationship between task conflict and group creativity will be weaker if supervisor support for creativity is high.*

Second Missing Piece: Outcomes of Creativity

Compared with the number of studies investigating the antecedents of creativity, few studies have focused on the outcomes of creativity (Janssen *et al.*, 2004). Consequently, understanding on how employee creativity affects individual, group, and organizational outcomes remains limited. Some studies found that innovative behavior was positively related to employees' career satisfaction and perceived insider status (Kim *et al.*, 2009; Seibert *et al.*, 2001). These studies provided preliminary ideas on how employee creativity is associated with individual and group outcomes. However, empirical results on the relationship between creativity and work outcomes are inconsistent (Kim *et al.*, 2009; Seibert *et al.*, 2001). Considering these concerns, two issues should be addressed to explain the creativity–outcome relationship. First, the effects of individual and group creativity should be distinguished from one another other. Second, HRM arrangements for outcome interdependence should be considered as a boundary condition.

Moderating Role of Organizational Reward Systems

This paper proposes that the creativity–outcome relationship varies with the degree of outcome interdependence among group members. Outcome interdependence has been studied as a group factor independent from task interdependence (Vegt *et al.*, 2000). Although task interdependence pertains to the characteristics of job tasks, and is often determined by the function and the level of the group, outcome interdependence is related to how group members are rewarded based on their work outcomes. Outcome interdependence is high when group members are rewarded purely on the basis of their collective rather than individual performance (Wageman, 1995). If the organization values creativity, awareness of outcome interdependence will motivate group members to maximize their creative work efforts. Thus, high outcome interdependence will help reduce “process losses” caused by goal ambiguity and potential conflict because of concerns regarding individual performance (Steiner, 1972).

Third Proposition. Individuals who exhibit creative activity at work are likely to gain more profits and be happier in their careers than others who do not (Kim *et al.*, 2009) because creativity contributes to the overall success of the organization. Organizations value and reward creative behavior, and such positive contributions to work group creativity indicate an individual's capability for greater creative responsibility within the organization. Therefore, individual creativity should be associated with a sense of accomplishment in one's chosen career, and creative individuals should be more likely to obtain salary increases and career promotions. Individual creativity is expected to influence career satisfaction and success of individuals when group members are rewarded on the basis of their collective performance.

Proposition 3a: *The positive effect of individual creativity on individual career satisfaction will be stronger when outcome interdependence among group members is high.*

Proposition 3b: *The positive effect of individual creativity on individual career success will be stronger when outcome interdependence among group members is high.*

Fourth Proposition. Although researchers have suggested the importance of creative initiative for organizational effectiveness and innovation (e.g., Amabile, 1988; Oldham and Cummings, 1996; Scot and Bruce, 1994; Woodman *et al.*, 1993), few studies have conducted an empirical examination of the actual outcome link between creativity, innovation, and organizational effectiveness. Strong theoretical reasons support the expectation of the existence of such a relationship. Organizational innovation depends largely on group members' creative contribution to success. Group creativity should be highly valued and rewarded in organizations (Gomez-Mejia and Balkin, 1992). Group creativity may also be an explicit aspect of job performance standards, such that organizations recognize and reward the collective contributions of group members,

triggering high work group performance. Group effectiveness will be high if group members maximize their efforts for the group when organizations reward group performance collectively.

***Proposition 4a:** The positive effect of group creativity on group innovation will be stronger when outcome interdependence among group members is high.*

***Proposition 4b:** The positive effect of group creativity on group performance will be stronger when outcome interdependence among group members is high.*

The conceptual framework presented in Figure 1 shows that the linear effect of creativity is embedded in a complex social system rather than a single-level variable. A full understanding of creativity requires focusing beyond its antecedents and carefully examining the outcomes of creativity. Uncertainty problems can be conceptualized as factors that either constrain or enhance the creativity of individual members, which in turn affect various outcomes at both individual and group levels. This paper proposes parallelism between individual and group creativity processes. Individual creativity is more likely to affect individual-level outcomes such as career satisfaction and career success, whereas group creativity is based on the team's belief, and is more likely to affect group-level outcomes such as innovation and work performance.

Discussion and Conclusions

This paper begins with a review on creativity and innovation research in management and hospitality literature. The review discloses two important missing pieces in creativity and innovation research in the hospitality sector, that of the multi-level influences and outcomes of creativity. This paper proposes a strategic contingency power model of creativity that posits that both individual- and group-level uncertainties are key determinants for creativity and for identifying important outcomes of creativity. By dealing with the two

missing pieces in extant research, the paper provides useful guidelines for future creativity and innovation research in the hospitality sector.

Specifically, the proposed model examines how uncertainty coping strategies (e.g., HRM practices) of an organization address uncertainty problems. The multilevel approach provides a comprehensive account of the complex social system existing between the individual and the group through which organizational HRM practices affect individual and group creativity, and which consequently affect various individual career outcomes and group innovation performance. Thus, a primary contribution of contingency power theory to creativity research is that it models alternative multilevel influences in business, service, and hospitality organizations.

A principal theme uncovered in previous studies was the multilevel influences of creativity and innovation. Multilevel researchers suggested that individuals might be influenced by cross-level effects from a higher group or unit (Hirst *et al.*, 2009). For example, group-level conditions such as participative climate, interdependent task characteristic, and supportive leadership can mitigate the negative influences of uncertainty at the individual level. Therefore, cross-level effects occur simultaneously at multiple levels of analyses in organizations. These effects affect interaction at a higher level (groups or organizations) and are embedded in the lower level (individuals).

Managerial Implications

The theoretical model proposed in this paper can help inform managers of hospitality organizations on how to manage individuals, teams, management, and workgroup design effectively. As mentioned above, creativity/innovation is risky, and requires individuals to change and act differently, and deviate from conventional practices. Psychologically, most people are afraid of change, which is associated with uncertainty and risk taking (Hon *et al.*, 2014; Kim, Hon, and Lee, 2010). As a result, people resist changing

their traditional methods of performing tasks, consequently inhibiting innovation.

Despite the uncertainty barriers associated with innovation and the potential for failure, creativity scholars suggested that several HRM practices play a critical role in minimizing uncertainty issues. For instance, organizational culture that emphasized participation and openness to experience, job characteristics such as task interdependence and supportive leadership would minimize the barrier of uncertainty. These HRM practices enable managers to understand the importance of change in encouraging innovation and in providing employees with the social, emotional, and technical support they need to overcome barriers or challenges when they innovate. Hospitality managers should focus on these HRM practices to enhance their competitive advantage by appropriately acquiring, selecting, developing, and rewarding the firm's human capital. Future studies should also focus on other HRM practices that could be used to build a creative workforce.

Implications and Direction for Future Research

This paper adopts a multilevel approach to strategic contingency power theory on creativity in service sectors, and advocates for multilevel methods that go beyond statistical and cross-sectional inquiries. Researchers interested in examining cross-level creativity processes in organizations need to adopt a set of multilevel approaches (e.g., Anderson *et al.*, 2014; Drazin *et al.*, 1999). The proposed multilevel model integrating strategic contingency power theory yields three important implications for studying creativity in hospitality organizations, as well as how creative processes operate in the context of team-based work arrangements.

First, uncertainty problems arising from individual perception, skill, ability, and personal issues at the individual- and group-levels may facilitate or constrain creativity, which in turn influences individual and organizational outcomes. Researchers could use both qualitative methodologies (Kahn, 1990) and multilevel quantitative methodologies

(Hofmann *et al.*, 2000) to measure the creative engagement of individuals and groups. Kahn (1990) used multiple strategies, including participant observation, interviews, and content analysis of archival documentation. Such qualitative methods could be paired with field survey methods using multilevel techniques (Hofmann *et al.*, 2000) to study employee creativity, innovative engagement, and its outcomes.

Second, the proposed model suggested new directions for employee creativity research. The distinctive strengths of this theory are its focus on identifying organizational uncertainties arising from individuals and groups and highlighting the role of HRM practices to cope with uncertainties. The strategic contingency power theory on creativity is emerging as a fruitful model for researchers to use in mapping organizational phenomena. This multilevel model simultaneously and interactively examines how teamwork at one level of analysis can interact with and influence other levels (i.e., individuals or units). Thus, this model is has potential for future research.

Finally, the proposed model suggests that organizational HRM interventions on uncertainty coping strategies directed at the group as a whole (i.e., task interdependence, participative climate, and supportive leadership) have stronger initial influence on group creativity than on individual creativity. Over time, cross-level influences of group-level interventions on individual creativity mechanisms may increase and sustain both group and individual creativity.

Specifically, organizational interventions designed to foster group creativity through individual creativity processes alone (e.g., selection of individuals with higher levels of creativity personality and providing supervisory or organizational support for creativity) may result in more creative individuals, but not necessarily in more creative work groups. Thus, an important implication of the proposed model is that managers must focus more on the type and functional purpose of various organizational practices and interventions to ensure a more effective management of creativity in individuals and groups. Managers who

focus most of their efforts on supporting creativity in individuals or solely in groups are unlikely to produce the best possible results with their firm performance (Chen and Kanfer, 2006).

This conceptual paper provides a future research agenda that discusses how to verify the creativity and innovation model effectively. This model integrates individual- and group-level creativity and innovation under a common umbrella because work outcomes directed at individuals can facilitate individual career outcomes. At the same time, work outcomes directed at groups can facilitate group innovation.

A valid and reliable research design is required to test the proposed model. A questionnaire survey will enable researchers to collect the pattern and multilevel relationship of variables depicted in the model from a large number of firms. The design of the survey will require (1) measuring individual creativity and uncertainty issues at both individual- and group-level, (2) measuring groups' and firms' innovative activities comprehensively, and (3) assessing the outcomes of both individual and group creativity. Researchers can address the first aspect by conducting additional in-depth interviews to complement the questionnaire survey. In-depth interviews could expose the reasons why firms encourage individual creativity and group innovation and the performance implication. Researchers can address the second aspect by including psychological cognitive tests for individual and group uncertainties, as well as the number of patents developed by a group per year in the questionnaire. This approach will provide an additional method on top of the survey to collect data from individuals, teams and firms, and allow triangulation. Finally, researchers can address the third aspect by adopting experimental designs regarding the causality issue. Hierarchical linear modeling might also be an appropriate method for testing the multilevel relationships of individual creativity and group innovation.

In conclusion, this paper proposed a theoretical model on creativity for the service and hospitality industry that links individuals, work groups, and organizational factors at

multiple levels. The three key features of the proposed multilevel model include (1) individual and group uncertainties may hinder individual and group creativity, and these relationships vary with the extent of organizational uncertainty coping practices, (2) creativity at the individual and group levels influence individual and group outcomes, and these relationships vary with the degree of organizational reward structures, and (3) measuring the individual- and group-level creativity using multilevel analysis techniques is important. In all these areas, incorporating dynamic models of both individual- and group-level uncertainties and innovation challenges are important concerns for hospitality organizations. To this end, scholars are invited to continue developing the multilevel approach toward creativity and innovation using multi-source samples, multi-wave studies, and multi-method techniques in service and hospitality research.

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Figure 1

Proposed Model of Creativity and Innovation

