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EXPLORING THE RELATIONSHIP BETWEEN HUMOR TYPES, INNOVATIVE WORK BEHAVIOR AND INNOVATIVE PERFORMANCE

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Humor is important human behavior that plays a vital role in communication and social interactions. Being a social phenomenon, humor is pervasive in organizations and workplaces. Because of its playful nature and the amusement it engenders, its presence in organizations is usually seen as a distraction. Traditionally, work has been conceived as a serious undertaking hence any seemingly frivolous behavior like humor should not form part of it. However, it has been suggested that humor has numerous benefits and facilitates organizational processes such as innovation. Unfortunately, there are few studies that have examined the role of humor in innovation. This study seeks to deepen understanding of humor’s utility in innovation management by exploring how individuals use of humor in different contexts affect their innovativeness.

The study draws on humor, creativity, innovation and social psychology literatures to develop a conceptual model. It examines how four types of humor used by employees in their interactions with their immediate co-workers (in-group) and with external actors (external group) affect their innovative work behavior and innovative performance. In testing this model, data is collected by a cross-sectional survey conducted in the fall of 2015. Employees from nine Finnish organizations involved in the HURMOS Project were invited to participate. At the end of the survey period, eighty-eight participants (n=88) completed the questionnaire. The data is analyzed by conducting correlational test and hierarchical multiple regression using SPSS Statistics 22 software.

The data analyses revealed some interesting findings. The results suggest that employees use of affiliative humor with the in-group and external group relate positively and significantly to innovative work behavior. Aggressive humor use has no significant relationship with innovative work behavior in the in-group context; but in the external group context, it has a negative significant association with innovative work behavior. The use of coping humor and reframing humor show no significant effect on innovative work behavior in both contexts. Also, affiliative humor, aggressive humor and coping humor show no significant direct relationship with innovative performance. On the contrary, reframing humor, surprisingly, relates positively to innovative performance in both contexts. Lastly, employees innovative work behavior relates positively to innovative performance. This study’s findings contribute to the existing knowledge by stressing the important role humor plays in individual innovativeness.

Keywords: affiliative humor, aggressive humor, coping humor, innovation, innovative performance, innovative work behavior, organizational humor, reframing humor

Additional information This research was conducted as part of the HURMOS Project.
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1 INTRODUCTION

"Serious play is not an oxymoron; it is the essence of innovation." (Schrage, 2000: 1)

1.1 Background

Humor is an important human behavior and a fundamental element of human existence. Although it has the nature of play, it performs essential social, cognitive and affective functions (Martin, 2007:1). It is an integral part of daily human communication and has been identified as a key feature of interpersonal interactions, dyadic interactions and group dynamics (Morreall, 1991). This ubiquitous human behavior has come under the scientific scrutiny of academic disciplines such as psychology, linguistics, education, and organizational studies (Attardo, 2014). Organizational humor research has not been prolific compared to other human behaviors (Westwood and Johnston, 2013). Researchers’ apparent disinterest in the subject may be partly attributed to the notion that work is a serious venture therefore any frivolous or irrational behavior should be isolated from it (Mainemelis and Ronson, 2006).

The changes taking place in the contemporary workplace is gradually pushing humor to the forefront of organizational discourses. Many young workers’ expectation is to work in relaxed environments where they can have fun while working at the same time (Romero and Pescosolido, 2008). Some organizations have seen the value of humor and have consciously nurtured it as a key element of their culture. The examples of South West Airlines, Kodak, and IBM have been widely documented in the literature (Romero and Cruthirds, 2006). This development has rekindled humor research in organizations. In recent years, researchers, practitioners and consultants have focused on unraveling how humor impacts organizational processes and outcomes. Indeed, humor has been touted as serving numerous beneficial functions in organizations. These functions include: enhancing interpersonal relationship and communication, fostering group bonding and cohesiveness as well as creating and maintaining organizational culture (Cooper, 2008; Romero and Cruthirds, 2006; Terrion and Ashforth, 2002; Ziv, 2010). Also, it facilitates leadership outcomes like
leadership effectiveness and boost subordinates satisfaction with leaders (Avolio, Howell and Sosik, 1999; Decker and Rotondo, 2001). Again it helps employees cope with workplace stress (Abel, 2002; Dixon, 1980; Kuiper, McKenzie and Belanger, 1995; Mesmer-Magnus, Glew and Viswesvaran, 2012). Humor has also been suggested to enhance problem-solving, creativity and innovation, and increase productivity (Holmes, 2007; Lang and Lee, 2010; Lehmann-Willenbrock and Allen, 2014; Morreall, 1991).

The benefits of humor are enormous as such it is expected that its formal recognition in organizations will be widespread. But surprisingly, few organizations have strategically integrated humor into their culture thereby reaping these benefits (Miller, 1996; Romero and Cruthirds, 2006). The weak premise on which most of these claims are based probably account for this skepticism surrounding humor’s integration into organizational cultures. In fact, humor’s role in creativity and innovation is one notion that has been neglected by organizational humor researchers. Although it has been suggested that humor triggers and drives innovation, the evidence appears to be shallow. Most of these assertions have no strong theoretical or empirical foundation; rather they evolve from conjectures or anecdotal evidence (Westwood and Johnston, 2013). While a scrutiny of the organizational humor literature reveals only a handful of scholarly work on this subject, most of the evidence comes from popular publications (Lang and Lee, 2010 is an exception). The dearth of scientific research limits the credence of the utility of humor in innovation. Also, most of the claims of humor’s effect on creativity and innovation are based on extrapolation of research in laboratory setting that use cartoons and funny clips as proxy for humorous events (Ziv, 1983 is an example). This also limits the evidence because the laboratory and organizational contexts are entirely different and the simple creative task of cartoon caption writing cannot be equated to the complex innovation activities that employees perform (Cann, Watson and Bridgewater, 2014; Robert and Wilbanks, 2012).

Given the importance of innovation in organizations, the neglect of the subject by humor researchers is worrying. With the possible exception of Lang and Lee (2010), no study has empirically tested the role of humor in innovation. The mechanism
through which humor drives innovation process and its ramifications on the innovation outcome is not fully understood. Although Lang and Lee’s (2010) work represents a bold attempt at bringing the issue to the fore, the researchers fell short of painting the entire picture. They limited their study to only organizational creativity. But it has been established in the innovation literature that creativity initiates the innovation process; hence it is a part of innovation (Amabile, 1988). So in studying creativity separately, the researchers left a bigger piece out of the ‘humor-innovation puzzle’. Indeed, Lang and Lee (2010: 55) acknowledged the importance of this subject and called for “more theoretical development and empirical studies…to explore additional humor-context interactions to understand how humor influences creativity in organizations.” This study heeds this call to further research the phenomenon but departs from the narrow focus on creativity to encompass innovation generally.

Innovation in organization continues to attract the interest of researchers because of its inherent ability in conferring competitive advantage and ensuring the survival of firms. Traditionally, organizations have organized their innovative activities through formally instituted structures (Tushman and Nadler, 1986). For example, Research and Development (R&D) departments were the focal functions tasked with the creation of novel products and processes. However, in recent times, innovation has ceased to be the preserve of only R&D teams. The increasing need for several types of knowledge, capabilities and resources in the innovation process, has made organizations to explore within and beyond their borders to acquire these assets to complement those they already have (Caloghirou, Kastelli and Tsakanikas, 2004; Fagerberg, 2005). Within their borders, firms are exploring effective ways of tapping their employees’ knowledge, expertise and commitment to drive their innovation efforts. Employees’, whose work roles hitherto were the application of innovation, are being encouraged to be proactive in the search for novel solutions to work-related problems (Kesting and Ulhøi, 2010; Scott and Bruce, 1994). Since innovation is now regarded as an organization-wide function, the demonstration of innovative behavior by individuals in the workplace has a concomitant effect on an organization’s innovativeness and performance (Laursen and Foss, 2005). Innovative work behavior refers to an employee’s deliberate search and application of new ideas, processes,
and work methods in a workplace with the intent of benefiting themselves, their group or organization (Janssen, 2000; Scott and Bruce, 1994; West and Farr, 1990; Yuan and Woodman).

In as much as organizations demands innovativeness from their employees, several contextual and individual factors influences the display of this behavior. Some of these factors are: job demands, job flexibility, job autonomy and job control (Dorenbosch, van Engen and Verhagen, 2005; Janssen, 2000; Ramamoorthy, Flood, Slattery and Sardessai, 2005), leadership styles (de Jong and den Hartog, 2007; Janssen, 2005; Pieterse, Van Knippenberg, Schippers and Stam, 2010; Scott and Bruce, 1994; Yuan and Woodman, 2010), self-efficacy, proactive personality, propensity to innovate, problem ownership and problem solving style (Dörner, 2012; Seibert, Kraimer and Crant, 2001; Bunce and West, 1995).

Notwithstanding the extensive examination of the determinants of innovative work behavior, other factors are yet to be investigated. One such factor that is conspicuously missing is humor. Although humor is seen as an important driver of employee’ cognitive, affective and behavioral responses (Lang and Lee, 2010; Martin, 2007), its role as a potential driver of innovative behavior is yet to be explored.

1.2 Objective and research questions

The foregoing discussion revealed that there is little existing knowledge on the effects of humor on innovation. To help bridge this research gap, an exploratory approach is taken in this study. That is, the data gathered in the study is analyzed to ascertain whether it can explain current or existing theories of humor and also to lay the foundation for future research of humor in innovation management.

Thus, the main objective of this study is to deepen our understanding about the role of humor in individual innovativeness and innovation outputs. More specifically, the goal is to advance current knowledge by exploring how employees’ use of humor in different contexts (in the organization and across the organization boundaries)
influence their innovative work behavior; and how innovative work behavior also affects innovative performance. Hence, the main research question to help achieve the objective/aim of this thesis is:

“What kinds of relationships exist between organizational humor types, employees’ innovative work behavior and innovative performance?”

The following sub-questions are formulated to help answer this main question.

- How does employees’ use of different humor types relate to their innovative work behavior?
- How does employees’ innovative work behavior relate to their innovative performance?

1.3 Methodology used in the study

In this study a cross-sectional survey design is employed (Saunders, Lewis and Thornhill, 2009: 151). The sample is drawn from nine organizations involved in the HURMOS Project. The organizations vary from micro- to large-scale and all operate locally in Finland except one who also has international operations. Also, they operate in diverse industries such as manufacturing, media, leisure and recreation, and other services. The data for this study is collected from employees of these organizations by means of online questionnaire.

The questionnaire instrument was developed based on previously validated scales. Participation in the survey was voluntary for all employees. In small organizations, every employee is invited to complete the questionnaire. However, in large firms, the contact person is asked to select a random sample to participate in the survey. The data is analyzed with SPSS Statistics 22 software. Correlational and regression analyses are conducted to test the relationships between the variables in the study.
1.4 Key concepts of the study

The key concepts as used in this study are presented briefly in this section and are subsequent discussed in detail in chapters two and three.

Organizational Humor

Humor is a complex phenomenon that is not easily defined and conceptualized. Because of the wide-ranging nature of this phenomenon, theorists draw on different perspectives in order to define it (Cooper, 2008). Some scholars focus on features of the humor object that makes it humorous and which influences individuals to experience this humor. Others also describe humor as an individual characteristic or habitual behavior that allows people to create and appreciate humorous stimuli. Yet still, other researchers conceptualize it as a communication shared between individuals in a social context. These varied perspectives have led to a myriad of definitions in organizational humor studies. For instance, Duncan (1982: 136) defines humor as “…a unique type of communication…that…establishes an incongruent relationship or meaning and presented in a way that causes laughter.” Also, Cooper (2005: 767) defines humor as “any event shared by an agent (e.g. an employee) with another individual (i.e. a target) that is intended to be amusing to the target and that the target perceives as an intentional act.” Finally, Romero and Cruthirds (2006: 59) suggest that humor is “amusing communications that produce positive emotions and cognitions in the individual, group or organization.” This study follow these scholars and define organizational humor as any amusing communication shared by an individual with others in a work group or organization that is perceived as an intentional or a playful act that evokes laughter. This definition suggest that for an event to be humorous, it has to have certain attributes: 1) it has to be an amusing communication and this can be spontaneous anecdotes, well-rehearsed jokes, or humorous materials like cartoons, 2) it has to be shared and enjoyed by an individual with their colleagues or other actors, 3) it has to take place in the work environment, 4) it has to be seen by both the source and the target as playful events that need not be taken serious and 5) it has to elicit emotional response ( e.g. smile or laughter ) from the hearers.
**Affiliative humor**

Affiliative humor is the harmless use of humor to enhance one’s relationship with others. The use of this kind of humor helps in building interpersonal relationships and positive climate in organizations. People who employ this humor style share jokes and say funny things about themselves to make others feel comfortable in their company (Martin, Puhlik-Doris, Larsen, Gray and Weir, 2003; Romero and Cruthirds, 2006).

**Aggressive humor**

This humor type is employed by people with the sole aim of running-down others and to manipulate them through implied ridicule. Such individuals find it easy to share sexist or ethnic jokes regardless of the jokes potential to disgruntle others. The intent of such a humor use in a group or organization may be to enhance an individual’s status or power (Martin et al., 2003). This humor style may not be overly negative because when used sparingly in organizations it can help build group cohesiveness; by whipping group members to conform to group norms and also serve as a tool to communicate reprimand messages without offending members (Romero and Cruthirds, 2006).

**Coping humor**

When people face difficult situations in their life or in the workplace, one of the coping strategies they usually employ is humor (Abel, 2002). Coping humor helps individuals to psychologically distance themselves from experiencing negative emotions and stressful stimuli. By making fun or maintaining a humorous outlook, people are able to express or allay negative emotions like boredom, anxiety, frustration and anger and thus are protected from experiencing the debilitating consequences of such affect (Kahn, 1989; Abel, 2002).
Reframing humor

Humor allows people to mentally step back from their normally-held beliefs and assumptions and see things with new perspective (Kahn, 1989). In other words, humor allows an individual to perceive a new meaning in a familiar idea, concept, object or situation. This internal transformation of reality makes a person to momentarily leave their old mindset and to embrace a new perspective of reality. Thus, reframing humor liberates people from their mental restrictions and helps them to “explore their familiar, taken-for-granted worlds” (Kahn, 1989: 50).

Innovation

Innovation is seen as important activity that produces beneficial outcomes to organizations. Indeed, scholars have suggested that innovation can confer competitive advantage and also help organizations to survive in turbulent competitive environments (see e.g. Bessant, Lamming, Noke and Phillips, 2005; Crossan and Apaydin, 2010). The importance of this phenomenon has led to its extensive study in several disciplines with various conceptualizations (see e.g. Apaydin and Crossan, 2010 for a review). Because of this fragmented conceptualization, an all-encompassing definition of innovation remains elusive. This study follows West and Farr (1990: 9) and defines innovation as “the intentional introduction and application within a role, group, or organization of ideas, processes, products or procedures, new to the relevant unit of adoption, designed to significantly benefit the individual, the group, organization or wider society.”

Innovative work behavior

Although innovation takes place in organization, however it does not occur in a vacuum. Individuals carry out the innovative activities either alone or as part of a group (West and Altink, 1996). Therefore individuals’ innovativeness is an important input in the realization of innovation in organizations. In the literature, individual innovation is mostly seen as the preserve of only a selected group of employees, particularly those in the research and development (R&D) department (see e.g. Tidd,
Bessant and Pavitt, 2001). However, in this study, individual innovativeness is conceptualized as an individual behavior wherein every organizational member consciously strives to introduce new ideas to improve their work role or organizational processes in general (Janssen, 2000, Scott and Bruce, 1994). In other words, the behaviors that they exhibit in the course of their work translate into novelties that may be beneficial to their work roles, groups and the organization at large. Consequently, this study adopts Yuan and Woodman’s (2010: 324) definition thus: “an employee’s intentional introduction or application of new ideas, products, processes, and procedures to his or her work role, work unit, or organization.”

**Innovative Performance**

Individual innovativeness is not an end in itself; rather it is a means to realizing beneficial novelties or useful ideas that can engender organizational competitiveness (Tuominen and Toivonen, 2011). The useful ideas generated by individuals result in tangible outputs. Thus, innovative performance is individuals’ specific contributions leading to the realization of new products, processes, working methods, technologies, designs or marketing methods that create value for the organization (Criscuolo, Salter and Ter Wal, 2013, Oslo Manual, 2005). Unlike other studies that measure innovative output objectively (e.g. patent counts, research reports; Scott and Bruce, 1994), this study assess innovative performance subjectively based on the perceived efforts individuals put in helping generate innovative outputs in their organizations. This is because employees sampled in this study play diverse roles in their organizations so measuring their innovative performance objectively might not be practicable or feasible.

1.5 **Structure of the study**

The study is organized in the following structure. The first chapter gives the background to this study which delineates the research gaps and the aim of the study. The research questions that the research seeks to answer are presented. In addition, a summary of the key concepts used is outlined and the methodology employed is briefly discussed.
Chapter 2 starts the detailed discussion of the theoretical foundation of the study. It begins with a detailed discussion of the theories and the classification of humor in general. Next, the discussion is narrowed to the functions that humor serve in organizations. This encompasses both beneficial and the unprofitable uses of humor in organizations. Finally, a review of how humor has been measured in prior humor studies is done.

In chapter 3, the theoretical discussion is continued and the focus is limited to innovation. An overview of the phenomenon begins the chapter and continues with a review of the various conceptualizations, definitions and the dimensions of innovation. Next, the discussion narrows in on innovative work behavior and explains the concept in detail. The chapter closes with a delineation of the antecedents of innovative work behavior.

Chapter 4 presents the development of the conceptual model used in the study. Here, the theories discussed in the previous two chapters are drawn upon to present a research framework to examine the effects of humor types on employees’ innovative behavior and innovative performance. The use of different types of humor by employees with their immediate co-workers effect on their innovative behavior is first discussed. This is followed by employees’ use of humor with external actors. The chapter ends with a discussion of employees’ innovative behavior’s influence on innovative performance. In all these discussions, hypotheses are formulated to test the proposed relationships.

In chapter 5, the methodology used in the study is presented. It begins by discussing how the questionnaire was developed. Next, the data collection procedure and the demographic information of the respondents are presented. This is followed an outline of the measures used in the study and the psychometric properties of the data. The statistical tools and the tests used to analyze the data and the hypotheses testing are then discussed. Finally, the results of the analyses and the hypothesis testing are presented.
Chapter 6 concludes the research and discusses the findings of the study in relation to previous studies and existing theory. This is followed by a discussion of the study’s contribution to existing theory and implication for management decision making. Finally the limitations of the study and directions for future research end the chapter.
2 HUMOR IN ORGANIZATIONAL CONTEXT

This chapter reviews the humor literature in general and narrows in on organizational humor in particular. An overview is given to shed light on the nature of humor and the various theories that has been propounded to explain the phenomenon. Next the function that humor plays in various individual and organizational outcomes are examined. The chapter ends with a review of how humor has been measured in humor studies in general and in organizational research in particular.

2.1 An overview of the nature of humor

Humor is one of the widely studied human behaviors. This familiar human phenomenon has received (and continues to receive) treatise from anthropology to psychology because of its pervasiveness in all cultures and modern societies (Berger, 1987). This enigmatic phenomenon occupied the minds of great thinkers (e.g. Plato, Aristotle, Freud, and Hobbes) and continues to arouse the curiosity of contemporary scholars. The singular objective of these scholars was (is) to unravel the conundrum surrounding humor and to give us a clear understanding of its nature (Duncan, 1982). This intent has, however, not been fully achieved as there has not been a comprehensive theory which elucidates this phenomenon completely (Berger, 1987; Duncan, Smeltzer and Leap, 1990; Martin, 2007: 31).

Drawing on psychology perspective, Martin (2007: 5) conceptualizes humor as a process involving the social, cognitive, affective and vocal-behavioral aspects. He subsequently classified the humor process into four (4) parts namely: a social context; a cognitive-perceptual process; an emotional response; and the vocal-behavioral expression of laughter. Humor is essentially a social phenomenon and does regularly occur in almost any social situation, for instance, between couples, between strangers sitting in a train or business associates in a meeting. Thus the social context is the avenue for people to act together in a playful way. The mental and perceptual processes involve the processing of information from the environment in a creative manner that results in witty verbal messages or non-verbal actions which are perceived as funny. The perception part ensues when an observer hears or
sees the messages or actions and interprets them as non-serious, playful and jovial. Apart from having an intellectual aspect, humor also draws emotional response from the cognitive-perceptual process. It is this response that appraises a situation as funny or hilarious. Like other emotions, humor is manifested in the form of smile or laughter accompanied by body movements depending on the level of the emotional intensity. Put differently, laughter is the way of communicating one’s emotional pleasure (Martin, 2007:5).

In sum, the psychological process of humor entails the mental evaluation of perceived playful stimuli and the emotional response of happiness and vocal expression of laughter which takes place in a social setting. This gives a simplified process of humor. In the next part, the classical humor theories are examined to present a detailed view and also, deepen our understanding of the phenomenon.

### 2.1.1 Theories of humor

For centuries, the enigma of humor has confounded great thinkers and scholars making them to formulate theories to deepen our understanding of this phenomenon. Historically, the classical theories namely: psychoanalytic theory, superiority/disparagement theory, incongruity theory and arousal theory have been the theories scholars have propounded to elucidate the phenomenon. Indeed, Cooper (2008) intimates that the classical theories of humor constitute the seminal work which forms the conceptual foundation upon which humor scholarship in all disciplines are built. Also, organizational humor researchers have mostly drawn on these primary theories of humor in their studies (Westwood and Johnston, 2013). Table 1 below gives a brief overview of these theories’ premise, their key proponents and examples that illustrates these theories. A detailed discussion of each theory follows subsequently.
Table 1. A Summary of the theories of humor.

<table>
<thead>
<tr>
<th>Theory</th>
<th>Key Proponents</th>
<th>Premise of Theory</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychoanalytic</td>
<td>Freud</td>
<td>Humor serves as mask for people to release their repressed sexual and aggressive impulses and to experience negative emotions without feelings of guilt.</td>
<td>Laughter, sexist humor</td>
</tr>
<tr>
<td>Superiority/Disparagement</td>
<td>Plato, Aristotle, Hobbes, Gruner</td>
<td>Humor is a form of aggression directed towards other people (or one’s self) that are deemed inferior. This playful aggression makes the initiator feel superior and gain some sense of triumph over difficult situations.</td>
<td>Satire, irony, sarcasm, mocking, parody, caricature, ethnic humor, sexist humor</td>
</tr>
<tr>
<td>Incongruity</td>
<td>Kant, Bergson, Koestler, Suls</td>
<td>An object or event is considered humorous if there is an element of incongruity present. An incongruity exists if there is a piece of surprise, ambiguity or difference between what an individual anticipates and what actually happens. The ambiguity is communicated through laughter when the mind ‘observes’ an association between two or more different frames of reference. The humor is appreciated when the incongruity is completely ‘resolved’.</td>
<td>Wit, banter, wordplay, improvisational humor, comedy</td>
</tr>
<tr>
<td>Arousal</td>
<td>Berlyne</td>
<td>Humor contains ‘collative variables’ (e.g. surprise, ambiguity) that stimulates an individual leading to heightened arousal in the brain and nervous system making them to experience mirth. In other words, humor is an emotional response linked with increased physiological arousal. Moderate arousal leads to highest excitement while extreme arousal intensity results in discomfort.</td>
<td></td>
</tr>
</tbody>
</table>
Psychoanalytic theory of humor

Many psychoanalytic theories abound in the literature but this perspective of humor research was popularized by Sigmund Freud in the 1900s. His theory appears to have spawned the others (Berger, 1987). The major premise of this theory is that humor, being a sophisticated phenomenon, helps in disguising libidinal or playful aggression. In building this theory, Freud (1960) drew on Spencer (1860) to explain the object of laughter. He proffered that if excess energy build up in the nervous system, it has to be dissipated and the only means for this excess energy to be shed was through laughter. In explaining laughter, Freud delineated three kinds of phenomena attributable to laughter: wit or jokes, humor (in the narrow sense) and comic. Jokes, according to Freud (1960), distract our conscience allowing for a momentary expression and enjoyment of aggressive or sexual signals. The repressive energy which would otherwise have inhibited these sexual drives becomes surplus. It is this surplus energy that comes out as laughter. Thus, jokes feel enjoyable because of the satisfaction derived from the innate libidinal stimuli (Martin 2007: 34).

The humor aspect of laughter becomes evident in instances when people experiencing negative emotion, arising from unpleasant situation, suddenly perceives hilarious or ambiguous aspects of the situation. They laugh at their own blunders or misfortune to help them stop experiencing this negative emotion. Finally, Freud (1960) explained the comic aspect as the non-verbal source of amusement. In this context, an observer in anticipating an event to happen mobilizes some form of mental energy to process the event. This mental energy becomes redundant when the anticipated condition does not occur which is released in the form of laughter (Martin, 2007: 36). For example, a person watching a clown walk a tight rope expects him to walk to the end of the rope. However, if the clown is not able to make it and falls mid-way, the expectant spectator may burst into laughter to shed the built up excess mental energy.

In analyzing the psychoanalytic theory, Martin (2007: 40) reveals two major drawbacks. First, numerous research have been conducted to test the hypotheses of
this theory. The results, unfortunately, have been inconclusive and inconsistent. Second, the redundant energy-laughter premise on which the theory was built has been found not to be consistent with modern understanding of the nervous system. This has led to the abandonment of the psychoanalytic theory by most empirical researchers. Even though this theory appears not to adequately explain all aspects of humor, it brought to the fore relevant aspects of humor like aggression and sexual themes inherent in most jokes and also the emotional satisfaction derived from humor (Berger, 1987; Martin, 2007: 43).

**Superiority theory of humor**

The superiority or disparagement theory is a social perspective which views humor vis-à-vis an individual’s status in their surroundings. The underlying assumption of this perspective is that humor is a form of aggression and the initiator, feeling an aura of superiority, directs this aggression (exhibited through laughter) towards people who are deemed to be inferior. The early proponents of this view (e.g. Plato and Aristotle) saw laughter and other forms of humor, like teasing, as arising out of malice and a means to inflict pain on people who have experienced some misfortune (Morreall, 1987). This view further suggests that humor results from the sense of eminence people derive when they denigrate others or their own frailty. In other words, people laugh when they feel a sense of triumph over others or their own former positions.

Some superiority theorists (e.g. Hobbes, 1968) argue that humor has strong affective aspect and elicits an equally strong emotional response which takes place in a social or cultural context. Also, it has a sudden impact on people who experience it and is manifested in laughter as well as exhibiting both pro-social and aggressive nature at different times (Berger, 1987). The aggressive nature of humor, according to Gruner (1997) is only “a playful aggression”. This playful aggression is similar to a game where there is fierce competition between two parties which results in a win or loss. The amusement from the humor ensues when the victor, by virtue of having won a duel, feels superior to the vanquished. This forms the theoretical basis for seeing
humor as source of victory over threat of people and situations and conferring mastery over life’s difficulties.

**Incongruity theory of humor**

The incongruity theory, according to Berger (1987) is the most generally approved of the humor theories. This theory, unlike the others, focus mainly on the cognitive aspect of humor. The theory posits that the determination of something as humorous or otherwise is contingent on the perception of incongruity. An event appears funny if there is an element of surprise, inconsistency, illogicality or difference from what was expected (Morreall, 1987). An incongruity occurs when the mind notices an unusual association between two or more opposite ideas, concepts, attitudes or sentiments which normally do not go together but have been merged together consciously or accidentally. For example, when a joke is told the hearer moves back and forth between two thought paths. He or she tries to make meaning of the joke setup but is abruptly shifted onto a new train of thought by the ‘punch line’ of the joke (Duncan et al., 1990). Laughter follows when the mind suddenly ‘sees’ this ambiguity. In other words, laughter is the vocal expression of this ambiguity (Berger, 1987; Lyttle, 2007).

Proponents of incongruity theory maintain that some form of incongruity is a prerequisite condition for humor but not sufficient since not all incongruities are funny. For example, when a child playing a cop points a loaded gun at their playmates, the scene may be incongruous but may not be funny because an accidental pulling of the trigger may result in fatalities. So for incongruity to be funny some scholars (e.g. Suls, 1983) argue that it must happen suddenly; it has to occur in a playful non-hostile setting and it has to be clearly resolved. The incongruity-resolution theorists assert that the resolution of a joke makes it to be appreciated well. Suls (1983), one of the leading proponents of this theory, presents a two-stage model for understanding humor. According to his view, when a joke is told, a listener tries to make an informed guess from the joke setup. He/she draws on their cognitive abilities to find a suitable mental rule to help reveal the punch line from the joke setup. When the punch line is not the same as their guess, an element of surprise
ensues. The incongruity is ‘resolved’ when the punch line is finally found and the joke thus becomes funny. On the other hand, if the punch line is not found, the incongruity remains and a state of surprise results.

The incongruity theorists, in acknowledging the need for the resolution of the incongruity also concede that the incongruity is not completely resolved. They maintain that the resolution is only a false-resolution and if the resolution were to be total, a non-humorous puzzle would rather ensue (Forabosco, 1992). The point of departure between the incongruity theories and the incongruity-resolution theory is that whereas the former theorists maintain that the continued presence of the incongruity produces the humor, the latter theorists insist that humor evolves from the complete resolution of the incongruity.

*Arousal theory of humor*

The arousal theories closely relates to the tension-relief theories which conceptualizes humor as a way of relieving bottled-up psychological tensions or feelings. That is, they focus on the function of psycho-physiological arousal in the humor process. The relief can emanate from various sources such as triumph over a struggle, fear or pain; the perceived weakness of an opponent and disappointment over perceived difficulty of an anticipated task which turns out to be easy (Martin, 2007:58). The related theory of arousal, views humor and jokes as containing the so-called “collative variables” like surprise, inconsistency or ambiguity. The collative variables according to Martin (2007:58) are “stimulus properties… that make stimulus such as a work of art, music or literature aesthetically pleasing.” These collative variables, owing to their unusual and fascinating nature, excite a person causing a heightened arousal in the brain and nervous system. According to this view, the highest excitement is gotten from moderate amount of arousal while extreme intensity of arousal leads to discomfort.

In an exposition of the arousal notion, Berlyne (1972) presented a two-related humor mechanisms- arousal boost and arousal jag to enhance understanding of an inverted U relationship between arousal and pleasure. When a joke is being told or a
humorous incident is being observed the boost mechanism is in charge. The collative variables increase the stimuli to an ideal level where the observer or listener experiences an excitement. When an arousal exceeds the optimal level and begins to be unpleasant, the jag mechanism takes over and the arousing property (punch line) of the joke is resolved instantly. This restores the arousal to its initial optimal level again. The instant reduction of arousal from unpleasant to pleasurable position adds to the hilarity of the joke. Laughter is the expression of the subjective excitement derived from both the arousal boost and the arousal jag.

From the foregoing, it is evident that no single theory has adequately addressed the basic nature of humor. All the theories combined present a bigger picture to help us understand the nature of humor by explaining why people experience or express humor, how humor is created and people’s evaluation of humor’s appropriateness or otherwise. Also, humor is understood to be controlled by complex cognitive, affective and interpersonal processes and these work together to drive this behavior. This study adopts perspectives from all the theories to explain how humor influence individual innovativeness in organizations. In the following, attention is turned to how humor has been categorized for easy elucidation in the literature.

2.1.2 Types of humor

A cursory appraisal of humor may tempt an observer to assume that there are no differences between instances of humor. This conclusion may be arrived at due to similarity in the elements (i.e. surprise, illogicality, ambiguity and mirth) that are present in all instances of humor. However, a careful scrutiny of humor reveals remarkable differences between the instances of humor (Mesmer-Magnus et al., 2012).

In contributing to our understanding of humor, scholars have tried to classify humor into various categories. Various classifications of types of humor abound in literature (see e.g. Holmes and Marra, 2002; Martin, 2007; Speck, 1991). Although these typologies exist in literature, a universally accepted typology is absent (Spotts, Weinberger and Parsons, 1997). A comprehensive humor typology that is often cited
by organizational humor scholars is the humor styles framework proposed by Martin et al. (2003). This framework describes how the various conceptualizations of humor may be arranged in relation to whether the humor is used to promote the self or the individual’s well-being (intrapsychic) or utilized to enhance a person’s relationship with others. Another dimension is whether the humor is relatively harmless or humane and (or) positive or whether the humor is possibly harmful or detrimental and (or) negative. This bi-dimensional conceptualization produces four styles or types of humor. These are affiliative humor and self-enhancing humor (positive) and aggressive humor and self-defeating humor (negative). The synopsis of the humor styles is presented in Table 2 below.

People who engage in affiliative humor tend to share funny jokes, pull good-natured pranks and indulge in witty banters with the aim to make members of a group happy. They may also say funny things about themselves which portray them as easy-going to members of a group. The purpose of using this form of humor is to make others relax which help in interpersonal bonding (Martin et al., 2003). According to Martin et al. (2003) affiliative humor is expected to be related to self-esteem, extraversion, cheerfulness and positive mood and emotions. Its application in organizations could create positive climate, foster togetherness and healthy interpersonal interactions (Romero and Cruthirds, 2006).

People who exhibit self-enhancing humor tend to have a humorous perspective on life. They enjoy the vicissitudes of life and are impervious to the stress and afflictions of life (Martin et al., 2003). This style, akin to emotional reputation or coping mechanism, aids in keeping a positive outlook. In comparison to affiliative humor, self-enhancing humor is more centered on individual well-being than interpersonal cohesion. It relates well with extraversion and anticipated to be negatively related to negative emotions like anxiety and depression and positively to self-esteem, and psychological well-being (Martin et al., 2003). In the organization, its use is to inflate the initiator’s self-image in relation to others in the organization (Romero and Cruthirds, 2006).
Table 2. A typology of humor (adapted from Martin et al. 2003).

<table>
<thead>
<tr>
<th>Style of Humor</th>
<th>Target of the Humor</th>
<th>Function of the Humor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affiliative humor</td>
<td>Interpersonal (Others directed)</td>
<td>The use of this kind of humor helps in building interpersonal relationship. People who employ this humor style share jokes and say funny things about themselves to make others feel comfortable in their company.</td>
</tr>
<tr>
<td>Aggressive humor</td>
<td>Interpersonal (Others directed)</td>
<td>This humor type is employed by people with the sole aim of running-down others and to manipulate them through implied ridicule. Such individuals find it easy to share sexist or ethnic jokes regardless of the jokes potential to disgruntle others.</td>
</tr>
<tr>
<td>Self-enhancing humor</td>
<td>Intrapsychic (Self-directed)</td>
<td>People who use self-enhancing humor are concerned about their personal well-being. They use it to regulate their emotions or as a coping mechanism against life stresses or affliction to make them maintain an optimistic perspective in the face of lingering adversity.</td>
</tr>
<tr>
<td>Self-defeating humor</td>
<td>Intrapsychic (Self-directed)</td>
<td>Individuals who use this form of humor tend to say funny things or ridicule themselves in order to gain acceptance from others. Such people deliberately ‘court’ the ridiculing and teasing of others and appear to ‘enjoy’ such disparagement. People who usually employ self-defeating humor have weakness in dealing with their negative emotions.</td>
</tr>
</tbody>
</table>

Aggressive humor according to Martin et al., (2003) is used with the intention of running-down others and to manipulate them through implied ridicule. Such people find it difficult to resist the urge of poking sexist or ethnic jests which has the potential to disgruntle others. The function of this humor is to enhance one’s status or power in a group or organization. This style is positively associated with neuroticism and negatively with agreeableness, conscientiousness and relationship satisfaction (Martin et al., 2003). Romero and Cruthirds (2006) contend that when aggressive humor is used in an organization, it can whip others in line ensuring conforming
behavior in groups. Also, it can communicate strong reprimand messages albeit in a humorous tone.

Individuals who utilize self-defeating humor say ridiculous and funny things about themselves with the view of amusing others and gaining their acceptance. This involves deliberately courting the ridicule and teasing of others and seeming ‘enjoyment’ of the disparagement (Martin et al., 2003). Also people who are deficient in dealing adequately with their negative emotions tend to indulge in this humor as defense mechanism in other to conceal such negative feelings. Martin et al. (2003) intimate that self-defeating humor is expected to be positively associated with neuroticism and negative emotions like depression and anxiety and negatively with self-esteem and psychological well-being. People who employ this type of humor in organizations intend to lower their status levels so as to relate well with their subordinates (Romero and Cruthirds, 2006).

Although these styles of humor gives a complete conceptualization of humor, in this study the affiliative and aggressive humor styles are adopted. The reason for this choice is that the affiliative and aggressive humor types depicts the interpersonal aspects of humor; as such, are best suited to enhance understanding of the social function humor plays in individuals’ innovativeness in organizations. Having discussed the styles of humor, it would be worthwhile to touch on the functions that humor play in organizations. The following section addresses this aspect of humor.

2.2 The functions of humor in organizations

Humor scholars have revealed that humor has a lot of potential functions. These functions include inter alia, serving as coping or defensive mechanism, for promoting bonding and cohesiveness, for control and exercise of power and for subverting authority (see e.g. Abel, 2002; Robert and Wilbanks, 2012; Ziv, 2010). In the organizational context, humor has been found to be associated with various organizational outcomes. Romero and Cruthirds (2006) contend that the right utilization of humor can reap valuable advantages to organizations and also provide valuable asset to management for motivating employees, communicating effectively
and mitigating conflicts. Needless to add, humor could also cause serious problems in organizations if not handled properly. In this study, the functions that humor plays are examined under three broad categories namely, the social function, the psychological function and the cognitive function. In the following these functions are discussed followed by the potential risks that unconscionable use of humor poses in organizations.

2.2.1 The social function of humor

Humor plays an important role in interactions in organizations by serving as a lubricant that oils social processes among employees (Romero and Pescosolido, 2008). At the individual level, humor helps in building interpersonal relationships among employees who hardly interact. According to Cooper (2008), humor can enhance relationship quality by eliciting positive affect and conveying similarity perception to employees who share humor. In groups, researchers suggest that the use of humor engenders bonding and cohesiveness among group members (Duncan et al., 1990). Romero and Cruthirds (2006) maintain that humor can be used to create a positive reinforcement within the group and also reduce external threat. Similarly, Romero and Pescosolido (2008) argue that humor promotes positive affect which drives social processes and aids in establishing cohesive social bonds. In an empirical study, Terrion and Ashforth (2002) observed Police officers in an executive development course for six weeks to examine how humor fosters group identity and cohesion. The researchers found that (putdown) humor facilitates solidarity among group members.

Relatedly, humor plays an important part in group culture by fostering a favorable environment where interpersonal ties thrive and knowledge and ideas flow freely without any hindrance. Humor is an indispensable asset to communicate desired organizational norms and values (Meyer, 1997); and changing organizational cultures and strengthening existing cultures (Linstead, 1985).

Communication is an essential asset in the interpersonal interactions among organizational members (Miller, 1996). The diverse nature of employees makes the
sending and understanding of messages across the organization quite problematic. However, Greatbatch and Clark (2002) posit that humor ameliorates this challenge by arousing positive affect that improves listening, comprehension and acceptance of messages. In addition, the incongruity of humor allows members to critique each other without experiencing any bad feelings. When people use humor to convey unpleasant messages, it attenuates the impact of the message on the recipient(s) (Lyttle, 2007). This promotes honest and open communication leading to behavioral changes among group members (Romero and Cruthirds, 2006).

In sum, humor reduces the tension in interactions and aids build strong interpersonal relationships; promotes bonding, cohesiveness and solidarity among group members; fosters group culture and improves interpersonal communication.

2.2.2 The psychological function of humor

Although pressure from employees’ social life can trigger stress, events in the workplace can equally drive individuals to experiencing stress reactions. Indeed Colligan and Higgins (2006) intimate that factors such as a poor work environment, excessive workload, role conflict, lack of autonomy, career development barriers, difficult relationships with managers and/ or co-workers, managerial bullying, and harassment contribute to employee stress. The persistence of these stressors pose a risk to individuals physiological and psychological well-being which can lead to negative work-related outcomes like absenteeism, work withdrawal and employee turnover (Colligan and Higgins, 2006; Mesmer-Magnus et al., 2012).

There is a growing body of research that suggests that humor helps in neutralizing the negative effect of stress on individuals (e.g. Abel, 2002; Kahn, 1989; Kuiper et al., 1995; Mesmer-Magnus, 2012). This property of humor lies in its ability in helping individuals to cognitively restructure a stressful situation so that it appears less threatening and to release positive emotions to buffer effects of the negative consequences of the stressful stimuli (Abel, 2002; Dixon, 1980). In other words, the amusement that humor brings induces the experience of positive affect and engenders a new perspective of the stressful situation in the individual (Locke,
According to Mesmer-Magnus (2012) research has shown that humor may decrease burnout and its attendant negative outcomes by helping employees deal with difficult situations, maintain optimistic mood state and positive self-concept. Specifically, Kuiper et al. (1995) found that individuals with high sense of humor are able to alter their perspectives and see the positives in negative life stresses than those with low sense of humor. Similarly, Abel (2002) also studied the linkages between sense of humor, stress and coping strategies and found that individuals with high sense of humor appraised less stress and also reported less anxiety than a low sense of humor group. Also individuals in the high sense of humor group were more likely to use positive reappraisal and problem solving coping strategies than those in the low sense of humor group.

Summing up, evidence from the literature appears to confirm the role that humor plays in mitigating the effects of stressful stimuli on individuals. By being employed as a coping strategy against difficult conditions in organizations, humor protects employees from experiencing negative psychological effects of workplace stressors. Although it emerged that the cognition of individuals plays a part of this psychological function, it seems the role is somewhat obscure. In the next subsection, the cognitive role that humor plays particularly in creativity is explored.

2.2.3 The cognitive function of humor

Theorists propose that the mental processes involved in the creation and appreciation of humor plays an important role in enhancing the creativity of individuals (e.g. Koestler, 1964; Morreall, 1991). For instance, an individual exerts considerable mental energy in crafting a joke that will elicit incongruity in the mind of the hearers. In the same vein, for the joke to be amusing, the hearers undergo complex mental processes and draw on their cognitive abilities to resolve the inherent incongruity in the joke. Thus, the sharing of humor by individuals trains their mental muscles to be more creative. In fact, Morreall (1991) suggests that humor promotes mental flexibility, that is, a group of characteristics like risk taking, creative problem solving, tolerance for ambiguity, change and novelty, and divergent thinking. In similar vein, Mainemelis and Ronson (2006) intimate that play (a related construct of
humor) enhance the cognitive processes of problem framing, divergent thinking, mental transformations, practice with alternative solutions and evaluative ability. These skills have been identified as fostering individual creativity (Amabile, 1988). Relatedly, Holmes (2007:520) also points to humor’s ability to provoke “creative solutions and lateral thinking” which fires intellectual activities that are relevant to the achievement of organizational outcomes.

Numerous empirical studies have investigated and supported the relationship between humor and creativity (see e.g. O’Quin and Decks, 1997 for a review). For example, in series of studies involving the function of humor in adolescents’ creative abilities, Ziv (1983) found that adolescents who were shown humorous film clips prior to performing a creative test, did substantially better than their peers in the control group who did not see the clips. Kudrowitz (2010) also studied 84 participants made up of students, improvisational comedians and professional designers who took part in cartoon caption test and product brainstorming test and found that improvisational comedians produced on average twenty percent more product ideas and twenty-five percent more creative product ideas than professional product designers.

Notwithstanding these findings, the studies have drawbacks. Firstly, they were conducted in a laboratory setting and secondly, cartoons and comedy clips were used as proxy for humor. Therefore generalizing these findings may be problematic because conditions in the laboratory may be entirely different from those in the organization setting. Secondly, humor, being a multidimensional construct, has many facets, hence comedy and cartoons cannot adequately represent the whole phenomenon (Robert and Wilbank, 2012). These drawbacks have prompted some researchers to study these phenomena in organizational settings. For instance, Lang and Lee (2010) examined the functions of three types of humor on organizational creativity and found that liberating humor relates positively to organizational creativity while controlling humor negatively relates to organizational creativity. No significant relationship was found between stress-relieving humor and organizational creativity.
In summation, the survey of both the theoretical and empirical literature reveals that humor enhances the mental abilities of individuals which in turn, make them creative. In these studies, the examination of humor’s cognitive function was limited to creativity but creativity is only a part of innovation. The current study therefore explores the cognitive role that humor plays in individual innovativeness.

The foregoing discussion has focused on the positive functions humor plays in individuals’ social, psychological and cognitive processes. In the following, the potential negative effects of humor in organization are discussed.

2.2.4 The risks of humor use in organizations

Traditionally, humor has been portrayed by some academics and consultants as a positive behavior that brings enormous benefits to individual and organizations (e.g. Mesmer-Magnus, 2012; Barsoux, 1996). However, Billig (2005: 10) contends that there are some negative aspects of humor that scholars have intentionally neglected owing to their unpopular and problematic nature. Relatedly, Lyttle (2007) suggests that there are some drawbacks of humor which makes it risky for organizations to adopt into their culture.

First, negative humor, notably disparagement humor, has the tendency of fostering hostility towards a targeted group through prejudice by enacting and bolstering stereotyping of targeted groups (Ford and Ferguson, 2004). This may defeat the goal of promoting diversity and inclusiveness in organizations. Ford and Ferguson (2004) posit that disparagement humor has a negative social implication because it alters the norms of self-regulation that dictates discrimination instead of inclusion of the disparaged group. It sends messages of implicit approval of discrimination against members of the targeted group by trivializing the expression of prejudice. For instance, a chauvinist may hide under the cloak of office humor to share sexist jokes about women in the organization. Although prejudiced people tend to approve of negative humor and may feel comfortable to express it devoid of any social consequences, their action could have dire repercussions for the organization. Some insensitive and irresponsible racial or sexist jokes may provoke the offended
individual to seek legal or administrative redress which may have serious financial and brand image consequences for the organization (Duncan et al. 1990; Quinn, 2000). Also, unconscionable use of negative humor has the tendency of alienating a group of workers and pushing some good staff to leave the organization. For example, in her study of four New Zealand firms, Plester (2009) found that excessive use of humor was cited by some workers as one of the reasons for their leaving the firms.

Second, humor can be used by managers to display excessive power (Romero and Cruthirds, 2006). Unguarded humor use by managers may portray a fun-filled work environment. However, it may be a subtle attempt at using it as a façade to cover their domineering and controlling motives (Plester, 2009). Similarly, Ackroyd and Thompson (1999: 100) argue that subordinates undermine organizations and subvert authority through their use of humor. The scholars claim that most workplace jokes cynically questions management’s decision making abilities, their actions, inactions and motives. Used either way, humor has the potential of promoting managerial excesses or resisting managerial authority.

Third, when organizations are going through crisis, there is the temptation to try all manner of strategies to get out of the turmoil. Some consultants are quick to prescribe the adoption of humor by these organizations to remedy the situation. However, the wholesale adoption of the ‘humor panacea’, instead of proper diagnosing and solving the real problems, could backfire and aggravate the situation (Kahn, 1989). Finally, Lyttle (2007:241) asserts that organizational humor can cause “simple distractions” which can make employees to gloss over quality or safety standards.

In sum, humor has been seen as having the potential to bring positive individual and organizational outcomes. In its application in organizations, care should be taken in order not to cross the borderline where its utility becomes counterproductive. Having examined the functions of humor in organizations, attention is now turned to how humor has been conceptualized and measured in previous studies.
2.3 The measurement of humor in organizations

The possibility of researchers arriving at conclusive results and unraveling important insights about particular phenomena hinges on how accurate measurements of the constructs or behaviors under investigation are developed. The key to achieving this feat is a thorough understanding of the phenomena and the crafting of an all-encompassing definition of the constructs grounded in theory (Hinkin, 1995). A major challenge that has plagued humor theorists for years is their inability to reach a consensus on the definition of humor. In a meta-analysis, Mesmer-Magnus et al. (2012) note that the attempt to define humor by scholars has been replete with complication arising from the complexity of the humor construct. According to the scholars, what makes the operationalization of humor difficult stem from the semantic misunderstanding between ‘humor’ and ‘sense of humor’, the varied and multi-dimensionality of humor, the varied quantification of sense of humor, as well as the many styles or types of humor.

The semantic misunderstanding is as a result of scholars’ erroneous use of sense of humor interchangeably with humor, which in reality is a different facet of the humor construct (Mesmer-Magnus et al., 2012). For instance, whereas sense of humor is a personality trait that helps in humor appreciation and its use for coping and interaction, humor is funny communication shared between a speaker and recipients (Cooper, 2008). This show that there are differences between the two concepts and one cannot be the substitute of the other. As noted earlier, this study conceptualize humor as amusing communication shared between two or more actors in a social context as such sense of humor is not discussed (for a thorough discussion on sense of humor, see e.g. Ruch, 1998). Humor’s ubiquity lies in its numerous dimensions which makes the capturing of all these dimensions in a single definition herculean. There have been varied differences in the conceptualization of the dimensions of humor in humor research (Mesmer-Magnus et al., 2012). Some researchers attempt to incorporate many dimensions as possible in their scales development while others focus on few dimensions. For example, Martin et al. (2003) Humor Styles Questionnaire (HSQ) proposes four dimensions of humor while Lang and Lee’s (2010) Organizational Humor Scale (OHS) articulates three dimensions of humor.
The different ways of conceptualizing humor, observes Martin (2001), has made researchers to devise manifold approaches to measure this construct. Some of these approaches are: the self-report scales, humor appreciation measures, ability tests and behavioral observation techniques. Most of the existing measures tend to narrowly focus on humor’s positive effects on personality and individual well-being. This is understandable because a good number of these studies find their roots in the positive psychology school (Martin, 2001). The burgeoning organizational humor research needs refined theories, clear conceptualizations and robust measures that tap into relatively wide range of potential humor dimensions (Hinkin, 1995). However, there are only a handful of validated scales specifically designed for organizational humor research (e.g. Avolio et al., 1999; Cann, Watson and Bridgewater, 2014; Decker and Rotondo, 2001; Lang and Lee, 2010). Most studies adapt and modify established scales from other disciplines to measure humor in organizational context. These adapted scales partly accounts for the persistent equivocal findings that have characterized humor research in organizations (Cann et al., 2014). Researchers have seen the limitations of the existing measures and have begun developing and validating tailor-made scales to advance empirical research in the field. For instance, Cann et al. (2014) recently developed the Humor Climate Questionnaire (HCQ) that assesses the role of positive and negative types of humor in the work environment on job satisfaction and organizational commitment.

The development of a new scale to measure organizational humor is beyond the scope of this study; therefore existing validated scales are adapted and used. Martin and colleagues’ (2003) Humor Styles Questionnaire (HSQ) and Lang and Lee’s (2010) Organizational Humor Scale (OHS) are used in this study. These scales were adapted based on a number of reasons. First, the HSQ is an established scale with robust psychometric properties that has been validated in other studies. Although the scale was originally developed for social psychology research, it has been successfully adapted in some organizational studies and also used to validate other organizational humor scales (e.g. Cann et al., 2014; Kalliny, Cruthirds and Minor, 2006). In addition, the sub-scales of affiliative and aggressive humor reflect the interpersonal or social aspects of humor in organizations as such are relevant for this study. Second, the OHS was specifically developed to study humor in an
organizational setting thus it adequately suits this study’s context. Also, the scale has good psychometric properties and its liberating and stress-relieving humor sub-scales captures the cognitive and psychological dimensions of humor in organizations.

This chapter began by reviewing the major theories of humor and the various conceptualization of humor as used in humor research. Next, the social, psychological and cognitive functions that humor plays in employees’ interactions as well as the potential risks of using humor in the organization were discussed. Finally, a survey of how humor has been measured in humor research in general and in organizational studies in particular was also done. In the next chapter, the literature on innovation is reviewed to present the overview of the phenomenon. The discussion will then be narrowed to focus on individual innovativeness.
3 KEY ASPECTS OF INNOVATION

In this chapter, key aspects of innovation are examined to enhance understanding of the phenomenon as used in this study. This chapter is arranged as follows: first, a general overview of innovation is given by reviewing how the phenomenon has been treated in the literature. Second, the discussion narrows in on individual innovativeness by examining the concept of innovative work behavior. Third, the chapter ends with a review of the various organizational and individual determinants of innovative work behavior.

3.1 Overview of innovation

In today’s global marketplace which is characterized by intense competition, changing customer demands and lifestyle as well as technological advances and changing business environment; the need for organizations to innovate is becoming increasingly profound (Goffin and Mitchell, 2010:2). Innovation is widely regarded as playing a central role in organizations’ value creation and also being a key source of their sustainable competitive advantage (Crossan and Apaydin, 2010). Indeed, some scholars even suggest that innovation is the life blood for a firm’s survival and growth (Bessant, Lamming, Noke and Phillips, 2005; Zahra and Covin, 1994). Innovation is seen as a strategic issue and its importance is manifested in the intense interest it has generated in academia and in practice since the seminal work of Schumpeter in 1934.

Because of the importance of this phenomenon, different conceptualization and definitions have been given by scholars in different fields. In order to give a clear overview and enhance understanding of innovation, different definitions are reviewed and the definition that fits the context of this study is chosen and briefly discussed. In addition, the various dimensions of innovation identified in the literature are discussed and situated in the context of this current study.
3.1.1 Innovation defined

Innovation has been defined by researchers and practitioners in a variety of ways. Some have looked at it from the value perspective; others too have sought to explain it based on its degree of newness or novelty. Yet still, some have defined it from the viewpoint of their disciplines. For example, Porter (1990: 780) states that innovation is “a new way of doing things (termed invention by some authors) that is commercialized.” The implicit assumption underlying this definition is that innovation is valuable only when it adds economic value to a firm. Thus, it narrowly focuses on product and service innovation. This definition appears problematic since innovation may not always be valuable to a firm (Kimberly, 1981).

Most of the innovation definitions in the literature focus on the degree of novelty or newness of the innovation. For instance, Damanpour (1991: 556) defines innovation as “the generation, development, and adaptation of novel ideas on the part of the firm. The OECD Oslo Manual (2005: 46) also defines innovation as “the implementation of a new or significantly improved product (good or service), or process, or new marketing method, or a new organizational method in business practices, workplace organization or external relations. In these definitions, ‘newness’ is the common thread which runs through them. However, using newness to equate innovation raises a challenge since an innovation that is new in a firm may not necessarily be new to another organization (Van de Ven, 1986).

West and Farr (1990: 9) also view innovation as “the intentional introduction and application within a role, group, or organization of ideas, processes, products or procedures, new to the relevant unit of adoption, designed to significantly benefit the individual, the group, organization or wider society.” This definition is adopted for this study because it has a number of features that fits the current study’s context. Firstly, it explicitly identifies innovation as an organization-wide phenomenon that is not limited to a particular section of the organization or peculiar organizational actors. In the present study, every employee is assumed to contribute to innovation activities in an organization. Secondly, the novelties introduced and applied helps brings beneficial outcomes such as increased performance, organizational
effectiveness and improved job performance. Although the beneficial outcomes can extend across all levels in an organization, the focus of the present study is on individual level performance.

3.1.2 Dimensions of innovation

Innovation is a broad terminology and just like other concepts which is studied under various disciplines, it has multiple meanings and dimensions. According to Damanpour and Gopalakrishnan (1998), organizational innovation scholars conceive innovation either as a process or an outcome. The innovation as a process entails how innovation emerges, develops and is institutionalized in a firm’s routine activities. Innovation can evolve from a firm’s internal value chain functions or can be copied or adopted from external value-added chain of suppliers, customers, partners, university, research institutions, competitors and related industries (Zahra and Covin, 1994; Afuah, 2003). Both sources are considered in this study because they represent the two contexts in which employees are expected to interact with other actors and exhibit their innovative behaviors (de Jong and Kemp, 2003). Daft (1978) suggests that innovation can be initiated at the top by management and cascade to the bottom of the organization or it can be conceived by the technical core and move up the organization and accepted by management. Similarly, innovation can occur at the individual, group or firm levels (West and Altink, 1996). In the current study, innovation behavior is not limited to a specific group of individuals but all organizational members are expected show this behavior in their daily activities. Although innovation behaviors take place at all levels in an organization, the individual level is of interest in this study.

Innovation as an outcome dimensions seek to explain the nature of innovation by distinguishing its diverse kinds. One dimension of innovation depicts the degree of newness of an innovation outcome.Traditionally, researchers have dichotomously distinguished innovation as radical or incremental depending on the magnitude of change (Garcia and Calantone, 2002). Radical innovation causes substantial changes in activities of organizations or industries which lead to the monumental transformation of these organizations or industries. Conversely, incremental
innovation denotes marginal changes in activities of firms which merely bolster the existing capabilities of these firms (Gopalakrishnan and Damanpour, 1997). Individual innovativeness can lead to both types of innovation. However, in organizations innovative behaviors of employees are likely to result in more incremental innovations than radical innovations. Usually, radical innovations emerge from formal research and development activities. Notwithstanding this possibility, no bounds are placed on any type of innovation in this study. Every new and beneficial intervention is considered as innovation provided it emerged from an employee’s effort.

Numerous forms of innovation are distinguished in the literature. These are product or service innovation, process innovation, organizational innovation, marketing innovation and business model innovation (Crossan and Apaydin, 2010; Oslo Manual, 2005). Product or service innovation is the introduction into the market of new or significantly improved good or service in a timely manner. Process innovation is the introduction of new production method, procedure or new technology with the intent to enhance production or logistical processes. Also, the implementation of new structures, processes, managerial and working concepts in the firm’s business practices, workplace organization and its external relationships denotes organizational innovation. More so, Marketing innovation entails bringing new or meaningful changes to an organization’s marketing mix. Lastly, business model innovation signifies the creation, capturing and delivering of value to a firm’s customers (Crossan and Apaydin, 2010; Oslo Manual, 2005). Although identified in the literature, in practice all these forms rarely take place simultaneous in an organization. However, since the organizations in this study operate in different industries, it would be impractical to place bounds on a particular form of innovation. Therefore all innovation forms are captured in order to get a holistic view of the phenomenon.

In the foregoing, the various definitions and dimensions of innovation and how they relate to the current study were discussed. In this study, innovation is limited to the individual level. As stated earlier, humor is conceptualized as individual communication behavior hence the focus of this study is on the role of humor in
individual innovativeness. The reasons being that: first, this study is mindful of Sosik’s (2012: 527) admonition to humor researchers to take levels of analysis serious. So the concepts are placed on the same level to avoid the potential “misalignment between data and theory.” Second, since humor is conceptualized as individual behavior, it is logical to also conceptualize individual innovativeness in a similar vein. As such, the concept of innovative work behavior is chosen to represent individual innovativeness. The rationale for this choice is that unlike similar employee-oriented behaviors such as proactive work behavior, suggestion schemes, organizational citizenship behavior, continuous improvement and corporate entrepreneurship, innovative work behavior “most clearly fits innovation discourses” (Tuominen, 2013: 18). In the next section innovative work behavior is discussed in detail followed by a review of its antecedents identified in the literature.

3.2 The concept of innovative work behavior

There is a growing consensus that innovation in organizations is realized through the efforts and behaviors of employees. Individual innovation remains the key driver of organization-wide innovations (Kesting and Ulhøi, 2010). Nonetheless, innovation at the individual level is not easily defined and measured. Most research conceives individual innovation as creativity and suggestion making (Dorenbosch, van Engen and Verhagen, 2005). Although creativity appears related to individual innovation (and are sometimes used interchangeably), individual’s innovation is more than being creative. Creative behavior is seen as a facet of an individual’s innovative behavior which only involves the generation of novel ideas (Amabile, 1988) whereas innovative behavior involves both the generation and implementation of new ideas with the potential of producing some benefits (West and Farr, 1990).

Consequently, researchers have conceptualized individual’s innovative work behavior1 as a complex behavior encompassing both employee creative behavior and

1 In the literature, some scholars refer to innovative work behavior as innovative behavior (e.g. Scott and Bruce, 1994; Yuan and Woodman, 2010). The likely reason may be that this behavior is implicitly assumed to be exhibited by employees in a work setting. In this study, the term innovative work behavior is used for purposes of consistency.
implementation behavior (sees e.g. de Jong and den Hartog, 2010; Janssen, 2000; Scott and Bruce, 1994; Yuan and Woodman, 2010). This study follows Yuan and Woodman’s (2010: 324) and defines innovative work behavior as “an employee’s intentional introduction or application of new ideas, products, processes, and procedures to his or her work role, work unit, or organization.” In other words, innovative work behavior entails an employee’s conscious generation and use of novelties, either developed in the organization or adopted from external sources, to enhance their work activities or organizational processes in general. Examples of such behaviors include finding solutions to problems, convincing people to support new ideas, finding new approaches to doing work and searching for new methods and technologies.

Innovative work behavior is a set of inter-related behaviors with different facets. In the literature, scholars have delineated various typologies (see e.g. Axtell, Holman, Unsworth, Wall, Waterson and Harrington, 2000; de Jong and den Hartog, 2010; Janssen, 2000; Kanter, 1988; Scott and Bruce, 1994). However, in this study, four main behavioral activities are distinguished namely, idea exploration, idea generation, idea promotion and idea implementation (de Jong and den Hartog, 2010). The idea exploration commences this multi-stage process. It involves searching for alternative ways to improve current products, services or products. The need to fix an existing problem or the discovery of an opportunity gives rise to this behavior. Idea generation follows idea exploration and it entails the production of useful ideas or solutions which could be entirely new or adopted. The idea promotion stage involves the courting of the support of potential allies to provide the necessary backing for the new ideas. Idea implementation leads to the development of a model or prototype that can be turned into productive use in a work role, group or organization. This stage ends the process. The idea exploration and idea generation falls under the creativity-related work behaviors whereas the idea promotion and idea implementation belong to the implementation-related work behavior (Dorenbosch et al., 2005).

Even though these dimensions are identified in the literature, in reality they do not follow a linear sequence. Scott and Bruce (1994) concede that innovation being an
iterative process may necessitate the use of different activities and combination of different individual behaviors at each stage of the process. For instance, an individual exploring a new idea to solve a pressing work problem may not wait until he/she has found a workable solution before looking for the support of their colleagues. Rather, he/she will ‘sell’ their idea to them at an early stage to ensure that the new idea when found, could be speedily implemented.

Perhaps with the possible exception of scientists, engineers and other R&D staff, other employees are not mandated to innovate in their formal roles. As such scholars usually conceptualize innovative work behavior as a discretionary, extra-role behavior. Putted differently, it is not a mandatory or formal behavior because it does not form part of employees’ contractual agreements and as such it is not recognized by the formal reward systems (Janssen, 2000; Katz and Kahn, 1978). Therefore individuals who exhibit this behavior may likely be acting as a result of their intrinsic motivation (Ramamoorthy, Flood, Slattery and Sardessai, 2005). However, Janssen (2000) believes this discretionary behavior is likely to benefit organizations in the form of innovation outcomes and individuals or group of individuals as socio-psychological gains such as increased job satisfaction; improved demand-ability fit and improved interpersonal communication. This study departs from this notion and sees innovative work behavior as both in-role and extra-role behavior (Tuominen and Toivonen, 2011). Since this study’s participants are not limited to a particular class of profession (e.g. researchers and scientists) it is impractical to place a bound on a particular behavior. Therefore any behavior exhibited in a formal or informal role that leads to innovative outputs is considered innovative work behavior.

Given the perceived notion that innovative behavior of employees translate into organizational innovativeness and competitiveness, most research on innovative work behavior have sought to isolate potential drivers or antecedents of this behavior. The varieties of antecedents that have been identified in the literature are discussed in the following section.
3.3 Antecedents of innovative work behavior

As mentioned earlier, the literature on innovative behavior is replete with studies that focus on identifying the potential determinants of individual innovation in the workplace. These factors can be classified broadly into organizational-related factors and individual-related factors (Dörner, 2012).

The organizational-related factors are those drivers which fall under the domain and control of the organization. These factors pertain to job-relevant dimensions, supervisory behaviors and team dynamics (Axtell et al., 2000; Janssen, 2005; Mumford, Scott, Gaddis and Strange, 2002). Researchers have examined a variety of job-related factors effect on innovative behavior. For instance, Janssen (2000) studied the effect of job demands on innovative behaviors of employees in a food manufacturing company and found a positive relationship between these variables. Also, Dorenbosch et al. (2005) examined the impact of job flexibility on individual innovative processes. Their findings suggest a multifunctional job design enhances innovative work behavior. Relatedly, job autonomy (Ramamoorthy et al., 2005), job tenure (Dorenbosch et al., 2005) and job control (Axtell, Holman and Wall, 2006) also have been established as having an influence on innovative behavior.

The relevance of organizational leadership has received considerable attention from scholars. Most studies have sought to explore the impact of various leadership styles on the innovativeness of subordinates. Specifically, the effects of participative leadership, transactional leadership, transformational leadership, leader-member exchange on individual innovativeness have been dominant in the literature (see e.g. de Jong and den Hartog, 2007; Janssen, 2005; Pieterse, Van Knippenberg, Schippers and Stam, 2010; Scott and Bruce, 1994; Yuan and Woodman, 2010). For example, in a study of knowledge-intensive firms, de Jong and den Hartog (2007) found leaders stimulating behaviors influence employees’ innovative behaviors. Lastly, organizational climate for innovation and organizational support for innovation have also been distinguished as important determinants of individual innovative work behavior (Axtell et al., 2000; Scott and Bruce, 1994). Unlike the job-related and leadership factors, team level factors appear to be the least studied. However, the few
studies have found support linking various group factors to innovative work behavior. Notably, Axtell and colleagues’ (2000; 2006) longitudinal study of team innovative processes found management support, team support for innovation, role breadth self-efficacy and job control related to different phases of employees’ innovative behavior.

At the individual level, factors that relate to personal characteristics, cognitive and affective dispositions have been studied. Predominant factors that have been examined include self-efficacy (Dörner, 2012), proactive personality (Seibert, Kraimer and Crant, 2001), propensity to innovate (Bunce and West, 1995), problem ownership (Dorenbosch et al., 2005), problem solving style (Scott and Bruce, 1994), and expected job performance, expected image risks and image gains (Yuan and Woodman, 2010). In a longitudinal study of a public health service, Bunce and West (1995) observed that personality factors consistently predicted individual work role innovation. Carmeli, Meitar and Weisberg (2006) also investigated the effect of individual self-leadership skills on innovative behaviors and found a positive association between them.

In sum, from the survey of the literature, it seems considerable efforts have been made to research the determinants of innovative work behavior. The factors that have been examined are extensive but they are not exhaustive; other factors are yet to be investigated. For instance, although humor is seen as an important driver of employee’ cognitive, affective and behavioral responses (Lang and Lee, 2010), its role as a potential driver of innovative work behavior is yet to be explored. This study, therefore, attempts to fill this research gap and also build on this growing body of literature by exploring the effects of types of humor on the innovative behavior of employees.

This chapter opened with a general discussion on innovation by reviewing the various definitions and dimensions in the literature. The discussion then moved on to the concept of innovative work behavior. Having clearly explicated the theories used in this study, the next chapter draws on these main theories to develop and test a conceptual model.
4 ORGANIZATIONAL HUMOR TYPES, EMPLOYEES’ INNOVATIVE WORK BEHAVIOR AND INNOVATIVE PERFORMANCE

The survey of the literature on humor revealed that humor can serve diverse functions including influencing innovation in the workplace. This chapter draws on humor, social psychology, creativity and innovation literatures to develop a conceptual model for testing. This model proposes that the use of humor to serve various functions impact employees’ innovative behavior which in turn affect their perceived innovative performance. Figure 1 below represents this conceptual model. The model is empirically tested in two contexts—employees’ use of humor with immediate co-workers and with external actors (herein referred to as in-group and external group respectively).

In the following, the proposed relationships underlining the model are discussed and hypotheses are presented. The first section describes the relationships between the types of humor and innovative behavior in the two contexts. The next section examines the link between employees’ innovative behavior and perceived innovative performance.

4.1 The effects of humor use with co-workers on innovative work behavior

The circumstance under which the use of humor in an organization may influence employees’ innovative behavior depends on the function that humor serves. As discussed previously, humor can serve different functions. In the following, the effects of affiliative humor, aggressive humor, coping humor and reframing humor use by employees with their close co-workers on innovative work behavior are examined.

4.1.1 Affiliative humor and innovative work behavior

Individual innovation is a social process because it is partly determined by the innovator’s interaction with other people in the organization (de Jong and den
Hartog, 2010). As such, it is important for innovative employees to build strong social relationships in the workplace (Amabile, 1988; Woodman et al., 1993).

Indeed, social relationships have been theorized and empirically supported to affect individuals’ creativity (Perry-Smith and Shalley, 2003; Perry-Smith, 2006). Drawing on the social network theory, Perry-Smith (2006) argued and found that an individual’s position in a network, the strength of the network and their external ties all interact to affect their creativity. This lends credence to the assumption that cordial social relationships foster idea generation and idea implementation. This is where the function of humor as social lubricant becomes invaluable. The use of affiliative humor (e.g. good natured jokes, lighthearted banter, and funny stories) by workers facilitates communication, improves interpersonal interactions, reduces conflict, and promotes the development of congenial work environment (Holmes, 2006; Romero and Cruthirds, 2006; Ziv, 2010). Similarly, Martin et al. (2003) suggest that the use of affiliative humor in interactions enhances feelings of well-being and attraction to others which lessens interpersonal friction and helps in building strong relationships. Thus, the use of affiliative humor can foster employees’ innovative work behavior by creating and maintaining a cohesive bond between workers. Employees’ can utilize the rapport from this bond to search for information, different opinion and other resources especially at the idea exploration and idea generation stages (Mainemelis and Ronson, 2006). Also, individuals can leverage their strong ties from the cohesive bond to support the promotion of their new ideas or concepts and new solutions (Romero and Cruthirds, 2006).

Furthermore, affiliative humor benefits innovative work behavior by reducing interpersonal conflict and resistance to change. Individuals who exhibit innovative behaviors run the risk of interpersonal conflict and resistance from their co-workers and supervisors who want to maintain current established practices (Janssen, 2003; Janssen, Van de Vliert and West, 2004). According to Janssen and colleagues (2004), some people tend to resist change in the workplace because they feel comfortable with existing work practices hence avoid any change that might bring uncertainty and insecurity in their work roles or organization.
Figure 1: The proposed conceptual model of the study
Individual innovators, on the other hand, may be dissatisfied with prevailing practices and would want to bring change. This divergent interest of innovators and their co-workers who want to maintain the status quo can spark serious interpersonal conflict (Kanter, 1988). In such situation, the use of humor could break the resistance and bring people together to iron out their differences if conflict arises. As alluded to earlier, people like the company of individuals who share jokes and amuses them therefore individual innovators could use humorous exchanges to ‘sell’ their novel ideas and also allay the fears of their resistant colleagues thereby convincing them to embrace the change. Indeed, McMaster, Wastell and Henrikson (2005) suggest that employees can assume the role of corporate jesters and use humor to exert change in an organization’s innovation adoption process.

Similarly, innovators can share jokes and funny stories with resistant co-workers to help mend any fractured interpersonal relationships (Duncan et al., 1990). The utility of humor as conflict management strategy has been empirically tested. In a study, Smith, Harrington and Neck (2000) found that humor was positively related to the conflict management strategies of avoiding, compromising, smoothing and confronting but negatively related to forcing.

Cumulatively, the use of affiliative humor in organizations can improve the innovative work behavior of employees by helping build strong relationships, by increasing their psychological safety and by reducing resistance to change and interpersonal conflict. Thus it is hypothesized that:

*H1a: An employee’s affiliative humor use with immediate co-workers is positively related to innovative work behavior.*

### 4.1.2 Aggressive humor and innovative work behavior

The use of aggressive humor in the workplace has a dual role; it can hurt interpersonal relationships or help build cohesive groups (Romero and Cruthirds, 2006). This dual role that aggressive humor plays can hamper or enhance employees’ innovative work behavior depending on how it is used.
Employees’ use of aggressive humor can be inimical to innovative work behavior in an organization because of its relationship destroying tendency. Firstly, individuals initiate innovation in firms but they depend on their colleagues and supervisors for information, resources and socio-political support to further develop, test and implement the innovation (Janssen et al., 2004). Therefore, when employees intentionally use sexist or racial jokes, ridicule and teasing to disparage their co-workers, they risk offending and alienating them (Hemmasi, Graf and Russ, 1994; Kahn, 1989; Martin et al., 2003). In such situation, the offended parties may decide to withhold vital information or their support (if they are not under any obligation) for further development, testing and implementation of novel products or work processes of the innovator.

Secondly, employees who show initiative and proactive behaviors may be seen as a threat by their supervisors and co-workers. This is because their ideas for change magnify problems and inefficiencies in their organizations which may bring their supervisors’ professional competence and intellectual abilities into question (Janssen et al., 2004). Supervisors who perceive such threat can ridicule, mock or use other disparaging remarks to belittle or disqualify innovative ideas being proposed by their subordinates (Janes and Olsen, 2000). Likewise, co-workers who are opposed to the change can employ aggressive humor to mobilize forces of resistance (McMaster et al., 2005). For instance, the persistent display of cynicism and ridiculing of the innovative ideas by few opposing co-workers may reinforce other skeptical workers’ belief that the ideas are indeed impractical thereby deepening the resistance. More so, innovative employees who are constantly at the receiving end of aggressive humor may not feel psychologically safe to search for innovative ways to solve existing problems. The psychological insecurity arises from the fear of being disparaged or embarrassed when they make mistakes or fail. Consequently, individuals who cannot stand such hostile humor or aggression may be forced to abandon their change oriented behaviors (Plester, 2009).

Conversely, the use of aggressive humor, especially among close co-workers, may enhance employees’ innovative behaviors. According to Romero and Cruthirds (2006), aggressive humor may not be entirely negative but can play some positive
roles in the workplace. In fact, researchers have empirically established that aggressive humor can foster interpersonal bonding and group cohesiveness so far as it is expressed within the boundaries defined by the group’s customs (Cooper, 2005; Terrion and Ashforth, 2002). In an experimental study of how individuals produce and share humor in six groups, Scogin and Pollio (1980) observed that group members shared deprecating humor together even when it is targeted at individual members. The communal enjoyment of the aggressive humor at the expense of individual members strengthens the bond between the group members. Also, Terrion and Ashforth (2002) investigated the process through which put-down humor foster group identity and cohesion in temporary groups. They observed Canadian police officers in a six-week executive course and found that the use of put-down humor at the various stages of the group development increased trust, inclusion and solidarity among the officers. Similarly, Plester and Sayers (2007) studied three IT firms in New Zealand and found that the use of banter among workers in the firms facilitated the socialization of work-group members.

Given that aggressive humor enhances intragroup cohesion, builds trust and solidarity, innovative employees can get the needed information and resources to generate novel ideas. Also, they can leverage the social support from close members with whom they share this humor to promote their ideas to other workers in the organization. In addition, individuals who repeatedly engage in teasing, bantering and sarcasm may have the confidence to take risk and propose new changes to their work roles or organizations. Such individuals may have developed ‘immunity’ to disparagement so even if they fail and are ridiculed, they can endure it (Plester and Sayers, 2007).

Taken together, when used with the intent to denigrate others, aggressive humor can destroy interpersonal relationships and trigger conflicts in the workplace which in turn decreases employees’ innovative behaviors. On the other hand, when shared among close co-workers as part of group norms, it can build interpersonal relationships; facilitate group bonding and solidarity thereby enhancing individuals’ innovative work behavior. Given this seemingly conflicting functions that aggressive humor serves in the workplace, its impact on employees’ innovative work behavior is
difficult to predict. On the balance of the arguments adduced, it can be assumed that aggressive humor may not have any effect on individuals’ innovative work behavior. Hence the following hypothesis is proposed:

\[ H1b: \text{An employee’s aggressive humor use with immediate co-workers is not related to innovative work behavior.} \]

4.1.3 Coping humor and innovative work behavior

The complexity of the innovation process demands that individuals perform one or more activities simultaneously. For example, they can be generating and promoting new ideas at the same time (de Jong and den Hartog, 2006). In shuttling between these innovative activities, individuals expend huge cognitive, emotional and social efforts which can have negative consequence on their physical and psychological wellbeing. For instance, employees performing innovative behaviors (i.e. extra role behaviors, Ramamoorthy et al., 2005) in addition to their prescribed work roles may have to strike a careful balance between these roles so that one role does not suffer at the expense of the other. Striking this balance may exert considerable psychological and emotional strain on them. In a study, Bolino and Turnley (2005) found that high levels of individual initiative are related with higher levels of employee role overload, job stress, and work–family conflict.

Also, promotion of new concepts and convincing resistant co-workers and other stakeholders for support can be emotionally and physically demanding for innovative employees (Janssen, 2004). Individuals who encounter these challenges may experience increased negative emotions such as anxiety, frustration and disappointment which may lead to decreased motivation to exhibit innovative work behavior. Such individuals may revert to their normalized behavioral patterns (Farr and Ford, 1990).

Given the potential stress associated with innovative work behavior, the use of humor by employees can serve as coping mechanism to mitigate its debilitating effects. When individuals experiencing negative emotions share and enjoy humorous
events (e.g. light-hearted jokes), their minds are taken off the stressful stimuli thus reducing its harmful effects on their wellbeing (Dixon, 1980; Kahn, 1989). The amusement that humor offers induces the experience of positive affect and engenders a fresh outlook in the individual (Locke, 1996). Specifically, Freud (1960) suggests that when individuals experiencing negative emotions express hilarity in response to shared jokes, they relieve the stifled emotions which allow them to see the ambiguous aspects in the stressful situation. Similarly, Gruner (1997) argues that when people facing difficult challenges laugh themselves, they tend to gain psychological urge and mastery over the stressful or challenging situation. Also, in a study of factory workers, Roy (1959) found that the joking behavior among the manual workers relieved them from the boredom and monotony associated with their routine jobs. Abel (2002) also studied the linkages between sense of humor, stress and coping strategies and found that individuals with high sense of humor appraised less stress and also reported less anxiety than a low sense of humor group. Also individuals in the high sense of humor group were more likely to use positive reappraisal and problem solving coping strategies than those in the low sense of humor group. Thus, innovative employees’ use of humor in a stressful situation can help them to cope and continue with their innovative work behavior. Consequently, it is hypothesized that:

**H1c:** An employee’s coping humor use with immediate co-workers is positively related to innovative work behavior.

### 4.1.4 Reframing humor and innovative work behavior

Humor’s function of helping people to reframe their normally held mindsets and to see things in a different light (Kahn, 1989) can enhance employees’ innovative behaviors. When people share humor (e.g. wit, funny stories and wordplay), they try to make meaning out of one or more ideas or concepts that have been incongruously juxtaposed. In order to meaningfully resolve the incongruity, they need to temporarily suspend their carefully held beliefs and assumptions, step back from rationality into the realm of absurdity to be able to make a connection between these incompatible frames of reference. In other words, the use of humor frees individuals
from thinking and acting in pre-defined fashion into a flexible thinking mode in which they see things with new perspective (Berger, 1987; Kahn, 1989; Koestler, 1964).

Innovative work behavior entails breaking free from established norms and trying things in new ways to solve existing work related problems (Torrance, 1995). As such, the use of reframing humor by employees may facilitate individual innovativeness at different stages of the innovation process. For instance, at the idea exploration stage which involves the searching of alternative ways to solve existing problems, individuals use of humor may allow them to briefly disengage from the problem and adopt a non-critical view of the situation. This non-serious stance taken to frame the existing problem provides enough room for its reappraisal in a new way which could result in novel solutions (Mainemelis and Ronson, 2006; Morreall, 1991). Also, the new perspective and the non-serious frame of mind that humor engenders can reduce individuals’ self-censorship and mental restrictions. This relative freedom from cognitive and psychological constraints encourages them to experiment with various ideas and see more possibilities and relationships between unrelated ideas and objects (Amabile, 1996).

In addition, the continuous sharing of reframing humor by employees can help improve their creative thinking and innovative problem solving behaviors (Csikszentmihalyi, 1997; Morreall, 1991). Humor’s ability to impart individuals with cognitive abilities or skills needed for innovative work behavior have been theorized and empirically tested. Morreall (1991) argues that workplace humor enhances workers tolerance for novelty, ambiguity, and change, divergent thinking, creative problem solving and risk taking. Relatedly, Mainemelis and Ronson (2006) posit that play facilitates employees’ problem framing, divergent thinking, mental transformations, evaluative ability and alternative solution practice skills needed for innovative behaviors. Individuals who are adept at creating spontaneous humor in the workplace (e.g. the office joker) possess the mental flexibility of combining and arranging different concepts, objects or elements to produce humorous events. Such individuals are open to new experiences hence can leverage their humor creation skills to generate new ideas. They can generate more novel ideas, solutions or
processes by breaking down ideas, concepts and objects in their natural occurring states and recombining them into new forms (Mainemelis and Ronson, 2006; Morreall, 1991).

In two separate studies, Ziv (1983) investigated the influence of humorous atmosphere on students’ creativity. In a series of tests involving writing subtitles for cartoons and taking creativity tests, Ziv (1983) found that humorous atmosphere significantly increases creativity score. Kudrowitz (2010) recently studied 84 participants made up of students, improvisational comedians and professional designers who took part in cartoon caption test and product brainstorming test and found that improvisational comedians produced on average 20% more product ideas and 25% more creative product ideas than professional product designers. Also, improvisational comedians were highly productive in both creative product idea generation and cartoon caption production.

Taken together, reframing humor allows employees to momentarily disengage from time held logics, assumptions and beliefs which help them to change their old mindsets and gives them new perspectives to experiment with new or unrelated ideas. Also, the creation and enjoyment of humor equips employees with problem framing, divergent thinking and mental transformation skills which in turn facilitates their idea exploration and idea generation behaviors. Hence,

**H1d: An employee’s reframing humor use with immediate co-workers is positively related to innovative work behavior.**

### 4.2 The effects of humor use with external actors on innovative work behavior

The interconnected nature of modern business implies that employees do not interact only with people in their organizations but also with external actors across the organization boundaries (Möller and Halinen, 1999). Employees are involved in complex interactions with customers, suppliers, competitors, partners, research institutions and other agents in order to create value and enhance their organization’s competitiveness (Gummesson and Mele, 2010; Holm, Eriksson and Johanson, 1999).
In addition to organizational competitiveness, these interactions also provide vital learning opportunity which employees can utilize to further develop novel products or services and processes (Hasu, Toivonen, Tuominen and Saari, 2015). Specifically, workers involved in these interactions get ideas, information, new experiences, feedback and technical knowledge from these external stakeholders (Sveiby, 2001).

Notwithstanding the benefits of these business interrelationships, maintaining them is not without challenges. The diversity and diverse interests of actors makes interactions of this nature difficult. In order to have effective exchanges, employees need to create and maintain good social relationship with all actors (Sheth and Sharma, 1997). One of the means to develop this social bond is through the use of humor. The use of affiliative humor by employees in these interactions has the tendency of fostering strong interpersonal bonds, build trust and meld diverse actors into a cohesive unit (Romero and Cruthirds, 2006; Holmes, 2007; Ziv, 2010). Also, in external interactions, individuals are likely to experience discomfort especially in first encounters (Fraley and Aron, 2004). In such situations, an employee can use affiliative humor to draw their interaction partners closer to themselves. That is, the positive affect the humor engenders help create a bond between the parties (Robert and Wilbanks, 2012). Individuals can then leverage the rapport built with significant external actors to get important ideas, information and feedback for the generation and implementation of new products or processes. In summation, employees’ affiliative humor is used in external interactions, promotes the building of interpersonal relationships and social networks which are good sources of ideas, knowledge, feedback and support needed for innovative behaviors. Hence, it is hypothesized that:

*H2a: An employee’s affiliative humor use with external actors is positively related to innovative work behavior.*

The discussion thus far assumes that the judicious use of humor in external interactions can influence employees’ innovative behaviors positively. However, humor, being a “double-edged sword” (Malone, 1980) can also have a negative effect on individuals’ innovativeness if used in a reckless manner. Specifically, the
use of aggressive humor can have a serious effect on external relationships. The deliberate use of ethnic jokes, disability jokes and horseplay, for example, can offend, hurt and disgruntle external parties which may lead to conflicts or break-up of relationships (Duncan et al., 1990, Martin et al., 2003). Given that employees rely on their contacts for valuable information, knowledge, and feedback from their external environment, the consequence of estranged relationship is that employees cease to get access to the needed resources and social support for further innovation (de Jong and Kemp, 2003). In other words, aggressive humor use destroys external relationships and spark conflicts between employees and their external contacts thus cutting employees’ access to valuable resources and support, which in turn, reduces their innovative behaviors. Hence the following hypothesis is suggested:

**H2b**: An employee’s aggressive humor use with external actors is negatively related to innovative work behavior.

Conversely, in difficult external interactions or in negotiations involving many external actors, employees may experience high levels of negative emotions such as anxiety, anger and frustration which could result in stress reactions (Lee, Yang and Graham, 2006). When faced with such distressing condition, individuals can use coping humor (e.g. spontaneous jokes, funny stories or anecdotes) to stir amusement and laughter among the actors thereby reducing the negative emotions (Dixon, 1980; Locke, 1996). Individuals in this aroused positive affect state or mood may have a fresh outlook to search for new ways to address the bottlenecks in the project or dealing with the stalemate in the negotiations. In fact, the utility of humor as a coping mechanism in negotiations have been empirically proven. In a study of multicultural business negotiations, Vuorela (2005) found that humor facilitates negotiation by diffusing tension, mitigating a potential offence and help broach a difficult issue. Thus, coping humor attenuates the effect of negative emotions and stress in external exchanges and energizes employees to search for new solutions to problems.

**H2c**: An employee’s coping humor use with external actors is positively related to innovative work behavior.
In a similar vein, the use of reframing humor in external interactions can facilitate employees’ innovative behaviors. Some projects are so complex (e.g. construction of a dam or development of complex software) that no single firm can successfully execute them. As such different firms collaborate to undertake such projects. Under such arrangement, employees with different expertise are drawn from the firms to form projects teams (Gann and Salter, 2000; Möller and Halinen, 1999). In such project teams, differences may arise due to members misunderstanding others opinions or each member taking an entrenched position as to the best approach at meeting the project objectives. Under such condition, when individuals engage in witty banter or humorous exchanges with each other, the amusement can relieve or detach them from their strongly held beliefs and entrenched positions (Kahn, 1989). The new perspective the humor engenders could help them find useful ideas or suggestions from others propositions which when combined, can reveal novel approaches to help achieve the project goals. Putted differently, the use of reframing humor makes individuals to see problems in new light and facilitate the generation of new approaches to solving problems. The following hypothesis is proposed thus:

\[ H2d: \text{An employee’s reframing humor use with external actors is positively related to innovative work behavior.} \]

4.3 Innovative work behavior and innovative performance

An individual’s innovative work behavior is expected to produce some beneficial novelties or outcomes (Tuominen and Toivonen, 2011). These outcomes may be in the form of new products or processes and improvement in job and organizational practices (Høyrup, 2010). Organizations then leverage these outputs to improve their performance (Damanpour, 1991). The relationship between innovation and organizational performance has been widely studied. Notwithstanding few equivocal findings, majority of these studies found positive relationship between innovation and organizational performance (Aragon-Correa, Garcia-Morales and Cordon-Pozo, 2007).
For example, in a study of industrial firms in the United Kingdom (U.K), Laursen and Salter (2006) found a curvilinear relationship between the search strategy of a firm’s innovation strategy and its innovative performance. Prajogo and Ahmed (2006) also examined the relationship between innovation stimulus, innovation capacity and innovation performance in Australian firms. Their findings revealed a strong and significant relationship between innovation capacity and innovation performance. Also, the relationship between innovation stimulus and innovation performance was mediated by innovation capacity. In another study of innovation type and innovation performance in U.K’s SMEs, Oke, Burke and Myers (2007) found that SMEs focused on incremental innovation than radical innovation and the incremental innovation focus was related to the growth in sales turnover. Bharadwaj and Menon (2000) also found support for the innovation and innovation performance link. The findings of their study show that both organizational creativity mechanisms and individual creativity mechanisms lead to highest level of innovation performance. Also, in a recent systematic literature review of empirical studies on open innovation and innovation performance, Greco, Grimaldi and Cricelli (2015) found a positive effect of inbound open innovation actions on both product and process innovation performance.

Although most of these studies have concentrated at the organizational level, the picture at the individual level is not that different. Very few studies have actually examined the relationship between individual innovativeness and innovative performance (de Jong and den Hartog, 2010 is an example). But in all these studies, researchers found a positive relationship between innovative work behavior and innovative performance. For instance, Scott and Bruce (1994) studied the determinants of individual innovative behavior of R&D employees in a United States (U.S) industrial company reported a significant correlation (r =.33, p < .001) between innovative behavior and objective counts of invention disclosures. Also, de Jong and den Hartog (2010) in validating their innovative work behavior scale tested the effect of innovative work behavior on innovative output and found a highly positive significant relationship. Finally, Andries and Czarnitzki (2014) recently examined the extent to which CEOs and employees’ idea generation influence small
businesses’ innovation performance and found that all the actors’ idea generation behavior enhances innovative performance.

Drawing on the empirical evidence presented in the foregoing discussion, it is argued that employees’ innovative work behavior will impact their innovative performance positively. Hence, the following hypothesis is suggested:

**H3: An employee’s innovative work behavior is positively related to innovative performance.**

In this chapter, a conceptual model was developed based on theories of humor and innovation. The assumption behind this model is that the use of different types of humor by employees in different contexts will influence innovative work behavior which will in turn impact innovative performance. After thoroughly adducing arguments to support the proposed relationships, hypotheses were subsequently formulated. The direct relationship between the types of humor and innovative performance was however not hypothesized. The assumption being that the relationship is mediated by innovative work behavior. In the next chapter, the methodology that was employed in this study and the results of the hypotheses testing are presented.
5 METHODOLOGY AND EMPIRICAL TEST

In this chapter, the research design employed to gather data and the statistical tests used to test the hypotheses is explained. It begins by discussing how the questionnaire instrument used in this study was developed. Next, the method used to gather the data, the study’s sample and the demography of the participants are discussed. This is followed by the enumeration of the measures used in the data collection. Finally, the statistical techniques used in the data analysis and the results from the analysis are presented.

5.1 Questionnaire development

The questionnaire development and the data collection formed part of the HURMOS Project, a multidisciplinary research project aimed at helping Finnish companies develop humor as a strategic tool for creating innovative business. The initial draft of the questionnaire was prepared in English based on previously developed and validated scales. Because the final survey was to be administered in Finnish companies, the scales, which were originally published in English, needed to be modified and translated to suit the research context. In order to ensure that the respondents understand what the questionnaire seeks to measure, the guidelines of Douglas and Craig (2007) was followed to translate the final questionnaire instrument into Finnish.

First, a multidisciplinary team reviewed the initial draft and made suggestions for some measures to be modified. The team comprised of a professor of International Business Management, a principal lecturer in International Business Communication, a senior lecturer in Business English, a doctoral student in Marketing and the researcher. Next, the team members (who were all Finns except the researcher) individually translated the draft questionnaire into Finnish. The individual translations were reviewed together by the team to ascertain whether the translations captured the same meaning. The differences in meaning were debated until all the members finally settled on the right meaning. An expert in both English and Finnish then drafted the Finnish version of the questionnaire. The team did a final revision of
both versions to iron out any equivalence differences that still exist. The process was repeated until all members of the team agreed on the final versions of the survey.

The final version of the questionnaire was pre-tested by four representatives of the organizations and other actors involved in the project. The pretest was to determine the clarity, coverage and comprehension of the instrument. The respondents were asked to report any difficult to understand, unclear and ambiguous words or items and also to suggest how to improve the overall instrument. Based on the results from the pretest, some redundant or ambiguous items were dropped and some difficult to understand items or words were rephrased.

5.2 Data collection and sample

The data for this study was collected from employees of the organizations involved in the HURMOS Project by means of cross-sectional survey. These organizations operated in diverse industries such as manufacturing, media, leisure and recreation, and other services. Their sizes ranged from micro to large and all operated locally in Finland except one who also had operations in other countries. The survey was conducted in the fall of 2015. A week before the survey was launched, an email was sent to all the project contacts in the organizations to explain the rationale for this survey and to encourage employees to participate. The survey questionnaire was administered electronically. The internet links of the questionnaire in both English and Finnish was sent via email to the contact persons who then made them available to the participants. Participation in the survey was voluntary for all employees. In small organizations, every employee was asked to complete the questionnaire. However, in large firms, the contact person was asked to select a random sample to participate in the survey. Also, to fairly assess the innovative work behavior of employees, the survey was not restricted to certain category of employees but all organizational members were encouraged to take part. The survey took approximately 20 minutes to complete. To motivate employees to take part in the survey, they were assured of their confidentiality and also the first one hundred respondents were promised gift items. In addition, their organizations were promised
a summary of the research findings. These promises were fulfilled at the end of the study.

At the end of the survey period, 88 completed questionnaires were returned. The responses were from incumbents with different job positions. Among the respondents, 70.6% was non-managerial employees, 23% was managers and 3.5% team leaders. Their average age was 42.5 years (S.D=13.24) and 59% was female. Thirty-four percent had vocational education, 44% had some university education and 12% had high school education. Respondents average tenure in their organizations and industry was 5.03 years (S.D= 2.05) and 4.91 (S.D= 1.91) respectively.

As suggested by Armstrong and Overton (1977), the non-response bias test was conducted in order to check the possibility of response bias affecting the data. The respondents were grouped into early and late respondents. The late respondents represent participants who completed the survey after a reminder has been sent to them. A comparison was made to ascertain if there was significant difference between these two categories’ response. The test revealed that there was no significant difference between the demography of early and late respondents at the .05 significant level in terms of the questionnaire items and variables. Thus, response bias may not be a serious problem in this study.

In addition, since the same respondents rated the predictor and criterion variables at the same time, common method bias may be a cause for concern (Podsakoff, Mackenzie, Lee, Podsakoff, 2003). To minimize this bias, the procedural precautions suggested by Podsakoff et al. (2003) were followed in the questionnaire development stage. Besides using established scales, the items were carefully constructed and the question order was counterbalanced. Also, the independent variables were separated from the dependent variables and respondents were assured of confidentiality and anonymity. Furthermore, in conformity with Podsakoff and colleagues’ (2003) recommendation, common method bias was checked by means of Harman’s single factor test at the analysis stage. In the test, all the variables in the study were subjected to exploratory factor analysis. The assumption behind this procedure is that
a common method bias is present if a single factor emerges from an unrotated factor solution or a single factor accounts for most of the variance (Podsakoff et al., 2003). In this study, the test showed that a common method bias may not be a problem since the first factor accounted for 21% and 23% of the variance in humor use with in-group and humor use with external group respectively.

5.3 Measures

As stated earlier, all the measures used in the study were based on previously validated scales. Items were written as statements and respondents were asked to rate them on five-point Likert scale (1= totally disagree− 5= totally agree). The scale had a ‘not applicable’ option. An item was dropped in the analysis stage in order to improve the reliability of the scale. The final measures for this study are presented in the Appendix.

Humor types

The four humor types used in this study was measured with 20 items modified from Martin and colleagues’ (2003) Humor Styles Questionnaire (HSQ) and Lang and Lee (2010). Five items assessed both affiliative and aggressive humor. Sample items includes ‘I usually joke around much with people’ and ‘If I don’t like someone, I often use humor or teasing to put them down’ respectively for affiliative and aggressive humor. Coping humor was determined by seven items such as: ‘Humorous stories help ease tension situation’. Reframing humor was measured with three items like: ‘Silly jokes are used to question old mindsets and practices’. Details of these measures’ reliabilities are presented under the analysis section.

Innovative work behavior

Employees’ innovative work behavior was measured using a ten item scale developed and validated by de Jong and den Hartog (2010) based on the work of Scott and Bruce (1994) and used by Mura, Lettieri, Radaelli and Spiller (2013). The scale has sample items such as ‘I systematically introduce innovative ideas into work
practices’, ‘I strive to convince people to support an innovative idea’ and ‘I generate original solutions for problems’.

Innovative performance

Employees’ innovative performance was assessed with nine item scale based on de Jong and den Hartog (2010) and the OECD’s Oslo Manual (2005). The approach of de Jong and den Hartog (2010) was followed to have respondents self-rate their innovative performance. This subjective measurement approach was adopted because given the diverse work roles and different professional background of our sample, it would have been difficult (if not impractical) to assess their innovative performance based on objective measures such as patent counts. This scale included items like ‘I am involved in the implementation of completely new production or delivery methods’, ‘I am involved in the improvements of current products or services’ and ‘I am involved in the implementation of new methods for organizing routines/procedures’.

Control variables

Besides the direct measures, other variables were entered in order to control for the likelihood that some socio-demographic and job-related differences in the independent and dependent variables might result in spurious relationships. Tenure (years) in organization and industry was controlled for because previous research indicates that job domain experience that comes with tenure may account for variance in innovative work behavior (Carmeli and Spreitzer, 2009). Gender (0= female, 1= male) was also controlled for because male and female employees might have different access to opportunities to engage in innovative work behavior (Ohlott, Ruderman, & McCauley, 1994). In addition, age was controlled for because previous research suggests that older employees are more active in innovative work behavior (Ng and Feldman, 2013b). Finally, person-job fit was also entered in order to control for the possibility of confounding with innovative work behavior and innovative performance. Person-job fit was measured with five items like ‘I have the right skills
and abilities for doing this job’ and ‘I am the right type of person for this type of work’.

5.4 Data analysis and results

5.4.1 Factor analysis and reliability assessment

The measures for the types of humor used with in-group members were determined by means of exploratory factor analysis. As recommended by Field (2013: 683), a pre-analysis diagnosis was conducted with the 21 items to assess the suitability of the data for factor analysis. The Bartlett’s test of sphericity was significant (p< .001) and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy value of 0.78 was above Kaiser’s recommended threshold of 0.50. This indicated the suitability of the matrix for factor analysis. The factor analysis was conducted by means of Principal Component Analysis (PCA) with varimax rotation. Contrary to an anticipated four component structure, five components emerged instead. As a result, separate factor analyses were done for the modified HSQ scale (Martin et al., 2003) and Organizational humor scales (Lang and Lee, 2010). The HSQ scale yielded a two component solution with five items loading on each component. Examination of the items revealed that all items loaded adequately on their theorized component. In other words, affiliative humor (five items) and aggressive humor (five items) matched the theoretical structure of HSQ. The organizational humor scale also yielded a two component solution. However, eight items loaded on one component whereas 3 items loaded on another component. When the components were scrutinized, it was found that the first consisted of 6 items from the stress-relieving humor measure and 2 items from the liberating humor measure. This component was labeled coping humor following Kahn (1989). Also, the examination of the 3 items in the second component showed that they reflected reframing humor as theorized in the literature (Kahn, 1989); consequently, it was labeled reframing humor. All the factor loadings were above 0.50 thus meeting the criteria of Hair, Anderson, Tatham, and Black (1998).
The reliabilities of these scales were checked using Cronbach’s alpha ($\alpha$). In order to improve the reliability of the coping humor scale, one item was dropped. The seven items produced a good reliability of the scale. The reliability analyses showed that affiliative humor ($\alpha= .86$) and coping humor ($\alpha= .74$) had good reliabilities because their coefficient alphas were above Nunnally’s (1978) recommended critical value of .70. However, aggressive humor ($\alpha= .62$) and reframing humor ($\alpha= .61$) had marginally adequate reliabilities.

The same procedure was followed to assess the internal consistency reliabilities of the types of humor used with external group. The analyses revealed that affiliative humor ($\alpha= .89$), aggressive humor ($\alpha= .71$) and coping humor ($\alpha= .75$) had good reliabilities whereas reframing humor ($\alpha= .66$) had marginally adequate reliability. Similarly, the reliability tests were done for the innovative work behavior and innovative performance variables. The Cronbach’s alpha for these scales were .86 and .91 respectively. Overall, the Cronbach’s $\alpha$ for the variables indicate reliability of the scales since most of them had values above the .70 threshold (Nunnally, 1978; Hair et al., 1998).

5.4.2 Correlation and regression analysis

The means, standard deviations and the correlations among the variables for employees’ humor use within in-group and with external group are presented in Table 3 and 4. The bivariate correlation shows that in-group reframing humor and in-group affiliative humor relates significantly with innovative work behavior ($r = .27$, $p < .05$; $r = .30$, $p < .01$ respectively). Similarly, all the humor types used with external group, with the exception of aggressive humor, correlate with innovative work behavior. Also, innovative work behavior related significantly with innovative performance ($r = .41$, $p < .01$). As can be seen, both in-group reframing humor and external group reframing humor relate highly to innovative performance ($r = .33$, $p < .01$; $r = .32$, $p < .01$ respectively). Likewise, external group affiliative humor use correlated with innovative performance ($r = .23$, $p < .05$).
The control variables also showed some significant relationships with the main variables. For example, gender related to both reframing humor and aggressive humor. Similarly, person-job fit correlated significantly with innovative work behavior. Finally, age was related to innovative work behavior ($r = .29$, $p < .01$) and external reframing humor ($r = .29$, $p < .01$).

In order to test the proposed hypotheses, a hierarchical regression was used employing IBM SPSS Statistics 22 software. Three separate multiple regressions were conducted. The first regression tested the relations between the humor types used by employees with in-group members and innovative work behavior. The second also tested the types of humor used with external group and innovative work behavior. In all these tests, innovative work behavior was the dependent variable. The final regression was between innovative work behavior and innovative performance.

Before running the regression analyses, some statistical parameters were checked to ascertain if they are within the required limits. First, the model was examined to see whether there is multicollinearity present. Examination of the values of the variable inflation factor (VIF) of the three models revealed that they were all within the acceptable limits. The highest value of 3.64 was far below the upper bound of 10 suggested by Hair et al. (1998). Also, all the tolerance statistic values
Table 3. Descriptive statistics and correlations of employees' humor use with in-group members.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>S.D</th>
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<th>4</th>
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<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
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<tr>
<td>2. Tenure in organization</td>
<td>5.03</td>
<td>2.05</td>
<td>0.65**</td>
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<tr>
<td>3. Tenure in industry</td>
<td>4.91</td>
<td>1.91</td>
<td>0.58**</td>
<td>0.81**</td>
<td>1</td>
<td></td>
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<tr>
<td>4. Gender</td>
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<td>0.21</td>
<td>0.24*</td>
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<tr>
<td>5. Job fit</td>
<td>4.1</td>
<td>0.77</td>
<td>0.22*</td>
<td>-0.01</td>
<td>0.03</td>
<td>-0.08</td>
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<tr>
<td>6. Affiliative humor</td>
<td>3.6</td>
<td>0.92</td>
<td>-0.20</td>
<td>-0.01</td>
<td>0.03</td>
<td>0.16</td>
<td>0.00</td>
<td>(0.86)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>7. Aggressive humor</td>
<td>1.6</td>
<td>0.64</td>
<td>-0.14</td>
<td>0.01</td>
<td>0.05</td>
<td>0.35**</td>
<td>-0.15</td>
<td>0.29**</td>
<td>(0.62)</td>
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<tr>
<td>8. Reframing humor</td>
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<td>1.17</td>
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<td>-0.16</td>
<td>0.41**</td>
<td>0.48**</td>
<td>(0.61)</td>
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<td>9. Coping humor behavior</td>
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<td>0.38**</td>
<td>0.55**</td>
<td>(0.74)</td>
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<td>10. Innovative work behavior</td>
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<td>0.29**</td>
<td>0.25*</td>
<td>0.28**</td>
<td>0.28*</td>
<td>0.35**</td>
<td>0.30**</td>
<td>0.15</td>
<td>0.27*</td>
<td>0.11</td>
<td>(0.86)</td>
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<tr>
<td>11. Innovative performance</td>
<td>2.7</td>
<td>1.26</td>
<td>0.18</td>
<td>0.24*</td>
<td>0.28**</td>
<td>0.22</td>
<td>0.26*</td>
<td>0.16</td>
<td>0.02</td>
<td>0.33**</td>
<td>0.16</td>
<td>0.41**</td>
<td>(0.91)</td>
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</table>

*p < .05; **p < .01; Alpha reliabilities are shown in parentheses.
were far above Menard’s (1995) critical level of 0.1, indicating that multicollinearity was not a problem. Next, the model was checked to determine whether the residual terms were independent (Field, 2013: 311). The values of the Durbin-Watson statistic showed that they were all below 2 indicating that independent errors may not be present. In addition, the term residuals were also checked for heteroscedasticity and non-normality. The scatter plots of the residuals, the histogram and the normal probability plots showed normal distributions, confirming that heteroscedasticity and non-normality are not cause for concern. Having found no violation of the underlying assumptions of regression analysis, the models were tested. The regression was done in two steps. The control variables were entered in the first step followed by the main variables in the final step. Tables 5–7 present the results of the regression analyses.

The $R^2$ values in Tables 5 and 6 show that the model explains a good proportion of the variation in employees’ innovative work behavior. The final in-group types of humor model and the external group types of humor model accounted for 37% and 36% of the innovative work behavior variance respectively. Similarly, Table 7 depicts that the full model accounted for 24% of the variance in employees’ innovative performance. Interestingly, job fit and gender were significant in the final in-group humor use and external humor use models. That is, the better an employee thinks he/ she fits their jobs, the higher the rating of their innovative work behavior. Likewise, male respondents rated their innovative work behaviors highly. Further, the $F$ values of all the regression models and their significance denote that the variance in the criterion variables (innovative work behavior and innovative performance) can partly be explained by the other variables in this study.
Table 4. Descriptive statistics and correlations of employees' humor use with external group actors.

<table>
<thead>
<tr>
<th>Variables</th>
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<td>2. Tenure in organization</td>
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<td>3. Tenure in industry</td>
<td>4.91</td>
<td>1.91</td>
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<td>0.81**</td>
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<td>4. Gender</td>
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<tr>
<td>5. Job fit</td>
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<td>0.22*</td>
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<td>0.32**</td>
<td>-0.04</td>
<td>0.34**</td>
<td>0.71</td>
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<td>7. Aggressive humor</td>
<td>1.26</td>
<td>0.50</td>
<td>0.03</td>
<td>0.10</td>
<td>0.07</td>
<td>0.32**</td>
<td>-0.04</td>
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<td></td>
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<td>0.46**</td>
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<td>0.28*</td>
<td>0.25*</td>
<td>0.26*</td>
<td>-0.04</td>
<td>0.43**</td>
<td>0.46**</td>
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<td>9. Coping humor</td>
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<td>0.21</td>
<td>0.09</td>
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<td>0.73**</td>
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<td>10. Innovative work behavior</td>
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<td>-0.02</td>
<td>0.23*</td>
<td>0.22*</td>
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<td>11. Innovative performance</td>
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<td>0.21</td>
<td>0.41</td>
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*p < .05; **p < .01; Alpha reliabilities are shown in parentheses
5.4.3 Hypothesis testing

The regression outputs were used to test the validity of the proposed hypotheses. Hypothesis 1a predicted a positive relationship between in-group affiliative humor use and innovative work behavior. As can be seen from Table 5, the coefficient for this variable was positive and significant ($b = .31$, $p < .05$) thus supporting the hypothesis. Hypothesis 1b suggested that an employee’s in-group aggressive humor use will not affect innovative work behavior. This hypothesis was also supported since the coefficient was not significant ($b = .06$, n.s). Hypothesis 1c posited that in-group coping humor use will positively impact innovative work behavior. Contrary to expectation, the coefficient was negative and not significant ($b = -.25$, n.s) hence not supported. According to hypothesis 1d, in-group reframing humor use will relate positively with innovative work behavior. This hypothesis was not supported because the coefficient failed to achieve significance ($b = .16$, n.s).

Hypothesis 2a stated that affiliative humor used with external actors will be positively associated with innovative work behavior. The hypothesis was supported because the coefficient was positive and significant ($b = .33$, $p < .01$). Hypothesis 2b predicted a negative relationship between aggressive humor use with external actors and innovative work behavior. Consistent with this prediction, the coefficient was negative and significant ($b = -.43$, $p < .05$) hence supporting the hypothesis. Hypothesis 2c claimed that coping humor use with external actors will relate positively with innovative work behavior. Contrary to this claim, the coefficient was negative and not significant therefore the hypothesis was not supported ($b = -.17$, n.s). Hypothesis 2d also postulated that reframing humor use with external actors associate positively with innovative work behavior. The coefficient was positive but not significant ($b = .17$, n.s) hence not supported.

Finally, Hypothesis 3 suggested that employees’ innovative work behavior will be positively related to their innovative performance. The coefficient of the variable was positive and significant ($b = .40$, $p < .05$). Therefore the hypothesis was supported. Table 8 gives a summary of the results.
Table 5. Regression of Innovative work behavior on employees’ affiliative humor, aggressive humor, coping humor and reframing humor use with In-group co-workers (n=87).

<table>
<thead>
<tr>
<th>Variables</th>
<th>Dependent variable: Innovative work behavior</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Coefficient</td>
<td>S.E</td>
<td>Coefficient</td>
</tr>
<tr>
<td><strong>Control variables</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tenure in organization</td>
<td>.03</td>
<td>.07</td>
<td>.02</td>
</tr>
<tr>
<td>Tenure in industry</td>
<td>.06</td>
<td>.08</td>
<td>.03</td>
</tr>
<tr>
<td>Job Fit</td>
<td>.41***</td>
<td>.12</td>
<td>.41***</td>
</tr>
<tr>
<td>Gender</td>
<td>.44**</td>
<td>.18</td>
<td>.28</td>
</tr>
<tr>
<td>Age</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td><strong>Main effects</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affiliative humor</td>
<td></td>
<td></td>
<td>.31*</td>
</tr>
<tr>
<td>Aggressive humor</td>
<td></td>
<td></td>
<td>.06</td>
</tr>
<tr>
<td>Coping humor</td>
<td></td>
<td></td>
<td>-.25</td>
</tr>
<tr>
<td>Reframing humor</td>
<td></td>
<td></td>
<td>.16</td>
</tr>
<tr>
<td>F</td>
<td>5.50</td>
<td></td>
<td>4.89</td>
</tr>
<tr>
<td>$R^2$</td>
<td>.26</td>
<td></td>
<td>.37</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>.21</td>
<td></td>
<td>.29</td>
</tr>
<tr>
<td>$\Delta R^2$</td>
<td>.26</td>
<td></td>
<td>.11</td>
</tr>
</tbody>
</table>

*p < .05; **p < .01; ***p < .001
Table 6. Regression of Innovative work behavior on employees’ affiliative humor, aggressive humor, coping humor and reframing humor use with external actors (n=87)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Dependent variable: Innovative work behavior</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient</td>
<td>S.E</td>
<td>Coefficient</td>
</tr>
<tr>
<td>Control variables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tenure in organization</td>
<td>.03</td>
<td>.08</td>
<td>.05</td>
</tr>
<tr>
<td>Tenure in industry</td>
<td>.03</td>
<td>.08</td>
<td>.00</td>
</tr>
<tr>
<td>Job Fit</td>
<td>.35**</td>
<td>.13</td>
<td>.31*</td>
</tr>
<tr>
<td>Gender</td>
<td>.44**</td>
<td>.18</td>
<td>.41*</td>
</tr>
<tr>
<td>Age</td>
<td>.01</td>
<td>.01</td>
<td>.01</td>
</tr>
<tr>
<td><strong>Main effects</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affiliative humor</td>
<td></td>
<td></td>
<td>.33**</td>
</tr>
<tr>
<td>Aggressive humor</td>
<td></td>
<td></td>
<td>-.43*</td>
</tr>
<tr>
<td>Coping humor</td>
<td></td>
<td></td>
<td>-.17</td>
</tr>
<tr>
<td>Reframing humor</td>
<td></td>
<td></td>
<td>.17</td>
</tr>
<tr>
<td>(F)</td>
<td>4.35</td>
<td></td>
<td>4.48</td>
</tr>
<tr>
<td>(R^2)</td>
<td>.22</td>
<td></td>
<td>.36</td>
</tr>
<tr>
<td>Adjusted (R^2)</td>
<td>.17</td>
<td></td>
<td>.28</td>
</tr>
<tr>
<td>(\Delta R^2)</td>
<td>.22</td>
<td></td>
<td>.14</td>
</tr>
</tbody>
</table>

*p < .05; **p < .01
Table 7. Regression of innovative performance on employees' Innovative work behavior (n=78).

<table>
<thead>
<tr>
<th>Variables</th>
<th>Dependent variable: Innovative performance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
</tr>
<tr>
<td></td>
<td>Coefficient</td>
</tr>
<tr>
<td>Control variables</td>
<td></td>
</tr>
<tr>
<td>Tenure in organization</td>
<td>.07</td>
</tr>
<tr>
<td>Tenure in industry</td>
<td>.12</td>
</tr>
<tr>
<td>Job Fit</td>
<td>.47*</td>
</tr>
<tr>
<td>Gender</td>
<td>.53</td>
</tr>
<tr>
<td>Age</td>
<td>-.01</td>
</tr>
<tr>
<td>Main effect</td>
<td></td>
</tr>
<tr>
<td>Innovative work behavior</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>3.12</td>
</tr>
<tr>
<td>$R^2$</td>
<td>.18</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>.12</td>
</tr>
<tr>
<td>$\Delta R^2$</td>
<td>.18</td>
</tr>
</tbody>
</table>

*p < .05; **p < .01
5.4.4 Additional analyses

The conceptual model of this study did not propose a direct relationship between the humor types and employees’ perceived innovative performance. The assumption behind the model was that the types of humor influence innovative performance through innovative work behavior. As such, no hypotheses were generated regarding these relationships. However, the correlation matrixes for both in-group humor use and humor use with external actors revealed that affiliative humor and reframing humor correlated with innovative performance. Subsequently, additional regression analyses were done to test the relationships between humor types and innovative performance.

The analyses yielded interesting results. In the in-group humor use, the relationships between affiliative humor (b = -.03, n.s), aggressive humor (b = -.44, n.s), coping humor and innovative performance failed to achieve significance. Indeed, all the coefficient values were negative. However, reframing humor had a positive and significant relationship with innovative performance. Similarly, all the types of humor use with external actors failed to achieve significant relation with innovative performance except reframing humor which was significantly related to it (b = .47, p < .05).

In this chapter, the method used to gather data and the statistical analyses conducted to test the hypotheses proposed in this study was discussed, and the results were presented. In the next chapter, the findings are discussed in relation to previous research and the theoretical contribution and practical implications are outlined.
<table>
<thead>
<tr>
<th>Hypothesis Number</th>
<th>Hypothesis</th>
<th>Coefficient</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1a</td>
<td>An employee’s affiliative humor use with immediate co-workers is positively related to innovative work behavior.</td>
<td>.31*</td>
<td>Supported</td>
</tr>
<tr>
<td>H1b</td>
<td>An employee’s aggressive humor use with immediate co-workers is not related to innovative work behavior.</td>
<td>.06</td>
<td>Supported</td>
</tr>
<tr>
<td>H1c</td>
<td>An employee’s coping humor use with immediate co-workers is positively related to innovative work behavior.</td>
<td>-.25</td>
<td>Not supported</td>
</tr>
<tr>
<td>H1d</td>
<td>An employee’s reframing humor use with immediate co-workers is positively related to innovative work behavior.</td>
<td>.16</td>
<td>Not supported</td>
</tr>
<tr>
<td>H2a</td>
<td>An employee’s affiliative humor use with external actors is positively related to innovative work behavior.</td>
<td>.33**</td>
<td>Supported</td>
</tr>
<tr>
<td>H2b</td>
<td>An employee’s aggressive humor use with external actors is negatively related to innovative work behavior.</td>
<td>.43*</td>
<td>Supported</td>
</tr>
<tr>
<td>H2c</td>
<td>An employee’s coping humor use with external actors is positively related to innovative work behavior.</td>
<td>-.17</td>
<td>Not supported</td>
</tr>
<tr>
<td>H2d</td>
<td>An employee’s reframing humor use with external actors is positively related to innovative work behavior.</td>
<td>.17</td>
<td>Not supported</td>
</tr>
<tr>
<td>H3</td>
<td>An employee’s innovative work behavior is positively related to innovative performance.</td>
<td>.40*</td>
<td>Supported</td>
</tr>
</tbody>
</table>

*p<.05  **p<.01
6 CONCLUSIONS

This chapter discusses the empirical findings of this study and links it to previous research on organizational humor and individual innovation. Also, the contributions that this study makes to theory and the practical relevance of the findings to business managers are presented. The chapter ends by outlining the limitations inherent in this study and potential avenues opened for further research.

6.1 Discussions

The objective of this study was to examine the role of humor in individual innovativeness. Specifically, the aim was to investigate how the use of different types of humor by employees in different contexts influences their innovative work behavior and their innovative performance. After a review of the literature on humor, creativity, innovation and social psychology, a model was developed and tested. In this model, it was hypothesized that affiliative humor, aggressive humor, coping humor and reframing humor will affect employees’ innovative work behavior directly which in turn, will also directly impact innovative work behavior. In other words, the model posited that the humor types will indirectly affect employees’ innovative performance via innovative work behavior. Moreover, even though direct relationships between the humor types and innovative performance were not hypothesized ex ante, nonetheless, in keeping with the exploratory nature of this study, these direct links were also tested.

The findings showed that employees’ use of affiliative humor with their close co-workers (in-group) and with external actors (external group) had significant positive effect on their innovative work behavior. However, it did not have any significant relationship on their innovative performance. This finding lends credence to the suggestion that affiliative humor helps build strong social relationships which has been theorized as being invaluable to individual creative behaviors (e.g. Perry-Smith and Shalley, 2003; Perry-Smith, 2006). Put differently, the strong relationships that affiliative humor use builds, both within and outside organizational boundaries, serve
as rich and readily available source of vital resources and support that employees draw on to enhance their innovative work behavior.

Given that employees use of affiliative humor with their co-workers and external agents impact their innovative work behavior, it was expected that it will also improve their innovative performance. But surprisingly, it had a negative but insignificant effect on innovative performance. One possible explanation for this seemingly implausible finding is that there might be an optimal threshold where affiliative humor use improves individual innovativeness and beyond that point or level, diminishing returns set in. In other words, a certain degree of affiliative humor use in interactions may be beneficial in building relationships. However, when used in excess it becomes counterproductive by distracting employees from focusing on their tasks. For example, employees who are admired by their co-workers or customers because of their prowess at generating funny jokes may be motivated to devote more time in developing their jokes repertoire to the detriment of their assigned roles.

Another possibility for the insignificant relationship may be linked to the image problems likely to be suffered by those who share humor. In the workplace or in organizations, individuals who say funny things about themselves to amuse others may help nurture some important networks. However, the persistent use of this strategy may create some credibility problems (McMaster et al., 2005). For instance, individuals who are known to share humor and play the role of jesters may not be taken seriously by their colleagues and outside parties. So when such people come up with credible ideas and seek to implement it, organizational members may perceive it as one of their usual jokes or pranks thus may not support it.

The results also revealed that aggressive humor used by employees with their close co-workers did not have any significant relationship with innovative work behavior. On the contrary, such humor use with external actors had a significant negative effect on innovative work behavior. Further, aggressive humor use in both contexts did not show any significant relationship with innovative performance. The possible reason for the insignificant effect on innovative work behavior within the organization may
be that aggressive humor use among co-workers who know each other may become a norm or subculture of these close co-workers. As such employees who become the target of this abrasive humor may view it as playful, non-serious event with no malicious intent. This perspective may protect them from experiencing any negative emotional or psychological effects thereby continuing with their normal work behaviors.

However, when employees cross the organizational boundaries, the cultural dynamics change. In external interactions, employees come across people with diverse backgrounds, personality differences, beliefs and cultural orientations. In such situations, the use of even mild forms of aggressive humor may significantly offend the sensibilities and emotions of the other parties (Kahn, 1989). Such offended parties may redraw from having further interactions with the ‘humor pariah’. When fractured relationships ensue, employees lose access to key resources which would otherwise have been important in their subsequent innovative work behavior. This might be the possible explanation for the negative relationship between employees’ humor use with external actors and innovative work behavior.

Again, a probable explanation why aggressive humor seems not to play a role in the innovative performance of employees may be that the innovative behaviors of employees are expected to lead to some benefits in the form of innovative outputs. Therefore if employees use of aggressive humor with their colleagues do not lead to any change in their innovative work behavior, it follows logically that such a static behavioral state might not translate into improvement in their innovative performance. Also, in the innovation process, innovation is considered to have been successful if novel products, processes or solutions are actually implemented. That is, employee’ success or performance in the innovation effort is only measured by the realization of tangible outputs. Since the implementation of innovation lies within the purview of key internal constituents (e.g. management and board of directors), external actors wield limited influence on implementation decisions. So even if they are offended by employees’ aggressive humor, their displeasure would, at worst, affect business relationships but not the implementation of employees’ useful
innovations. This may be the possible reason why employees’ use of aggressive humor has no impact on their innovation outcomes.

Contrary to expectations, coping humor did not show any significant relationship with employees’ innovative work behavior in both contexts. Likewise, it also did not have a significant effect on their innovative performance. The non-significant result is consistent with Lang and Lee’s (2010) finding that stress-relieving humor has no effect on organizational creativity. The probable explanation to this seemingly unimportant role of coping humor in employees’ innovative work behavior and innovative outcomes might be employees’ overreliance on humor as emotion-focusing coping strategy (cf. O’Brien and Delongis, 1996). Previous research suggests that people use a combination of problem-focusing coping and emotion-focusing coping to effectively deal with stressful stimuli. Specifically, O’Brien and Delongis (1996) contend that individuals use high levels of problem-solving coping in dealing with work-related stressors. So when employees use humor to protect them from experiencing negative emotions, they only gloss over the stressful situation but do not deal with the root cause of the stressors. Because of the persistence of the stressful stimuli, individuals may need high levels of humorous amusement to attenuate their negative emotions. Given that cognitive ability is needed to unravel the incongruity in humor before amusement can be enjoyed, the use of humor as coping mechanism may distract employees from using the same mental faculties to explore new ideas. In other words, the cognitive resolution of humor to produce mirth to buffer negative emotions may take precedent over using their mental abilities to search for new ideas or solutions to existing problem.

Another possible reason is that the context may not be conducive to using coping humor. Indeed, some scholars assert that coping humor might only play useful role in certain situations (see e.g. Healy and McKay, 2000; Safranek and Schill, 1982). It may be true that employees in some job context (e.g. factory workers, police officers, fire officers and emergency health workers) may use coping humor to mitigate the stresses inherent in their job. However, in certain job contexts (e.g. law, architectural, accounting and business consulting firms) using humor to deal with stress may be considered inappropriate or out of place (see e.g. Kahn, 1989). Similarly, as noted
earlier, the diverse backgrounds of external actors may make the use of humor appear demeaning. So employees experiencing stress in their interactions with outsiders may not even attempt to employ humor as coping strategy. The forgoing reasons may explain why coping humor do not seem to have any influence on employees innovative work behavior and outputs.

Surprisingly, employees’ use of reframing humor with co-workers and external actors had no significant relation with innovative work behavior. However, its use in both contexts has a positive effect on innovative performance. The possible reason may be attributed to employees’ use of different cognitive style at different stages of the innovation process (Scott and Bruce, 1994). Prior studies suggest that individuals use two modes of thinking style in their innovative problem solving endeavors (e.g. Jabri, 1991; Scott and Bruce, 1994). According to these scholars, some individuals prefer the systematic mode which entails focusing on logic and rationality; following routines and rules; and adherence to structured and guided procedures in the problem solving process. Others, by contrast, rely on the intuitive mode which defies logic, rationality, rules and disciplinary boundaries but instead, place emphasis on imagery or symbolism, intuition and ambiguity (Scott and Bruce, 1994).

It is possible that the employees sampled rely more on systematic problem solving style at the early stages of the innovation process. Perhaps, the urgency and the seriousness they attach to finding solutions to pressing organizational problems may make them to restrain the use of humor to better concentrate on the rational idea generation process. Employees then switch to the intuitive problem solving mode at the idea implementation stage after a useful solutions have been found and also key constituents have been successfully convinced of the utility of the new solutions. At this stage where employees are expected to develop their concepts and ideas into concrete product or process prototypes, they revert to playful mood and adopt humor in their work (Mainemelis and Ronson, 2006). Because of reframing humor’s potential of loosening employees’ cognitive restrictions and closely held assumptions, it frees them to try new combination and reconfiguration of concepts and materials into many possible alternatives. In other words, the ‘carefree’ thinking mode engendered by reframing humor allows employees to be prolific at generating
innovative outputs. This could account for why reframing humor do not seem to influence innovative work behavior but have a highly significant impact on innovative performance. Further research is warranted to fully explain this finding.

Finally, employees’ innovative work behavior related positively to innovative performance. The result fully supports previous studies that found significant positive relationship between innovative work behavior and other organizational performance indicators (e.g. Dörner, 2012; de Jong and den Hartog, 2010; Scott and Bruce, 1994).

The foregoing discussion had focused on explicating the possible reasons accounting for the findings of this study. In the following sections, the new knowledge that the study added to existing knowledge and what these findings mean to practitioners are discussed.

6.2 Theoretical contributions

The aim of this study was to deepen understanding of the role that various types of humor used in different contexts play in individual innovativeness and innovative outputs. The findings of this study make important contribution to the organizational humor and innovation management literature in a number of ways. First, this study extends the organizational humor research from the predominantly anecdotal, conceptual and theory based works to empirical domains. As noted earlier, empirical research on organizational humor has concentrated on examining the role of humor in general organization processes and outcomes. Innovation has not received specific attention because it is implicitly assumed to be one of the organizational imperatives that humor influence. Scholars that have attempted to bring it to the front burner only addressed an aspect (i.e. creativity) thus fall short in painting the whole picture. This study has helped to narrow this research gap by bring innovation to the forefront of organizational humor research and empirically proving that humor influences innovation differently in workplace and in organizations.
Second, humor has been theorized as amusing communication which takes place within a social context (Martin, 2007). However, most organizational humor researchers lose cognizance of this fact and rarely take into account the context in which humor occurs (Westwood and Johnston, 2013). This study adds to the body of knowledge in organizational humor by empirically examining the influence of different types of humor on innovation in two different contexts, that is, within the organization and beyond the organization boundaries.

Third, the study extends the knowledge frontier of innovation management by making the role of humor more visible and relevant. As alluded to earlier, several determinants of individual innovativeness have been studied but no attention has been given to humor yet. The findings of this research fills this gap by providing evidence that affiliative humor, aggressive humor, and reframing humor are important determinants of individual innovative work behavior and innovative performance in organizations.

6.3 Managerial implications

Just as “managers often fail to take humor seriously or realize its numerous benefits” (Romero and Cruthirds, 2006: 58); they are also prone to overlook the differences and downsides of humor used by employees in and out of the organization. The likely reason for both of these deficiencies may be the lack of awareness of the differences and limitations related to humor use which hinders them from approaching it in a more purposeful manner. The findings of this study revealed several practical issues that can help managers in handling humor in their organizations.

Firstly, affiliative and reframing humor proved to be important drivers of innovation indicators as such managers could encourage employees to use more of these forms of humor in their internal as well as external interactions. In organizations where the use of these types of humor is prevalent, managers should exercise caution in managing the behavior of employees in order not to extinguish the use of such beneficial humor from the organizational climate. Also, in organizations where such
humor is not visible part of the climate, managers could involve professional humorists (e.g. stand-up comedians) in organizational activities like corporate parties and fun games to stimulate its organic growth.

Secondly, aggressive humor appeared to be delicate and sensitive especially when used across the organization boundaries; therefore managers should control its potential malicious use by employees both in and outside the organization. Because of the ambiguity and the playful nature of humor, some employees with malicious intentions could use it as a tool of harassment and aggression against co-workers or managers and even customers. Managers should therefore be proactive by being constantly on the lookout for signs of malicious and aggressive humor used by organization members and immediately sanction individuals who exhibit this deviant behavior. Also, victims of excessive aggressive humor should be offered counseling and other social support in order to fully recover from any emotional or psychological injury they might have suffered. In addition, frontline staff that constantly interacts with external actors should be advised to avoid the use of aggressive humor in the course of their work. The supervisors of this category of workers should watch out for employees who use aggressive humor and, if possible, give them different roles in which interaction with external actors may not be needed. By taking these measures, managers would be able to proactively manage the fall outs of aggressive humor use without having it degenerate into potentially damaging outcomes in the organization.

Thirdly, managers should be careful in using humor as a strategy to manage deep seated problems in the organization. Because of the amusement and incongruity inherent in humor, managers may be tempted to believe that encouraging a widespread humor use in organizations may take the minds of employees from the problem. But as the findings reveal, the use of humor as coping mechanism do not benefit the innovativeness of employees. As such, managers should focus on finding practical solutions to organizational problems instead of using humor as stopgap measure to reduce the potential impact of the problem. Such an attempt has the likelihood of backfiring and worsening an already precarious situation.
Fourthly, humor could be incorporated into an organization’s human resource strategy, particularly in the recruitment process and employee development programs. As part of the strategy, a humor inventory test could form part of psychometric test prospective candidates take as part of the recruitment process. This instrument could help human resource managers assess prospective candidates’ predisposition to using various forms of humor and their aversion or tolerance of disparaging or aggressive humor. The rational of such an instrument is not to use humor as a selection criterion; rather it is to help managers ascertain the strengths and weaknesses of potential employees’ humor use in order to incorporate appropriate interventions in training programs. It could also help match candidates to the right roles based on their score on the humor inventory. For instance, if a candidate scored high on affiliative humor, such a candidate may be suitable for multifunctional or inter-organizational teams as well as play a frontline role. This inventory would not only be important in recruitment, but it may also be invaluable in incumbent employees’ appraisal in order to achieve the aforementioned objectives.

Finally, humor should not be seen as the magic wand at the disposal of managers to drive organizational effectiveness. Managers should not be deluded into thinking that a humorous organizational climate is all that is needed to improve innovativeness in organizations. As the results point out, the humor types accounted for some proportion of the variance in employees’ innovative work behavior. This shows that other factors also contribute in driving employees’ innovativeness. Therefore, humor should not be promoted to the neglect of other factors. All the factors should be given equal attention in other to holistically develop individual innovativeness in organizations.

6.4 Limitations of the study

Despite the fact that this study makes several contributions, like all research, it has limitations and these findings should be interpreted in the light of these limitations. First, the cross-sectional design adopted precludes the making of causal inferences from the results. Even though the research model proposed a direct linear relationship between the predictor and criterion variables, it is difficult to determine
which variable is influencing the other. For instance, the positive relationship between employees’ innovative work behavior and their innovative performance could mean that employees who exhibit high innovative work behavior translate that behavior into generating high innovative outputs. The reverse scenario, that is, employees who perform highly on their innovative tasks may develop high innovative work behavior, could also be true. In view of this, a longitudinal approach is needed in the future to determine the causality or direction of the proposed relationships.

Second, although stringent effort was made to reduce the effects of common method bias, the use of the same raters (i.e. employees) to measure both the predictor and criterion variables in the same instrument still makes it a cause for concern. Future designs that make employees rate their humor use and utilize supervisors, peers or objective measures (if available) to assess employees’ innovative work behavior and innovative performance could mitigate the mono-method bias.

Third, the heterogeneity of the respondents and the diverse industries from which they were drawn makes it easy to generalize the findings of this study. However, the study’s small sample size makes generalization problematic and that attempt should be approached with caution. Future studies should employ large sample size to replicate this study to enhance its generalizability.

6.5 Directions for future research

Notwithstanding the foregoing limitations, this study opens up several fruitful research directions that need to be brought to the fore. In the first place, humor being a social phenomenon is certainly influenced by factors in the social environment. Many factors in the workplace or organizations therefore impact how individuals use humor. Factors like co-worker diversity, the organizational culture or climate, leader support, organizational structure and others interact to influence the use of humor in an organization. Future studies should examine these factors’ moderating effects on the proposed relationships.
In addition, the research model for this study assumed that innovative work behavior would mediate the relationships between the humor types and innovative performance. However, this mediation was not tested in the study because of the small sample size. Thus, the mediating role of innovative work behavior should be tested in future studies to ascertain whether it partially or fully mediates these relationships.

Furthermore, innovative work behavior was conceptualized as a unidimensional construct in this study. However, the literature suggests that it is a multidimensional construct which follows the innovation process stages (e.g. de Jong and den Hartog, 2010; Janssen, 2000; Scott and Bruce, 1994). The findings of this study show that different types of humor may have different effect on different aspects of employees’ innovative behavior. For example, reframing humor may be relevant at the idea implementation stage, while coping humor may be needed at the idea promotion stage. Yet still, affiliative humor may be relevant at the idea exploration, idea generation and idea promotion stages. Thus, a promising research will be to explore the effects of the humor types on the different stages of employees’ innovative work behavior.

More so, the small sample size of this study coupled with the diverse industries they were drawn from limits this study from making any cross industry comparisons. In the future, a large scale survey should be used to investigate how employees in different industries use of humor affect their innovative behavior and innovative performance. For instance, there could be a design that compares employees in manufacturing with those in services. Finally, because culture also plays an important role in humor use, a cross-country study could also be conducted to examine how employees use of humor in different countries affect their innovativeness.
REFERENCES


Appendix

MEASURES USED IN THE STUDY

*Humor Types*

Respondents rated how well the statements apply in their daily interactions with their co-workers and in their external work relationships on each scale item using a 5-point scale (1 = totally disagree, 5 = totally agree).

*Instructions*

*Immediate Co-workers: Refers to your co-workers who are members of your work group or team.*

*External relations: Refers to outside actors (e.g. customers, suppliers, other stakeholders) who have a business relationship with your organization.*

The items below are grouped according to how they loaded on each component in the factor analysis. However, they appeared in random order on the survey.

*Affiliative humor*

1. I usually joke around much with people.
2. I usually like to tell jokes and amusing stories to others.
3. I enjoy making people laugh.
4. I usually think of witty things to say when I’m with other people.
5. I make other people laugh by telling funny stories about myself.

*Aggressive humor*

1. If I don’t like someone, I often use humor or teasing to put them down.
2. If something is really funny to me, I will laugh or joke about it even if someone will be offended.
3. If someone makes a mistake, I will often tease them about it.
4. I like it when people use humor as a way of criticizing or putting something down.
5. I participate in laughing at others if everyone is doing it.
Coping humor

1. Frequent laughter is used to make work more pleasant.
2. There is hardly anyone to brighten up a bad day with a good laugh.*
3. Funny stories are always told to lighten up the day.
4. Jokes are frequently shared to loosen up a stressful work environment.
5. Sensitive organizational issues are usually handled by joking about them.
6. Funny stories and jokes are welcome in most meetings.
7. Humorous stories help to ease tension situations.
8. Silly jokes or ridiculous stories are rarely heard. R

Reframing humor

1. Counter-intuitive jokes are encouraged to help us see things in new light.
2. Funny stories and jokes that help us see old problems in new light are common.
3. Silly jokes are used to question old mindsets and practices.

Notes: The asterisked (*) item was drop from the coping humor measure to improve the alpha reliability
The item denoted by ‘R’ was reversed coded

Innovative work behavior

The innovative work behavior was measured with ten items. Respondents indicated the extent they agree with each statement about how they do their job on a 5-point scale (1 = totally disagree, 5 = totally agree).

I often...

1. generate original solutions for problems.
2. pay attention to issues that are not part of my daily work.
3. strive to convince people to support an innovative idea.
4. contribute to the implementation of new ideas.
5. search out new working methods, techniques, or instruments.
6. make important organizational members enthusiastic for innovative ideas.
7. see how things can be improved.
8. systematically introduce innovative ideas into work practices.
9. put effort in the development of new things.
10. find new approaches to execute tasks.

**Innovative performance**

The innovative performance measure was made up of nine items. Respondents rated the extent of their agreement with each statement on their personal involvement in their organization’s innovative activities on a 5-point scale (1= totally disagree, 5 = totally agree).

My Personal Involvement Includes...

1. implementation of completely new production or delivery methods/techniques.
2. implementation of new ways of organizing relations with external stakeholders.
3. implementation of new methods of organizing work responsibilities and decision making.
4. improvement in current production or delivery methods/techniques.
5. improvement of current products/services.
6. making significant changes to the design or packaging of products/services.
7. development of completely new products/services.
8. implementation of new methods for marketing products/services.
9. implementation of new methods for organizing routines/procedures.