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FAITH AND JOB SATISFACTION: IS RELIGION A MISSING LINK?

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ABSTRACT

While many studies of business ethics have linked job satisfaction and spirituality, relatively few have focused on the connection with formal religions. However, there are numerous suggestions in the literature that spirituality, when incorporated into religious systems, might affect the work-related values and attitudes of employees in unexpected ways. These nuances are important for managers who desire to be inclusive in a multicultural world to understand.

This study explores the links between religious faith and job satisfaction using a multi-religion sample of working adults. Data were drawn from 741 employees and managers from Southern California organizations and firms. The sample included non-religious individuals and members of a variety of religions. The intent was to examine whether and what level of religious commitment impacted workplace attitudes, specifically job satisfaction.

In this paper, we compare and contrast members of the five largest religions which are, in alphabetical order, Buddhism, Christianity, Hinduism, Islam, and Judaism, in relation to job satisfaction. We found that religious commitment does positively impact job satisfaction, though there are differences depending on the type of religion. The study concludes with implications for research and practice.

INTRODUCTION

A major influence on an employee's satisfaction at work is the subtle permission on the part of the employer to allow him or her to be a complete person, rather than making it necessary to leave important personal characteristics, such as ethnicity, gender or religion, at the door (Ackers and Preston 1997; Epstein 2002). This desire is not limited to one age group or education level; rather it affects the job satisfaction or dissatisfaction of many employees (Brief 1998; Kutcher *et al.* 2010).

In the diverse workplace of the 21st century, a-good-manager works at creating an inclusive workplace where whole-person expression is welcomed. Research suggests that such encouragement includes the accommodation of spirituality and the basic tenets of religious faiths (Ali and Gibbs 1998; Walker 2013). That is, understanding an employee's spirituality helps minimize misunderstanding and creates a healthy, accepting workplace. It increases job satisfaction.

Job satisfaction can be defined as an individual's positive or negative attitude toward his or her job or workplace (Brayfield and Crocket 1955; Kinicki *et al.* 2002). Research suggests

that there are extensive positive correlations between job satisfaction and important workplace variables such as organizational commitment, absenteeism, and low turnover (Judge *et al.* 2001; Mowday and Steers 1979; O'Reilly and Caldwell 1980; Petty *et al.* 1984). Hence, employee job satisfaction is presumed to be an important construct for managers to understand.

Job satisfaction is a complex construct. Four basic factors are postulated to affect an individual's level of job satisfaction: (1) the nature of the work itself (Herzberg, 1987; Kim, 2005); (2) the individual's personality, demographics, and values (Judge and Larsen 2001; Locke and Latham 1990); (3) social influence (Van den Berg and Feij 2003); and (4) the individual's general life satisfaction (Jones 2006; Witmer and Sweeney 1992).

Ghazzawi and Smith (2009) suggest that a strong religious faith could influence at least three of these factors. For example, individual values are often formed and strengthened by the religion the person is affiliated with. Social influence, in the form of religious teachings and communities, may affect how the person understands the value of his or her job. General life satisfaction can be enhanced by a sense of purpose in life, as is incorporated into many religious systems (Ellison and Smith 1991).

Indeed, a number of researchers have found positive correlations between an employee's spirituality and his or her satisfaction with, and commitment to, the job (Barnett *et al.* 1996; Kolodinsky *et al.* 2008; Milliman *et al*. 2001). However, although spiritual commitment has been researched extensively in relation to job satisfaction and other work attitudes, religious commitment has been less studied (Cash and Gray 2000; Fry 2003; Moore 2008; Von Bergen 2009).

This paper contributes to the literature in several ways. First, it contributes to the ethics literature by adding to the discussion on religion. As said before, in relation to employees the ethics literature has tended to emphasize spirituality (Kennedy and Lawton 1998; Kutcher *et al.* 2010; Moore 2008; Von Bergen 2009), but there have been increasing calls for more research on employees and religion (e.g. Conroy and Emerson, 2004; Furnham 1990; Ghazzawi *et al*. 2012; Ibrahim et. al. 2008; Kriger and Seng 2005; Moore 2008). This might be because spirituality is often self-defined in individual terms (Duffy, 2006; Fry, 2003; Kolodinsky *et al.* 2008) which, arguably, makes it more difficult to study reliably (Hill and Pargament 2003; Milliman *et al.* 2001; Parboteeah *et al*. 2008). Please note that saying that spirituality is often defined in individual terms does not suggest that there is not a communal aspect (i.e. Milliman *et al.* 2001), merely that there is not a consistent group creed or defining set of beliefs. However, a majority of the employees (and employers) who say they are spiritual are also members of one of the major religions (Kriger and Seng 2005; Walker 2013), and these do have defining beliefs. Studying spirituality within a consistent community and set of beliefs can arguably contribute to rigor in the research (Hill and Pargament 2003; Hill *et al.* 1998; Kutcher 2010). Thus, one benefit of studying religion might include the ability to generalize finding more straightforwardly.

It should be noted that this paper does not focus on one particular religion. Rather it focuses on religions as collective faith and creed systems (Fisher, 2008; Hill *et al.* 1998; Fry 2003; Kennedy and Lawton, 1998; Kolodinsky *et al*. 2008). Though there is spirituality outside of religion, religions incorporate the spirituality of the individual into a system of formal doctrine, worship, values, attitudes, prayer, and devotional practices (Horton 1950; Vitell 2009; Zellers and Perrewe 2003). Spirituality is valuable to study, but it is not the focus of this paper.

This paper also contributes by exploring religion in relation to a major workplace variable, job satisfaction. The connections between religious expression and workplace attitudes

are important for managers to understand. Outside of the West many employees assume that religion will be central in the workplace (Ali 1987; Choo *et al*. 2009; Hutchings *et al*. 2010). Even in the West, religion is important to people. For example, though there is evidence that Americans are becoming less religious (Grossman 2009), 80% of surveyed adults in the U.S identify themselves with a formal religion, and over half say religion is very important in their lives and that they attend religious services regularly and pray daily (PewResearch 2008: Para. 2). Thus, while religion may not be as central in the western workplace as in other societies, we suggest that many employees would not wish to sublimate their religious identities at work (Kennedy and Lawton 1998; Kutcher *et al*. 2010). In addition organizations are becoming increasingly diverse (Cunningham, 2010; Kriger and Seng 2005). Therefore it becomes even more important for managers who desire to create inclusive workplaces to understand the links between religious commitment and work attitudes.

This research also contributes because it focuses on five different religions. Though there have been repeated calls for multi-religion tests of workplace attitudes (i.e. Parboteeah *et al*. 2009; Kutcher *et al*. 2010), it is still relatively unusual to find studies where people of different religions are compared on the same scale. In addition this study tests working adults, which adds robustness to the results. It explores the positive aspects of religiously committed employees, thus adding complexity to the perspectives in the organizational literature.

Finally, this study contributes by testing the validity for an instrument that is increasingly used in measuring religious commitment – the Religious Commitment Inventory-10 (Worthington *et al*. 2003). To date, this instrument has been shown to be a robust, multi-dimensional measurement of religiosity, but it has largely been tested on Christians (Hall *et al*. 2009; Kum-Lung and Teck-Chai 2010). This research tests the instrument on a variety of people, including those who are religiously committed and those who are not.

There are many thousands of religions but we chose to focus this study on the five largest - Buddhism, Christianity, Hinduism, Islam, and Judaism (Adherents.com 2012). This kept the study and the paper within reasonable bounds. Testing other religions, or people without religion, in relation to job satisfaction is valuable, but it is outside the scope of this paper.

The following pages will first focus on the nature of religion and its connections with ethics and with the workplace. Next, we will discuss the five major religions in relation to job satisfaction. Lastly, we present the study linking job satisfaction to the religious commitment of adherents of the five largest world religions.

THEORITICAL FOUNDATIONS OF THE STUDY: RELIGION AND JOB SATISFACTION

Religion can be thought of as a sincerely held set of beliefs about the nature of the forces(s) that ultimately shape man's destiny and moral values (Lenski, 1969; Von Bergen 2009). For the sake of simplicity, in this paper we will call these forces(s) "deity" with a small "d." By "deity" we mean to denote the ultimate source that adherents to the religion assume are the sacred/moral/shaping force or forces that create their religion.

A religion includes "the feelings, thoughts, experiences and behaviors that arise from a search for the sacred…and the means and methods (e.g. rituals or prescribed behaviors) of the search that receive validation and support from within an identifiable group of people" (Hill *et al*. 1998:21). Most religions bring their devotees into a community, such as a temple, church,

synagogue, or mosque, and encourage members to interact in worship, prayer/meditation, or study of sacred documents.

Considerable research focuses on the relationship between religion and ethics (e.g. Cavanagh and Bandsuch 2002; Childs 1995; Ibrahim *et al.* 2007; Kutcher *et al*. 2010). Religions, through the norms, values, and beliefs they advocate, often provide the foundations for the ethical values of their adherents (Horton, 1950; Fararo and Skvoretz 1986; Fisher 2001; Turner, 1997). For example, the code of ethical values found in the Ten Commandments provides a moral foundation for three major religions (Christianity, Judaism, and Islam).

There is theoretical support for a positive relationship between a higher degree of religious commitment and ethical workplace attitudes (Allmon *et al*. 2000; Barnett *et al*. 1996; Conroy and Emerson 2004; Siu *et al*. 2000; Smith and Oakley 1996; Wolkomir *et al*. 1997). For example, the Hunt and Vitel (1986) Ethics Model postulates that personal religious commitment influences an individual's perceptions of situations, alternatives, and consequences of business decision making. Tests of the model suggest that personal religiousness does influence an individual's ethical decision-making behavior (e.g. Mayo and Marks 1990: Kennedy *et al.* 1998; Vermillion *et al*. 2002).

This influence might occur because religious ethical values are regarded by many as general moral guidelines in their business and personal conduct (Ali *et al*. 2000; Conroy and Emerson 2000; Friedman 2000; Kohlberg 1981). Economist Adam Smith possibly expresses the ultimate connection between religion and ethics when he says:

> "Religion affords such strong motives to the practice of virtue,
> and guards us by such powerful restraints from the temptations
> of vice, that many have been led to suppose that religious principles
> were the sole laudable motives of action" (Smith [1776] 1982, p. 171).

Job satisfaction is not a value, but it is a work attitude and attitudes are formed by values (Rokeach 1973). Values are global concepts that guide judgment and a conviction about what is right or desirable (Chaplin 1985; Rokeach 1973). As suggested earlier, religious faith is often a source of individual value systems (Leahy 1986; Kohlberg, 1981; Parboteeah *et al.* 2008). Value systems influence an individual's attitudes, the predisposition to respond to specific environmental elements (Ali 1987; Bos *et al.* 2009; Chaplin 1985; Rokeach 1973). This research is testing the connection between religious intensity and the attitude of job satisfaction

RELIGION AND DEITY: IMMANENCE AND TRANSCENDENCE

Each of the five major religions has different assumptions about the nature of the ultimate force or forces which, as stated earlier, we call "deity." For example, it has been suggested that the Hindu ideal of deity is power, the Christian ideal of deity is love and justice, and the Muslim ideal of deity is transcendence (Corduan 2005). Deity can be impersonal, personal, single or multiple, and have different characteristics.

According to Plantinga and Tooley (2008), the religions of the world center around three major conceptions of deity: 1) deity as the forces of nature/the universe, 2) deity as humanity, and 3) deity as a being separate from and in authority over nature and humanity. Many religions are a synchronistic blend of these concepts.

One concept of deity is that the forces of nature are the ultimate sources that guide life, values and morality (Plantinga and Tooley, 2008). In this concept, deity can be earth-centered (for example Mother Gaia or many forms of Wicca) or involve the larger forces of the universe. Some systems of belief personalize natural forces as spirits or gods, as in Animism or Pantheism. Other systems consider these forces to be impersonal and arbitrary. For example adherents to Atheism say there is no divinity/god/sacred reality but rather assume that the final shaper of human life is the impersonal forces of the universe (Fisher 2008).

In this concept of deity, humans strive to find defenses against the forces of nature, whether personal or impersonal, or find ways to work with or placate them/it. This view would include those whose trust is in science, magic, or technology (McCleary and Barro 2006).

A second concept of deity is that humankind is the source of meaning, knowledge and value (Plantinga and Tooley, 2008). Humanity - individually, *en mass,* or in systems such as cultures - creates morality and meaning. Communism and Humanism (Huxley, 1961) are part of this concept, as are the religions that create deity from archetypes such as war (Mars), birth (many of the fertility religions) or death (Kali). Other religions, such as Buddhism, see the human self/mind as in control of creating the person's moral or physical state (Marques 2011; Yeshe 1998).

The third conception of deity is Theism, the idea that a supreme being or beings, separate from nature and from humanity, has revealed his, her, or themselves and is/are the source of meaning (Plantinga and Tooley 2008). Those who adhere to the major monotheistic religions, Christianity, Islam, and Judaism , think of man and nature as dependent on a singular supreme being (Fisher 2008). God or Allah (Arabic for God) is engaged in combat with the evil tendencies in the world (Horton, 1950) and has given a code of morality to humans in a written form – the Bible (Old and New Testaments) or the Koran, respectively.

Some divide these three concepts of deity into two views: the "immanent" and "transcendent" views (Fisher 2008). The immanent perspective is based on the idea that deity is experienced as present within the world in the form of nature or humanity (Horton 1950). Hinduism and Buddhism are examples of immanent religions. It should be noted that some see Buddhism as more of a philosophy than as a religion in the conventional sense (Marques, 2011; Yeshe 1998). However, for purposes of this study, we follow the majority of scholars by assuming that Buddhism is an immanent religion as defined above. The transcendent perspective is based on the idea that deity is separate from and outside of nature and humanity (Horton 1950; Plantinga and Tooley 2008). Christianity, Islam and Judaism are examples of transcendent religions (Fisher 2008).

RELIGION IN THE WORKPLACE AND ITS EFFECTS ON JOB SATISFACTION

What is the appropriate role of religion in the workplace? In the United States, Federal law, such as Title VII, prohibits hiring discrimination or preference based on religion. However, the law also requires that employers reasonably accommodate employees whose religious beliefs, practices or observances conflict with work requirements, unless the accommodation would create an undue hardship (U.S. Department of Labor n.d., para. 3). This could create a possible ambivalence on the part of some managers.

Religious commitment can affect employees positively. Three key effects are noted in the literature.[i] First, the major religions encourage moral frameworks that include care for others. Various studies have found that a majority of business people believe that their religious

values play an important role in making ethical business decisions (i.e. Childs 1995; Lewis and Hardin 2002), and that these decisions should be based on respectful treatment of customers, colleagues and employees (Vitell 2009).

For example, Buddhism and some Hindu sects emphasize the importance of people working harmoniously together toward a common goal (Rich 2007). Judaism is known for its charitable imperatives (Hartman and Hartman 2011), as is Islam where giving alms to those in need is one of the five pillars of the faith (Dunn and Galloway 2011). One of main commands for Christians is altruistic love, to "do to others what you would have them do to you" (Bible, Luke 6:31). Christians and Muslims are required to be just to their employees, knowing that God is watching (Al-Qazwini 1999; Bible, Colossians 4:1). An entire book of the Jewish scriptures (Bible, Proverbs) is devoted to honesty and diligence in life and work, and honorable interactions with others (Pava 1998).

Second, the five major religions encourage their adherents to be honest and conscientious workers, often by helping believers think of their work as dedicated to deity (Epstein 2002). For example, the Protestant (Weber 1958 [1920]) and Catholic work ethic (Novak 1993), the Islamic work ethic (Ali 1987; Ali *et al*. 1995), and many Jewish writings (Bible, Proverbs; Hartman and Harman, 2011; Pava 1998) require employees to be exemplary workers in order to honor God. Choompolpaisal (2008) suggests that the Buddhist work ethic resonates with the Weberian idea that worth can be judged by a person's willingness to work hard (Weber 1958: 68-70). One of the fundamental principles of Islam is stewardship where believers are to protect the resources entrusted to them and deal with others justly (Dunn and Galloway 2011); stewardship is also an important Jewish and Christian concept and part of some Hindu sects (Fisher 2008).

Religions also can play a part in creating positive reactions towards work by helping believers think of their labor as transcendent to the immediate moment even when the moment is unpleasant (Kutcher *et al*. 2010; Vitell 2009). In addition, people who have strong religious social networks might be able to integrate negative work experiences more favorably than people with weaker networks (Kolodinsky *et al*. 2008; Martinson and Wikening 1983). This might encourage them to continue to give good service to their employers, even when unhappy with the employer. Third, religions have been found to encourage emotional health in individuals. There is evidence that employees with high religious commitments are likely to be emotionally healthy (Brooks, 2008; Hill and Pargament 2003), though the opposite has also been found (i.e. Lenski 1969; Lugo *et al*. 2008). Religiously committed individuals may receive positive emotional support, and sometimes physical provision, from fellow members of their faith community (Duffy 2006; Stone *et al*. 2003). This might allow a person to cope more easily with the challenges of a job (Davis *et al.* 2004).

In addition, there is evidence that suggests a positive correlation between strong religious commitment and life satisfaction, defined as happiness and well-being (i.e. Hill and Pargament 2003; Jones 2006: Vroom 1964). Longitudinal surveys have found that religious people of all faiths report being about 13 points happier on average than non-religious people (Brooks 2008; Davis *et al*. 2004). Religious people also report being optimistic about the future and inclined to feel successful (Davis *et al*. 2004; Snoep 2008).

A few studies have found a direct relationship between religion and job satisfaction (i.e. Ali *et al*. 1995; Chusmir and Koberg 1988; Ghazzawi *et al*. 2012; Martinson and Wikening 1983; Yousef 2001). For example, in a study comparing the two branches of Christianity, Catholicism and Protestantism, Skjorshammer (1979) concluded that religion is a significant modifier of job satisfaction and that frequent attendees of religious places tended to be more

satisfied with their jobs than less frequent attendees. Ali and colleagues found similarly that Muslim employees who were more religiously committed tended to be more devoted to their job (Ali 1987; Ali *et al.* 1995). Ghazzawi and Smith (2009) suggest that religion connects positively to job satisfaction by influencing three of the four basic factors that have been postulated to affect an individual's level of job satisfaction: individual values, social influence and general life satisfaction. Religions are the sources for individual values that influence attitudes and they also encourage faith communities, which create social influence (Pava 1998). People are more likely to be satisfied at work if their family and friends model satisfaction (Van den Berg and Feij 2003; McGee and Cohn 2008).

Religious people also have been shown to have high degree of life satisfaction which has been shown to connect to job satisfaction. Tait and colleagues (1989) found, for example, that the greater the degree of general life satisfaction, the higher the degree of job satisfaction (Tait *et al*. 1989 Jones, 2006), though the direction of the relationship has been questioned (England and Whitely 1990; Kolodinsky *et al.* 2008).

In addition, a number of studies have found that spirituality links positively to job and career satisfaction (i.e. Klonodinsky et al. 2008; Milliman et al. 2001). Since religions incorporate spirituality into a system, the suggestion that strong religious commitment and job satisfaction are linked should not be unexpected.

To summarize, the literature about religion and its role in the workplace suggests that, in general, religiously committed individuals will be more satisfied with their job. However, some variations may exist among those of different religious affiliations and of different levels of religious commitment.

Other Variables Related to Job Satisfaction and Religion: Age, Gender, Income, and Education

Other variables have been frequently suggested to relate significantly to both religion and job satisfaction. The most prominent of these are age, gender, income, and educational level (Byrne *et al.* 2012; Ghazzawi, 2008; Jagannathan and Sundar 2010). In order to clarify the effects of religion, we chose to test these variables as well.

Age

There is some indication that an employee's age might affect his or her religious commitment and also level of job satisfaction.   Religious commitment has been found to fluctuate throughout an individual's life (Brooks, 2008; Witmer and Sweeney 1992) though there is no clear pattern as to whether old or young people are more religiously committed (Kum-lung and Teck-Chai 2010; Worthington *et al.* 2003).

A growing body of literature suggests that age plays a role in job satisfaction (Bos *et al*. 2009; Ghazzawi 2010) but again, the results are inconclusive. Some researchers found that older workers tend to be more satisfied than younger ones (i.e. Hunter 2007; Durst and DeSantis 1997) while others found the reverse (i.e. Finegold *et al.* 2002; Hickson and Oshagbemi 1999; Oshagbemi and Hickson 2003). Still others suggest that the age-job satisfaction relationship may follow a U shaped curve, with employees over 55 and under 25 reporting the highest satisfaction (Bernal *et al*. 19 98; Clark *et al*. 1996; Hunter 2007). Other researchers found no interactions at all, though the studies were not always done in western nations (i.e. Sarker *et al.* 2003: Sharma

and Jyoti 2005, 2009; Tu *et al*. 2005).   In conclusion, the connections between age, level of religious commitment and job satisfaction are not clearly defined. One contribution of this study is to continue testing this relationship.

Gender

Some researchers have found evidence that women are more concerned with religion than men (Kum-Lung and Teck-Chai 2010; Ruegger and King 1992). However, a 1998 meta-analysis of gender and religiosity (Borkowski and Ugras 1998) concluded that approximately 51% of the studies found no or mixed differences between the genders. The effect of gender upon religious intensity is still not clear (Kum-Lung and Teck-Chai 2010).

The role of gender in job satisfaction is also unclear. While some studies reported that women have higher job satisfaction than men, possibly due to lower expectations (Clark 1997; Sloane and Williams 2000), others found that women have lower job satisfaction, possibly due to more restrictive conditions (Kaiser 2007; Sousa-Paza and Sousa-Poza 2003). Still other studies found no effect at all (Bender *et al*. 2005; Eskildsen *et al*. 2004), though that might be moderated by work related factors such as stress (Kim *et al.* 2009).

Education

Education acts as a moderator for many relationships and one of those relationships seems to be ethics. A number of studies have found that higher educated respondents tend to display a more sophisticated ethic (Tsalikis and Lassar 2009; Kum-Lung and Teck-Chai 2010). Given the link between ethics and religion, this would suggest a similar relationship for religious intensity, but we could find no study linking educational level and religious intensity.

The links between educational level and job satisfaction are mixed. Some researchers found positive relationships between the two (i.e. Bamundo and Kopelman 1980; Chen and Francesco 2000; Pereira and Coelho 2013). Others concluded that educational level is negatively related to job satisfaction, particularly if over-skilling is an issue (Agarwal and Bhargava 2013; Mavromaras *et al*. 2011). Yet others found no results at all. For example, level of education was not a predictor of job satisfaction in nursing (Choi *et al.* 2012) or in academics (Byrne *et al.* 2012).

Income

The relationship between income and job satisfaction has been well-documented, though not agreed upon. Some studies report a positive relationship (Clark and Oswald 1996; Weaver 1980), while others find that the relationship does not exist or is negative (Bhuian and Mengue 2002; Jayaratne and Chess 1984). Still others suggest that the relationship is different among different income levels (Ducharme and Martin 2000).

In conclusion, the literature on age, gender, education and income do not give clear ideas on what direct or indirect effect these variables might have on job satisfaction. Therefore it seemed best to control them when examining the relationship between religious commitment and job satisfaction. Consequently, we propose the following hypothesis:

> ***Hypothesis 1:*** *For any individual, there is a positive and direct relationship between his or her level of religious commitment and job satisfaction, after controlling for the direct or indirect effects of age, gender, income, and education.*

THE FIVE RELIGIONS AND JOB SATISFACTION

There are many important religions but in order to bound the study, we focused on the five largest - Buddhism, Christianity, Hinduism, Islam, and Judaism. It should be noted however, that none of these religions are unified systems of belief. For example Islam has several branches, the most dominant of which are the Sunni and Shiite, and there are many sects of Hinduism. However, for the purposes of this exploratory research, we assumed that the variations between religions were greater than the variations within a religion. Each religion was considered as a single construct. The discussion below covers the major "orthodox" teachings of the religion regarding job satisfaction, with the differences in the branches noted only peripherally.

Immanent religions and job satisfaction: Buddhism and Hinduism

Buddhism

Buddhism is based on the writings and teachings of Siddhartha Gautama, commonly known as The Buddha, the enlightened one. The goal is to escape impermanence - the thinking constructs of the world - and plunge into Nirvana, the uncreated, which is enlightenment (Fundamentalbuddhism.com; Marques 2011; Yeshe 1998). The Eightfold Noble Path links the thinking and action processes designed to assist the adherent to achieve enlightenment through a process of birth and rebirth (Cantor 2008; Rich 2007).

There are a few studies that suggest that Buddhism might have a positive influence on its followers' job attitudes. For example, Rich (2007) suggested that the values of Buddhism, particularly compassion and other communitarian values might cause nurses who are Buddhists to have good job relationships and subsequently higher job satisfaction. On the other hand, it is possible that the Buddhist philosophy of impermanence might affect an adherent's perception of the job as tying one to the world (Cantor 2008). In addition, there might not be the social encouragement of other adherents to be attached to a job because it is part of the thinking constructs of the world.

Hinduism

There is little formal research on the relation between work ethics and Hinduism, nor could we find literature connecting the religion to job satisfaction or dissatisfaction. Therefore one of the contributions of this paper is to begin to fill this gap.

Hinduism is a syncretistic religion. Though there are a large number of Hindu gods and sects, a number of experts suggest that the major sections of Hinduism fall into the category of humanity as deity (i.e. Berry 1961; Chattopadhyaya 2001; Drees 2011). Therefore we have positioned it as an imminent religion.

In the culture derived from the Hindu *dharma,* an individual's profession and social status is determined by his cast (Borooah *et al.* 2007; Hopkins 2010). This might affect job

satisfaction, particularly for people of a lower cast or for women. In many Hindu sects, a virtuous woman can only seek employment with the permission of her husband, which results in a high percentage of women working in lower paying, home-based work (Kantor 2005; Rani and Unni 2009). As a result of these complexities, we suggest that it might be difficult to find clear correlations between religious commitment and job satisfaction for Hindus.

Transcendent religions and job satisfaction: Christianity, Islam, and Judaism

Christianity

Christians worship the God of Judaism in three persons ("three in one") and are named for the second member of the Trinity, Jesus, who Christians also consider to be the Jewish Messiah or Christ. The scriptures of Christianity are the Bible (Old and New Testament), and its major branches are Catholicism and Protestantism.

Beginning with Max Weber in the early 20th century (Weber 1958 [1920]), a well-established literature on Christian work ethics has developed. Weber argued that the Protestant Work Ethic arose from Luther and Calvin, leaders in the Protestant movement. Luther suggested that God calls individuals to various vocations using the term *Beruf*, "calling," to suggest that a Christian had a spiritual work on earth – his or her vocation (Wingren, 1957).

There is also a clearly established Catholic work ethic (Novak, 1993). Both ethics derive from the Bible which commands Christians to work as though they were working for Christ himself (Sherman and Hendricks 1987; Smith 2011).   Good work is seen as evidence of altruistic love to others and an act of worship to God (Ryken 1986). We suggest that as believers internalize these values, their satisfaction with their job will increase.

Islam

Islam, which means "surrendering one's will to the will of Allah" (Al-Qazwini 1999) is derived from a revelation from Allah, the Almighty, given to Muhammad. The message was written in the Quran, or Koran, which is the principle holy book in Islam. The major branches of Islam are Sunni and Shia'ai (Dunn and Galloway 2011).

There is a growing literature on the relation of Islam to work attitudes such as job satisfaction (i.e. Ali 1987; Ali et al. 1995; Tsalikis and Lassar 2009; Yousef 2001). Muhammad was a businessman and, according to the Quran, business is an important aspect of life. For example, it is allowed even during pilgrimage to Mecca (Graafland et al. 2006). Work in general is a source of independence, a means of fostering personal growth and self-respect, and a way to create the means to provide charity to others (Ali 1987; Graafland et al. 2006). In fact not working hard is seen to be a life failure (Tsalikis and Lassar 2009).   Based on a study of 425 Muslim employees, Yousef (2001) concluded that the Islamic work ethic directly affects both job satisfaction and organizational commitment. Ali and colleagues found that Muslim employees who were more religious tended to be more devoted to their job (Ali 1987; Ali et al. 1995).

Judaism

Judaism is also a transcendent religion, though it is notoriously difficult to define the religion clearly (Satlow 2006) because it also involves ethnicity and tradition. The name "Jew"

was originally a nickname for people from the Israelite tribe of Judah, but the meaning later came to include all descendants of Jacob (Neusner 1975). The religion is generally based on rabbinical traditions and ceremonial laws, located in and derived from, the Hebrew Scriptures (Halbertal 1997) which are called the TaNaKh an abbreviation for the Torah (the Law), the Neviim (the Prophets) and the Kethuvin (the Writings or Wisdom literature) (Neusner 1975; Satlow 2006.).

Though a number of scholars have discussed the ethics of Judaism in relation to economic life (i.e. Michaels 2009; Pava, 1998; Satlow 2006), we could find few discussions of a so-called Jewish work ethic, and little research relating Judaism to job satisfaction. An exception is Kremer and Goldstein (1990) who found links between religious centrality and job satisfaction in high school teachers in Israel.

One contribution of this paper is to begin to fill this gap. We suggest that the historic relationships between the TaNaKh and economic integrity, plus the emphasis in Judaism on charity (McGee and Cohn 2008) argue that commitment to this religion could have a strong positive effect on job satisfaction.

Summary

In regard to the links between personal commitment to one of the five major religions and job satisfaction, we speculate that members of the transcendent religions (Christianity, Islam, and Judaism) would be somewhat likely to have similar responses to religious commitment and job satisfaction. Followers of Allah or God follow divine commands when they act well as employees (Judge, et al. 2001; Petty et al. 1984). Therefore we predict a more direct positive connection between religious commitment and job satisfaction.

In contrast, the imminent religions, Buddhism and Hinduism, have fewer direct links between doctrine/divine authority and working well on the job. Therefore we predict that it will be more difficult to find positive relationships between the religious commitment of members of these religions and job satisfaction, or that the relationships will be neutral or negative. This discussion leads to the following hypotheses:

> ***Hypothesis 2:*** *The relationship between level of religious commitments and level of job satisfaction will be different among different religions.*

> ***Hypothesis 3:*** *Individuals who are members of transcendent religions will show a direct and positive relationship between level of religious commitment and level job satisfaction. Members of immanent religions will not show a direct and positive relationship between level of religious commitment and level of job satisfaction, or the relationship will be weaker.*

RESEARCH METHOD

This study investigates the relationship between religion and job satisfaction. The researchers used two instruments to survey 741 participants from a variety of southern California firms and organizations. Participants were also asked for demographic details such as age, gender, educational level, religious affiliation, income level, position in the organization, and the type of the industry they worked in.[ii] Participation in this study was voluntary and survey

responses were confidential. Participants signed a consent form that clarified the purpose of the study; the consent form was than separated from the demographic data and the survey instruments.

As noted earlier, we chose to limit this study to those people who self-identified with one of the five major religions. The purpose was to bound the study and also because the research design was exploratory in nature. We acknowledge that people without religion, or from other religions, are also valuable participants in this type of research, and will include them in future tests. However, this particular study focuses on people who are members of the five major religions.

Job Satisfaction Measurement

The MSQ Short form (Lester and Bishop 2000) was used to measure an individual's level of job satisfaction. This is a commonly used instrument for this construct. The 20-item "general satisfaction scale" Short Form was created by extracting the item with the highest correlation from each of the original 20 scales of the MSQ. Hoyt reliability coefficients for the Short Form items range from 0.93 to 0.78 (Lester and Bishop 2000; Weiss, Dawis et al. 1967). Construct validity is supported by the validation studies of the Minnesota Importance Questionnaire, based on the Theory of Work Adjustment. Cronbach's Alpha for the 20 MSQ items is 0.926 (Lester and Bishop 2000). In this study, while the mean of job satisfaction was 3.70 and standard deviation was 0.71, for the entire study sample of n=741 the mean was 3.73 for those who identified themselves as affiliated with one of the five major religions and 3.48 for those who did not.

Religious Commitment Measurement

An individual's level of religious commitment was measured using the Religious Commitment Inventory-10 (RCI-10) (Worthington et al. 2003). The RCI-10 is a 10 question scale measuring general level of religious commitment, based on a Likert-type scale.

The RCI -10 was developed by Worthington and colleagues to assist psychologist and counseling health professionals in testing the religious intensity of patients. The developers used Pearson correlation coefficients to test each subscale of the instrument. The test–retest reliability coefficients for the full RCI–10 and for the factors Intrapersonal Religious Commitment, and Interpersonal Religious Commitment were .87, .86, and .83 respectively (Worthington *et al.* 2003: 87).

Construct validity of the instrument was assessed by an ANOVA, using participants' endorsement of salvation on Rokeach's Value Survey as the independent variable and the RCI-10 scales as dependent variables. Scores on the full-scale RCI–10 were significantly higher for religious individuals. Additionally, Pearson correlation coefficients were used to examine the relationship of the RCI–10 (full scale and subscales) and scores of endorsement of the single-item measures of religiosity and spirituality (Hall et al. 2009; Worthington et al. 2003). Cronbach's Alpha for the RC-10 items in this study was 0.959. For this study, the mean of religious commitment for those who were affiliated with a major religion (n=616) was 2.97. The mean of those who reported themselves as not being a member of a major religion (n=125) was recoded as 0.

Participants and Setting

The 741 participants in the study included employees of banks, hotels, hospitals, governmental agencies, not-for-profit organizations and employed graduate students at a private southern California university. Out of the 912 people solicited for this study, a total of 769 completed and returned the survey, for a response rate of 84%. However, 28 forms were incomplete, and seven surveys belonged to unemployed respondents. These surveys were not used.

Religions

About nine percent ($n=64$) of the participants self-identified as Buddhist; 54.1% ($n=401$) identified themselves as Christian; 4.2% ($n=31$) identified as Hindu; 3.4% ($n=25$) identified as Jewish, and 9.3% ($n=69$) identified themselves as Muslim. About eight percent ($n=61$) said they did not have a formal religion; and 3.5% ($n=26$) identified with "other religions." Three and half percent (3.4%) of the participants ($n=25$) identified themselves as Agnostic and 3.5% ($n=26$) as Atheist. Only 1.8% ($n=13$) of the survey takers did not identify their religious affiliation. See Table 1 for participants' religious affiliation.

Available statistics suggest that this sample is indicative of the religious composition of the southern California region. In particular, significant Hispanic immigration has changed the religious profile of some regions. For example, between 1990 and 2008, the Catholic population of the New England states fell from 50% to 36% while it rose from 29% to 37% in California (Kossmin and Keysar 2009, para. 8). About 54% of our sample identified as Christian, which includes both Catholics and Protestants. In 2004, California was reported to be 2.7% Jewish (Jones, 2004). This Jewish percent of the sample was 3.4% .

While Pew Research reports that 16.1% of the U.S. population is unaffiliated with any formal religion (Lugo et al. 2008), in California this percent goes down to 14.4% (Jones, 2004). About 15.1% ($n=112$) of this sample reported no connection with a formal religion. Thus, on balance we judge that to a large extent this sample is representative of the religions of the region.

Table 1 PARTICIPANTS RELIGIOUS AFFILIATION ($N=741$)		
Religion Affiliation	**Number of employees (n)**	**Percentage (%)**
Agnostic	25	3.4%
Atheist	26	3.5%
Buddhist	64	8.6%
Christian	401	54.1%
Hindu	31	4.2%
Jewish	25	3.4%
Muslim	69	9.3%
No formal religion	61	8.2%
Other religious beliefs	26	3.5%
Blank	13	1.8%
Total	**741**	**100.0%**

Gender, Age, Education, Income

The respondents in this study were 54% male (*n*=402) and 46% female (*n*=339). The age distribution of the sample was as follows: 13.9% (*n*=103) were younger than 25; 26.9% (*n*=199) were aged 25-30. Of the remainder, 16.2% (*n*=120) were in the 31-35 age range; 24.7% (*n*=183) were in the 36-45 age range, 11.70% (*n*=87) were in the 46-55 age range, and 6.5% (*n*=48) were over 56.

Over 94% of the respondents had some level of education past high school. Six percent (6.2%) of the sample (*n*=46) had a high school education and 14.7% (*n*=109) had an Associate college degree. About 48.40% (*n*=359) had a Bachelor's degree, and 28.5% (*n*=211) of the sample had a Graduate degree. The remainder, 1.6% (*n*=12) had "other" form of education, such as vocational and professional designations. A few participants (*n*=4) did not answer this question. Please see Table 2 for the full characteristics of the sample.

The income levels of the respondents were similarly distributed. Twenty four percent (*n*=178) reported that their annual income was $35,000 or lower; 17.8% (*n*=132) earned $35,000 - $49,000; 18.8% (*n*=139) earned $50,000 -$64,999; 10.8% (*n*=80) earned $65,000-$79,999; 11.5% (*n*=85) earned $80,000-$94,999; and 15.2% (*n*=113) earned $95,000 or more. Fourteen respondents did not indicate their income level (see Table 2. The value of income is transformed using the square root method for regression analysis).

Table 2		
CHARACTERISTICS OF THE SAMPLE (*N*= 741)		
Demographics	**Number of Employees**	**Percentage**
Gender		
Male	402	54.30%
Female	339	45.70%
Age		
	Less than 20	103
	25-30	199
	31-35	120
	36-45	183
	46-55	87
	Above 56	48
	Age not identified	1
Academic Degree		
	High school	46
	Associate degree	109
	Bachelor's degree	359
	Graduate degree	211
	Other	12
	Degree not identified	4
Income Level		
	Less than $35,000	178
	$35,000 - $49,000	132
	$50,000 -$64,999	139
	$65,000-$79,999	80
	$80,000-$94,999	85
	$95,000 +	113
	Income not reported	14
Total		**741**

RESULTS

To test the research hypotheses, we followed the analysis framework shown in Figure 1. SPSS was used to analyze the data. First we used simple and hierarchical regression analysis to determine whether the relationship between religious intensity and job satisfaction existed (Hypothesis 1), and then examined whether the relationships were different among different groups (Hypothesis 2 and 3). The results and discussions are below.

Figure 1: FRAMEWORK FOR ANALYZING THE RELATIONSHIP BETWEEN RELIGIOUS COMMITMENT AND JOB SATISFACTION
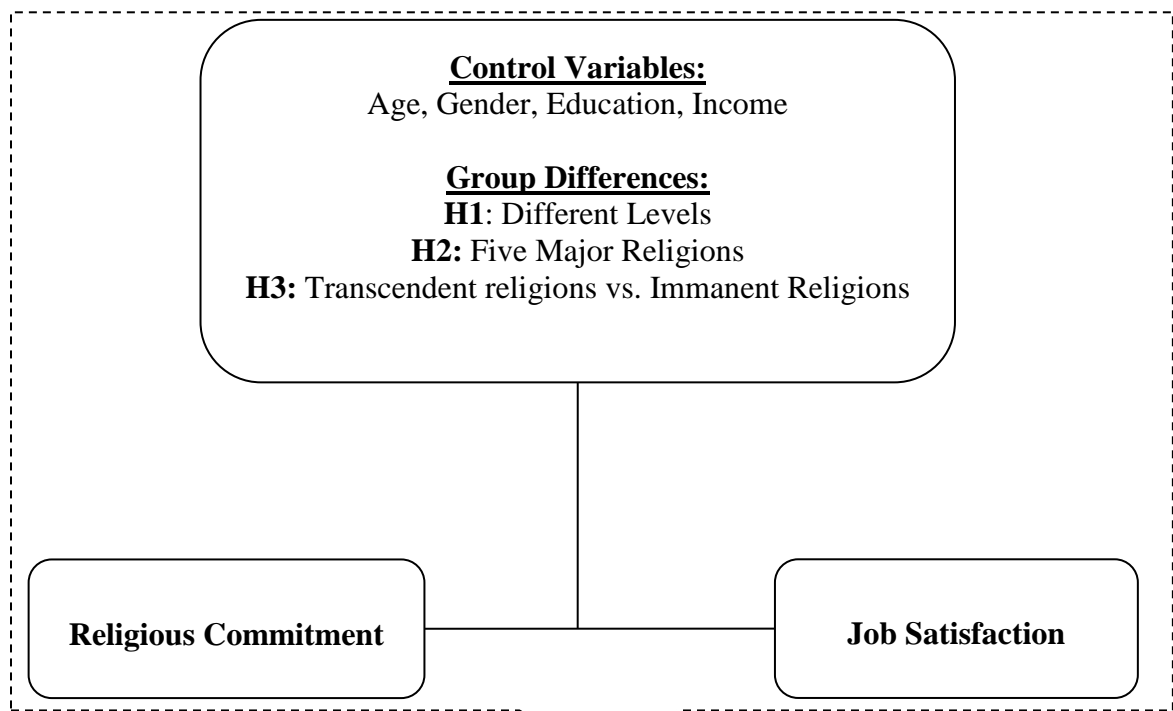
> ***Hypothesis 1:*** *For any individual, there is a positive and direct relationship between his or her level of religious commitment and job satisfaction, after controlling for the direct or indirect effects of age, gender, income, and education*
> .

To test whether more religiously committed individuals experience more satisfaction from their job, as proposed in Hypothesis 1, correlation and regression analysis were used. We first calculated the correlation coefficients of a composite religious commitment variable using the means of all the 20 MSQ items, and its relationship to a composite job satisfaction variable using the means of the RC-10 (the level of religious commitment of those who self-reported as "not being affiliated with a religion" was coded as "0"). The correlation coefficient was 0.170 (p=0.000), which suggested that there is a positive relationship between religious commitment and job satisfaction, though the relationship is not strong. Hypothesis 1 was confirmed.

Level of Religious Commitment

Next hierarchical regression analysis was used to further analyze the positive relationship between religious commitment and job satisfaction, while the compounding effect of gender, age, income, and education were controlled and examined. The results of the analysis are shown in Table 3.

	Model 1: Control Variables	Model 2: Effects of Independent Variable	Model 3: Effect of Moderator Variable
	Table 3		
	HIERARCHICAL REGRESSION ANALYSIS OF THE RELATIONSHIP		
	BETWEEN RELIGIOUS COMMITMENT AND JOB SATISFACTION WITH		
	CONTROL AND MODERATING VARIABLES		
Constant	3.079	2.912	2.761
Gender	0.070	0.089	0.091
Age	0.023	0.012	0.013
Education	0.033	0.036	0.038
Income	0.247***	0.234***	.318**
Religious Commitment		0.081***	0.141*
Income*Religious Commitment		-0.035	
R^2	0.058	0.086	0.088
Adjust R^2	0.053	0.080	0.080
F Value	10.973	13.485	11.452
R^2 Change		0.028	0.002
F Change		22.231***	1.261

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

The hierarchical analysis indicated that religious commitment was positively related to job satisfaction in this study. The results, shown in Model 2 of Table 3, suggest that religious commitment had a positive relationship with job satisfaction even after the effects of various demographic variables such as age, gender, income, and education are taken into consideration. The suggestion is that the more the person is religiously committed, the higher her/his job satisfaction (B=0.081, p<0.001).

Religious commitment added 2.8% to the explanation of the variance in job satisfaction. This positive relationship between religious commitment and job satisfaction stays positive and significant (see Model 3 of Table 3, *B*=0.141, *p* <0.05) even after the interaction of income and religious commitment is taken into consideration. Therefore, this study shows that the level of religious commitment is positively related to the level of job satisfaction. Accordingly, Hypothesis 1 is thus confirmed.

To further analyze how different levels of religious commitment relate to different levels of job satisfaction, we separated the respondents who were affiliated with formal religions into two groups (those without formal religions were excluded). Those with a religious commitment composite score above the mean were categorized as the "high commitment" group and those under the mean as the "low commitment" group. The hierarchical regression analysis results on the relationship between religious commitment and job satisfaction are shown in Table 4.

	High Commitment Model 1	High Commitment Model 2	Low Commitment Model 1	Low Commitment Model 2
Table 4 RELIGIOUS COMMITMENT AND JOB SATISFACTION USING HIERARCHICAL REGRESSION ANALYSIS: HIGH COMMITMENT GROUP VERSUS LOW COMMITMENT GROUP				
N	344	344	346	346
Constant	3.155	2.467	3.052	3.133
Control Variables				
Gender	.148	.155*	.170*	.169*
Age	.032	.021	0.015	0.015
Education	.018	.026	.056	.068
Income	.233**	.223*	.183*	.183*
Independent Variable				
Religious Commitment		0.0187**		0.042
R^2	0.069	0.099	0.059	0.060
Adjust R^2	0.058	0.086	0.045	0.042
F Value	6.308	7.453	4.156	3.371
R^2 Change	0.069	0.030	0.059	0.001
F Change	6.308	11.272	4.159	0.4266

Note: * $p< 0.05$; ** $p < 0.01$; *** $p <0.001$.

The results suggest that the relationships for the two groups are different. There was a positive relationship between religious commitment and job satisfaction for the "high commitment" group ($B=0.187$, $p<0.001$, see Model 2 of Table 4's high commitment group). For this group, religious commitment added 3.3% to the level of job satisfaction. Together with other demographic control variables, religious commitment explained 9.9% of overall job satisfaction.

Income was a significant factor for job satisfaction and gender was part of the relationship. Men with high religious commitment appeared to be more satisfied with their job. However, the relationship did not seem to hold for the low commitment group. The relationship between low religious commitment and job satisfaction was not significant ($B=0.042$, $p=0.607$, see Model 2 of Table 4's Low Commitment group) for those 346 respondents who had low religious commitment. Thus, analyzing low and high commitment groups separately strengthened the confirmation of Hypothesis 1 that different levels of religious commitment is related to different level of job satisfaction among those with formal religions.

Demographic factors

The roles of the demographic factors (age, gender, income and education) were also examined. As shown in Model 1 of Table 3, hierarchical regression analysis results indicated that the control variables together explain 6% of the variance in job satisfaction. Income had a significant positive relationship with job satisfaction, while the other control variables such as age, gender, and education did not except as noted above.

The moderating effect of income was analyzed further. First we added the interaction of income and religious commitment to the hierarchical analysis that examined the relationship between religious commitment and job satisfaction while other demographic variables were controlled (see Model 3 of Table 3). While the results suggested that the interaction has some negative moderating effect on the relationship, it was not significant ($B= -0.035$, $p>0.05$).

We then compared the relationship between the level of religious commitment and the level of job satisfaction for different income groups. Respondents were organized into three groups: low income (annual income less than \$50,000, $N=310$), middle income (annual income \$50,000 -\$79,999, $N=219$), and high income (annual income \$80,000 and more, $N=198$).

Multiple regression analysis was used to investigate the relationship, as well as that of the other control variables. The analysis showed unexpected results about the relationship between income, religious commitment, and job satisfaction (see Table 5). The relationship was significant and strongest in the middle income group ($B=0.088$, $p<0.01$). It was also somewhat strong and significant in the low income group ($B=0.124$, $p<0.001$). However, the relationship was weak (0.022, $p=0.493$) and not significant in the high income group with an income of \$80,000 and over ($n=198$).

The analysis on demographic factors provided additional confirmation for Hypothesis 1. It was not surprising to find that in this study income had a positive relationship to job satisfaction.   As suggested earlier, in the general literature the connection is been mixed. That is, while income is a motivator of job satisfaction for some individuals (Gupta and Shaw, 1998; Kohn 1993; Lawler 1971), it is a hygiene factor for others (Herzberg 1987). However, the literature suggests that age could be a moderating variable in this relationship; generally speaking income is a job motivator for younger people (Maslow 1970; Tang and Chiu 2003). Almost 82% of the participants in the sample were younger than 46 years; this is an age group where extrinsic factors such as income are often important (Ellickson 2002; George and Jones 2005; Ghazzawi 2008; Ghazzawi 2011). Nevertheless, this study found that the relationship between religious commitment and job satisfaction was different among different income groups. It is possible that a factor other than religion might play a significant role in job satisfaction for the high income group.

Table 5 MULTIPLE REGRESSION ANALYSIS OF THE RELATIONSHIP BETWEEN RELIGIOUS COMMITMENT AND JOB SATISFACTION AMONG DIFFERENT INCOME GROUPS			
	Low Income	**Middle Income**	**High Income**
R^2	0.033	0.104	0.017
Adjusted R^2	0.018	0.082	-0.009
(Constant)	3.371***	2.779***	4.034***
Gender	-0.013	0.168	0.154
Age	-0.002	-0.012	0.014
Education	0.040	0.040	0.013
Income	-0.150	0.270	-0.154
Religious Commitment	0.088**	0.124***	0.022

Note: * $p< 0.05$; ** $p < 0.01$; *** $p <0.001$.

Hypothesis 2: The relationship between level of religious commitments and level of job satisfaction will be different among different religions.

To examine the relationship between different religions and job satisfaction, we began by dividing the sample according to the major religion with which the individual self-identified. Multiple regression analysis was adopted for each religion group, using demographic variables and religious commitment as the independent variables and job satisfaction as the dependent variable. The results are shown in Table 6.

The analysis indicated that religious commitment does have a positive relationship with job satisfaction for two groups, Buddhists (N=64, B=0.233, p<0.001, see Table 6 under "Buddhism") and Hindus (N=31, B=0.280, p<0.001, see Table 6 under "Hinduism), but not for Christians, Jews, or Muslims. For Buddhists, two demographic variables, income (B=0.252, p<0.05) and education (B=0.341, p<0.05), were also positively related to job satisfaction. For Buddhists and Hindus, religious commitment, income, and education explain over 20% of the variation in job satisfaction. This confirms Hypothesis 2, but in an unexpected way.

	Buddhism	Hinduism	Christian	Jewish	Muslim
Table 6 MULTIPLE REGRESSION ANALYSIS OF THE RELATIONSHIP BETWEEN RELIGIOUS COMMITMENT AND JOB SATISFACTION AMONG DIFFERENT RELIGIOUS GROUPS					
R^2	0.223	0.263	0.068	0.302	0.109
Adjusted R^2	0.156	0.115	0.056	0.119	0.039
N	64	31	401	25	69
(Constant)	1.792	3.109	3.018	2.346	3.190
Gender	.040	.143	.237	-.012	-.006
Age	-.030	-.021	.025	-.159	.126
Education	.252*	.011	.020	.230	-.043
Income	.341*	-.029	.156*	.533	.144
Religious Commitment	.233**	.280**	.062	.161	-.009

Note: * p< 0.05; ** p < 0.01.

Hypothesis 3: *Individuals who are members of transcendent religions will show positive relationships between religious commitments and job satisfaction. Members of immanent religions may not show a direct relationship between religious commitment and job satisfaction, or show a weaker relationship.*

To further test the relationship between religious commitment and transcendent and immanent religions, we clustered members of transcendent religions (Christianity, Islam, and Judaism, N=495) into one group and members of immanent religions (Buddhism and Hinduism, N=95) into another. As suggested earlier, the reason for this grouping was based on the assumption that the immanent religions, Hinduism and Buddhism, have less direct connections between deity and acting well at work. The transcendent religions, Christianity, Islam and Judaism, are all commanded by deity to act well towards their employment.

Variable	Immanent Religions Model 1	Immanent Religions Model 2	Transcendent Religions Model 1	Transcendent Religions Model 2
Table 7				
RELIGIOUS COMMITMENT (PREDICTOR) AND JOB SATISFACTION USING REGRESSION ANALYSIS: IMMANENT RELIGIONS VERSUS TRANSCENDENT RELIGIONS				
N	95	95	495	495
Constant	2.870	2.139	3.147	3.010
Control Variables				
Gender	.036	.109	.192	.196
Age	.025	-.031	.037	.027
Education	.078	.167	.025	.023
Income	.329*	.274*	.168*	.174*
Independent Variable				
Religious Commitment		.238***		.054
R^2	0.110	0.230	0.062	0.069
Adjust R^2	0.071	0.186	0.055	0.060
F Value	2.790	5.306	8.126	7.281
R^2 Change	0.110**	0.119***	0.062***	0.007
F Change	2.790	13.781	8.126	3.722

Note: * $p< 0.05$; ** $p < 0.01$; *** $p <0.001$.

A surprising result was the finding that those with strong beliefs in the transcendent religions did not show a strong relationship with job satisfaction, while the high commitment immanent believers did (B=0.054, p=0.054). For the transcendent group, religious commitment only explained 0.7% of the variance in job satisfaction and, when adding the demographic variables, it only explained 6.9% of the variance. The significance of income and its relationship to job satisfaction was similar in both groups.

These results suggest that the relationship between religious commitment and job satisfaction differs between transcendent religions (Christianity, Islam, and Judaism) and immanent religions (Buddhism, Hinduism). While the findings indicated that not all beliefs experience the same relationships between these constructs, transcendent religions do not show a positive relationship while immanent religions do. Therefore, Hypothesis 3 is rejected.

There are several possible reasons for these results. One might be the small numbers in the sample for the different religious groups, particularly the immanent religions. It might be fruitful to further investigate this phenomenon with a larger sample. Another possible reason might have to do with each religion's view of the sacred reality, deity. A transcendent believer sees deity as a distinct being, with personality and existence apart from him or herself. An immanent believer views deity as an inherent and indissoluble part of nature and his or her self, such as the idea of direct self-awareness for the Buddhist and the sense of "Karma," the inevitability of action and consequences, for the Hindu. According to Fisher (2008) this means that for the immanent believer:

> Every act we make, and even every thought and every desire we have, shape our future experiences. Our life is what we have made it. And we ourselves are shaped by what we have done: As a man acts, so does he become…" (79).

It is possible that the immanent believer sees job satisfaction as directly dependent on personal endeavor and action, rather than an outside personality, and as a result has higher job satisfaction.

CONCLUSIONS

This study found that level of religious commitment does impacted job satisfaction, which is similar to the results found by Ghazzawi and colleagues (2012) in a pre-test. However, the relationship is not strong (r=0.182).

The study also found that members of immanent and transcendent religions at the same level of religious intensity have different levels of job satisfaction. Contrary to our thinking, believers of immanent religions showed a significant positive relationship with job satisfaction, while believers of transcendent religions did not. This finding suggests that further testing along these lines might be useful.

Additionally, the study concluded that income plays a moderating effect in the relationship between religious commitment and job satisfaction, with higher income workers tending to be more satisfied.

At least two important managerial implications can be taken from this study. First, this research can inform managers who desire to create a more inclusive and religion-friendly working environment that employees, regardless of their faith, have the same needs as other employees and want management to be fair, reasonable, and provide opportunities for growth. The probability is high that a religiously committed employee will work hard, show respect for others, and treat customers and peers ethically. In addition, the employee is likely to have high job satisfaction, with its attendant positives such as organizational commitment.

Another managerial implication is relevant to organizations in the global arena. Managers from western nations need to understand the impact that religion might have on their foreign employees. Globally, there are many cultures that are driven by the majority religion of that culture and it is helpful for managers to understand the implications. For example, cultures based on certain religions may treat women in ways that Western managers would find problematic. In order to have strong job satisfaction from both men and women, secular managers may need to find culturally appropriate ways to deal with issues they may initially know little about.

IMPLICATIONS FOR RESEARCH AND LIMITATIONS

This study also has implications for ethicists. The findings suggest that there are positive links between religious commitment and job satisfaction. There might also be links between religious commitment and other workplace constructs. If this is so, testing religious commitment using a validated instrument, such as the RCI-10, might yield more reliable results than testing an individually self-defined spirituality. That is, stronger tests and stronger results might be possible if religious commitment is tested versus personal spirituality. Finally, the fact that religious commitment affects job satisfaction suggests that researchers need to more deeply study the effect of the major religions on the workplace.

It is the intent of this paper to stimulate further research in the area of religious commitment-job satisfaction relationship. As already suggested, a focus on religious links to job satisfaction might extend the present literature in valuable ways, particularly in demonstrating ways that religiously employees can bring positive impact in their workplace.

The study has some limitations and its conclusions should be generalized with caution. One limitation is a possible geographical bias. The sample was taken from full-time employees

and managers who live in Southern California. Research on the same subject in different regions in the United States might yield different results, particularly in regions where religion, in general, is a larger part of daily life. That is, further research with a more statistically random sample across the U.S. is needed in order to assess the applicability of these findings to the general population.

It should also be noted that this research was limited to one country, the United States. Broad application of these results to other countries or cultures is not valid because religious beliefs, and the intensity of such beliefs, differ. Further research in different cultures would provide reasonable assessments of the applicability of the results to other cultures.

Another limitation is related to the size of the sample, particularly the small number of representatives of various religions. Though the study was unusual in that it tested the five largest religions on the same scale, there were relatively few Jews, Hindus, Buddhists and Muslims in the sample. Some of the effect sizes of the findings are small, which may be due to the small sample size. Future research should include enough numbers of each religious group to present sound statistical results regarding each faith.

In spite of the limitations however, the study does present some direction for further research.   First, it might be rewarding to investigate the causal relationships between religious intensity and job satisfaction by using semi-structured or structured interviews with various focus groups of religiously committed employees.   Second, more research is needed in specific professions and industries to test the applicability of this concept. Some religious groups might have positive or negative reactions to certain industries. For example Christians might not wish to work in military related industries or in industries that sell sex. Muslims, likewise, are enjoined to avoid working in industries that feature gambling, alcohol or swine (Dunn and Galloway 2011). Therefore industry or sector-specific research might yield valuable results.

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REFERENCES

Ackers, P., and Preston, D. (1997). Born again? The ethics and efficacy of the conversion experience in contemporary management development. *Journal of Management Studies* 5: 677-697.

Adherents.com. (2012). Retrieved in Dec, 2012 from http://www.adherents.com/.

Agarwal, U. A., and Bhargava, S. (2013). Effects of Psychological Contract Breach on Organizational Outcomes: Moderating Role of Tenure and Educational Levels. *VIKALPA*, *38*(1), 13.

Al-Qazwini, M. (1999). *Invitation to Islam.* Retrieved from al-islam.org/invitationto/htm:1-50.

Ali, A.J. (1987). Values system as predictor of work satisfaction of Arab executives. *International Journal of Manpower,* Vol. 18, No. 2, pp. 3-6.

Ali, A.J., Falcone, T., and Azim, A.A. (1995). Work ethic in the USA and Canada. *Journal of Management Development,* Vol. 14, No. 6, pp. 26-34.

Ali, A. J., and Gibbs, M. (1998). Foundation of business ethics in contemporary religious thought: The ten commandment perspective. *International Journal of Social Economics, 25*(10), 1552-1564.

Ali, A., R. Camp and M. Gibbs (2000). The Ten Commandments perspective power and authority in organizations. *Journal of Business Ethics* 26, 351-361.

Allmon, D. E., D. Page and R. Roberts (2000). Determinants of perceptions of cheating: Ethical orientation, personality and demographics. *Journal of Business Ethics* 23, 411-422.

*Bible (*1978). New International Translation. Zondervan Bible Publishers, Grand Rapids, MI.

Bamundo, P. J., and Kopelman, R. E. (1980). The moderating effects of occupation, age, and urbanization on the relationship between job satisfaction and life satisfaction. *Journal of Vocational Behavior*, *17*(1), pp. 106–123.

Barnett, T., K. Bass and G. Brown (1996). Religiosity, ethical ideology, and intentions to report a peer's wrongdoing. *Journal of Business Ethics* 15, 1161-1174.

Bender, K.A.; Donohue, S.M.; and Heywood, J.S. (2005). Job satisfaction and gender segregation. *Oxford Economic Papers*, 57(3), pp 479.

Bernal, D., Snyder, D., and McDaniel, M. (1998). The age and job satisfaction relationship: Does its shape and strength still evade us?. *Journal of Gerontology: Series B-Psychological Sciences and Social Sciences,* Vol. 53, pp. 287-293.

Berry, T. (1961). Oriental philosophy and world humanism. *International Philosophical Quarterly,* 1, pp. 5-34.

Bhuian, S. N., and Mengue, B. (2002). An extension and evaluation of job characteristics, organizational commitment and job satisfaction in an expatriate, guest worker, sales setting. *Journal of Personal Selling and Sales Management*, *22*(1), 1–11.

Borkowski, S.C. and Ugras, Y. J. (1998). Business students and ethics: A meta-analysis. *Journal of Business Ethics,* 17 (8), pp. 117-127.

Borooah, V.K., Dubey, A., and Iyer, S. (2007). The effectiveness of Jobs reservation: Caste, religion and economic status in India. *Development and Change, 38(3),* 423-445.

Bos, J., Donders, N., Bouwman-Brouwer, K., and Van der Gulden, J. (2009). Work characteristics and determinants of job satisfaction in four age groups: university employees' point of view. *International Archives of Occupational and Environmental Health*, S2(1 0), pp 1249-1259.

Brayfield, A. H., and Crocket, W. H. (1955). Employee attitudes and employee performance. *Psychological Bulletin,* 52, pp. 396-424.

Brief, A.P. (1998). *Attitudes in and around organizations.* Thousand Oaks, CA: Sage Publications.

Brooks, A. (2008). *Gross national happiness.* New York, NY: Basic Books.

Burnside, J. (2010). What shall we do with the Sabbath-Gatherer? A narratife approach to a hard case in Biblical Law. *Vetus Testamentum,* Vol 60, Is 1, pp. 45-62.

Byrne, M., Chughtai, A. A., Flood, B., and Willis, P. (2012). Job satisfaction among accounting and finance academics: empirical evidence from Irish higher education institutions. *Journal of Higher Education Policy and Management*, *34*(2), pp. 153–167.

Cantor, J. (2008). Vision and Virtue in Psychoanalysis and Buddhism: Anatta and its implications for social responsibility. *Psychoanalytic Inquiry.* Vol 28, Is. 5. pp. 532-540.

Cash, K.C. and Gray, G.R. (2000). A framework for accommodating religion and spirialtiy in the workplace. *Academy of Management Executive. Vol. 14 (3),* pp. 124-133.

Cavanagh, G.F., and Bandsuch, M.R., (2002). Virtue as a benchmark for spirituality in business. *Journal of Business Ethics,* Vol. 38 (1), pp. 109-117.

Chaplin, J. P., (1985) *Dictionary of psychology.* New York: Dell Publishing.

Chen, Z. X., and Francesco, A. M. (2000). Employee demography, organizational commitment, and turnover intentions in China: do cultural differences matter? *Human Relations*, *53*(6), 869–887.

Childs, J.M. (1995). *Ethics in business: Faith at work.* Minneapolis, MN: Fortress Press.

Chattopadhyaya, D.P. (2001). *Nature and technology in the world religions.* Boston: Kluwer Academic Publishers.

Choi, J., Flynn, L., and Aiken, L. H. (2012). Nursing practice environment and registered nurses' job satisfaction in nursing homes. *The Gerontologist*, *52*(4), pp. 484–492.

Choo, S. S., Hendirck, H.; and Keng-Howe, I.C. (2009). Life values and job satisfaction:Comparing local managers to the Japanese and Chinese expatriates in Singapore. *International Journal of Business Studies,* Vol. 17, # 1: pp. 61-106

Choompolpaisal, P. (2008). Constrictive constructs: Unraveling the influence of Weber's sociology on Theravada studies since the 1960's. *Contemporary Buddhism,* 9(1), 7-51.

Chusmir, L.H., and Koberg, C.S. (1988). Religion and attitudes toward work: A new look at an old question. *Journal of Organizational Behavior,* Vol. 9, Is 3, pp. 251-262.

Clark, A., Oswald, A., and Warr, P. (1996). Is job satisfaction U-shaped in age? *Journal of Occupational and Organizational Psychology,* 69, pp. 57-81.

Clark, A. E. (1997). Job satisfaction and gender: Why are women so happy at work? *Labour Economics*, *4*(4), pp. 341–372.

Clark, A. E., and Oswald, A. J. (1996). Satisfaction and comparison income. *Journal of Public Economics*, *61*(3), 359–381.

Conroy, S. J., and Emerson, T. L. N. (2004). Business ethics and religion: Religiosity as a predictor of ethical awareness among students. *Journal of Business Ethics, 50*(4), 383-396.

Corduan, W. (2005). God in the early twenty-first century: Ayodhya as case study. *Christian Scholar's Review,* winter, xxxiv, pp.167-187.

Cunningham, G.B., (2010). The influence of religious personal identity on the relationships among religious dissimilarity, value dissimilarity, and job satisfaction. *Soc Just Res,* 23, 60-76.

Davis, J., Smith, T. and Marsden, P. (2004). General social surveys, 1972-2004. *National Opinion Research Center,* Chicago: Ill.

Ducharme, L. J., and Martin, J. K. (2000). Unrewarding work, coworker support, and job satisfaction a test of the Buffering Hypothesis. *Work and Occupations*, *27*(2), 223–243.

Durst, S.L., and DeSantis, V.S. (1997). The determinants of job satisfaction among federal, state, and local government employees. *State and Local Government Review,* 29 (1), 7-16.

Drees, W. B. (2011). History, Hinduism, and Christian humanism, *Journal of Religion and Science,* Vol. 26, Is 3, pp. 515-516.

Duffy, Ryan D. (2006). Spirituality, religion and career development: Current status and future directions. *Career Development Quarterly,* 55 (1), pp. 52-63.

Dunn, S. L.; and Galloway, R.R. (2011). Islam, Islamic finance, and Christianity. *Journal of Biblical Integration in Business,* 14(1), 43-68.

Ellickson, M.C. (2002). Determinants of job satisfaction of municipal employees. *Public Personnel Management,* 31(3), 343-358.

Ellison, C. W, and Smith, J. (1991). Toward an integrative measure of health and well-being. *Journal of Psychology and Theology,* 19, 35-48.

England, G. and Whitely, W. (1990). Cross-national meanings of working. In A. Brief and W.Nord (Eds.), *Meanings of Occupational Work.* Lexington,MA: Lexington Books, pp. 65-106.

Epstein, E.M. (2002) Religion and business: The critical role of religious traditions in management education. *Journal of Business Ethics,* 38 (1), pp. 91-96.

Eskildsen, J.K., Kristensen,K. and Westlund, A.H. (2004). Work motivation and job satisfaction in the Nordic countries. *Employee Relations*, 26(1/2), pp. 122-136.

Finegold, D., Mohrman, S. and Spreitzer, G.M., (2002). Age effects on the predictors of technical workers' commitment and willingness to turnover. *Journal of Organizational Behavior,*23(5), pp. 655-674.

Fararo, T.J. and J. Skvoretz (1986). Action and institutions network and function: The cybemetic concept of social structure. *Sociological Forum* 1, 219-250.

Fisher, M.P. (2008). *Living religions.* Upper Sadler River, NJ. Pearson Prentice Hall.

Friedman, H. (2000). Biblical foundations of business ethics. *Journal of Markets and Morality* 3(1), 43-57.

Fry, L.W. (2003). Toward a theory of spiritual leadership. *Leadership Quarterly,* Vol. 14, pp. 693-727.

Fundamentalbuddhism.com. (1997). Accessed Dec., 2012.

Furnham, A. (1990). A content, correlational, and factor analytic study of seven questionnaire measures of the Protestant Work Ethic. *Human Relations,* 43: 383-399.

George, J.M., & Jones, G.R. (2005). *Understanding and managing organizational behavior*. Fourth Edition. Upper Saddle River: New Jersey, Pearson Prentice Hall.

Ghazzawi, I., (2008). Job satisfaction among information technology professionals in the U.S.: An empirical study. *Journal of the American Academy of Business,* Cambridge, 13(1), 1-15.

Ghazzawi, I. (2010). Gender role in job satisfaction: The case of the U.S. information technology professionals. *Journal of Organizational Culture, Communication and Conflict, 14*(2), 1-34.

Ghazzawi, I.A. and Smith, Y. S., (2009) Crafting the whole employee: Job satisfaction, job commitment, and faith. *The Business Review,* Cambridge, 1(2), 300-309.

Ghazzawi, I.A.; Smith,Y. S., and Cao, Y. (2012). Job Satisfaction and Faith: Testing the Effects Of Religious Intensity on Job Satisfaction. *The Cambridge Business Review. 20*(2), 10-22.

Graafland, J., Mazereeuw, C., and Yahia, A. (2006). Islam and socially responsible business conduct: an empirical study of Dutch entrepreneurs. *Business Ethics: A European Review,* 14(4), pp. 390-406.

Grossman, C.L. (2009). Most religious groups in USA have lost ground, survey finds. *USA TODAY.* Retrieved on February 23, 2014 from:

http://usatoday30.usatoday.com/news/religion/2009-03-09-american-religion-aris_n.htm

Gupta, N. and J. D. Shaw: 1998, March/April, 'Let the evidence speak: Financial incentives are effective!! *Compensation and Benefits Review* 26, 28-32.

Halbertal, M. (1997). *People of the book: Canon, meaning, and authority.* Cabridge, MA: Harvard University Press.

Hall, T. W., Fujikawa, A., Halcrow, S.R., Hill, P. C., and Delaney, H. (2009) Attachment to God and implicit spirituality: Clarifying correspondence and compensation models. *Journal of Psychology and Theology*. Vol. 37, Is. 4; pp. 227-245.

Hartman, H. and Harman, M. (2011). Jewish identity and the secular achievements of Amercian Jewish man and women, *Journal for the Scientific Study of Religion* 50(1), pp. 133-153.

Helliwell, J.F. and Huang H. (2010) How's the Job? Well-being and social capital in the workplace. *Industrial and Labor Relations Review,* Vol. 63, Issue 2: 205-227.

Herzberg, F. (1987). One more time: How do you motivate employees? *Harvard Business Review,* 65(5), 109-120.

Hickson, C. and Oshagbemi, T. (1999). The effect of age on the satisfaction of academics with teaching and research. *International Journal of Social Economics,* 26(4), pp. 537-544.

Hill, P.C. and Pargament, K.I. (2003). Advances in the conceptualization and measurement of religion and spirituality: Implications for physical and mental health research. *American Psychologist,* 58, pp. 64-74.

Hill, P.C., Pargament, K.I., Swyers, J.P., Gorsuch, R.L., McCullough, M.E., Hood, R.W., and Baumeister, R.F. (1998). Definitions of religion and spirituality. In D.B. Larson, J.P. Swyers, and M.E. McCullough (Eds.) *Scientific research on spirituality and health: A consensus report.* Baltimore: National Institute for Healthcare Research, pp. 14-30.

Hopkins, A. G. (2010). The Historiography of Globalization and the Globalization of Regionalism. *Journal of the Economic and Social History of the Orient,* Vol. 53 Is 1, pp. 19-36.

Horton, W. R. (1950). *God.* New York: Association Press.

Hunt, S. D., and Vitell, S. J. (1986). A general theory of marketing ethics. *Journal of Macromarketing, 6*(1), 5.

Hunter, D. (2007). Nonlinear Patterns of Job Satisfaction and Age Cohorts in an Industrial Environment. Journal of American Academy of Business, Cambridge, 11(2), 231-238.

Hutchings, K.; Metcalfe, B.D.; Cooper, B.K. (2010). Exploring Arab Middle Eastern women's perceptions of barriers to, and facilitators of, international management opportunities. *The International Journal of Human Resource Management,* Vol. 21, # 1, pp. 61-83.

Huxley, J. (1961). *The humanist frame: The modern humanist vision of life.* Harper and Brothers.

Ibrahim, N. A., Howard, D. P. and Angelidis, J. P. (2008). The relationship between religiousness and corporate social responsibility orientation: Are there differences between business managers and students? *Journal of Business Ethics, 78*(1-2), 165-174.

Jagannathan, R., and Sundar, K. (2011). Impact of demographic and organisational factors on job satisfaction (A study with reference to employees of Life Insurance Corporation of India (LIC), Vellore Division, India). *International Journal of Marketing and Management Research*, 2(9), pp. 138–154.

Jayaratne, S., and Chess, W. A. (1984). Job satisfaction, burnout, and turnover: A national study. *Social Work*, *29*(5), 448–453.

Jones, J. M. (2004, June 22). Tracking religious affiliation, state by state. *Gallup Poll*. Retrieved March 14, 2014, from http://www.gallup.com/poll/12091/tracking-religious-ffiliation-state-state.aspx

Jones, M. (2006). Which is a better predictor of job performance: Job satisfaction or life satisfaction? *Journal of Behavioral and Applied Management.* Vol. 8,

Judge, T.A., Thoresen, C.J., Bono, J.E. and Patton, G.K. (2001). The job satisfaction-job performance relationship: A qualitative and quantitative review. *Psychological Bulletin,* May, pp. 376-407.

Judge, T.A. and Larsen, R.J. (2001). Dispositional affect and job satisfaction: A review and theoretical extension. *Organizational Behavior and Human Decision Processes.* Sep 2001. Vol. 86, Is. 1; pp. 67-98.

Kaiser, L. C. (2007). Gender-job satisfaction differences across Europe: An indicator for labour market modernization. *International Journal of Manpower*, *28*(1), pp. 75–94.

Kantor, P. (2005), Determinants of women's microenterprise success in Ahmadabad, India. *Feminist Economics,* Vol. 11, Is 3, pp. 63-83.

Kennedy, E. J., and Lawton, L. (1998). Religiousness and business ethics. *Journal of Business Ethics,17*(2),163-175.

Kim, S. (2005). Factors affecting state government information technology employee turnover intentions. *American Review of Public Administration*. Vol. 35, No. 2, pp. 137-156.

Kim, B. P., Murrmann, S. K., and Lee, G. (2009). Moderating effects of gender and organizational level between role stress and job satisfaction among hotel employees. *International Journal of Hospitality Management*, *28*(4), pp. 612–619.

Kinicki, A.J., McKee-Ryan, R.M.; Schriesheim, C.A. and Carson, K.P. (2002). Assessing the construct validity of the job descriptive index: A review and meta-analysis. *Journal of Applied Psychology*, Vol. 87, Is. 1, pp. 14-32.

Kohlberg, L. (1981). *The philosophy of moral development: Moral stages and the idea of Justice.* Harper and Row: San Francisco.

Kohn, A. (1993). Why incentive plans cannot work. *Harvard Business Review,* 74(5), 54-63.

Kolodinsky, R.W., Giacalone, R.A., and Jurkiewicz, C.L, (2008). Workplace values and outcomes: Exploring personal, organization and interactive workplace spirituality. *Journal of Business Ethics*, 81, pp. 465-480.

Kriger, M. and Seng, Y. (2005). Leadership with inner meaning: A contingency theory of leadership based on the worldviews of five religions. *The Leadership Quarterly,* 16, 771-806.

Kremer, H.L. and Goldstein, Z. (1990). The inner world of Israel; secondary school teachers: Work centrality, job satisfaction and stress. *Comparative Education.* 26, pp. 285-297.

Kum-Lung, C. and Teck-Chai, L. (2010). Attitude towards business ethics: Examining the influences of religiosity, gender and education levels. *International Journal of Marketing Studies,* 2 (1), pp. 225-232.

Kutcher, E.J.; Bragger, J.D.; Rodriguez-Srednicki, O. and Masco, J.L. (2010). The role of religiosity in stress, job attitudes and organizational citizenship behavior. *Journal of Business Ethics* 95:3, pp. 319-337.

Lawler, E. E. (1971). *Pay and organizational effectiveness: A psychological view.* New York: New York, McGraw-Hill.

Leahy, J.T. (1986). Embodied ethics: Some common concerns of religion and business. *Journal of Business Ethics,* 5(6), pp. 465.

Lenski, G. (1969). *The religious factors: A sociological study of religion's impact on politics, economics and family life.* Garden City, NY: Doubleday and Co.

Lester, P.E. and Bishop, L.K. (2000). *Handbook of Tests and Measurement in Education and the Social Sciences. Second Edition.* Lanham: Maryland. The Scarecrow Press, Inc. Technomic Books.

Lewis, M.M. and Hardin, S.I. (2002). Relations among and between career values and Christian religious values. *Counseling and Values, 46,* pp. 96-107.

Locke, E. A. and Latham, G.P. (1990). *A theory of goal setting and task performance.* Englewood Cliffs: New Jersey, Prentice Hall.

Lugo, L. S. Green, J. Smith, J. Cox, D. Pond, A. and Kohut, A. (2008). US religious landscape survey. Washington D.C., *Pew Research Center.*

Marques, J. (2011). Buddhism in the United States: Implications of managers of Buddhist values in the workplace. *International Journal of Management,* Vol. 28, # 2, pp. 564-572.

Martinson, O.B. and Wikening, E.A. (1983). Religion, work specialization, and job satisfaction: Interactive effects. *Review of Religious Research,* Vol. 24 Issue 4, pp. 347-356.

Mavromaras, K. G., McGuinness, S., Richardson, S., Sloane, P. J., and Wei, Z. (2011). Over-skilling and job satisfaction in the Australian labour force. Retrieved from http://www.voced.edu.au/content/ngv48450.

Mayo, M. A., and Marks, L. J. (1990). An empirical investigation of a general theory of marketing ethics. *Academy of Marketing Science.Journal, 18*(2), 163.

McCleary, R. M. and Barro, R.J. (2006). Religion and Economy. *Journal of Economic Perspectives,* Vol. 20, # 2, pp. 49-72.

McGee, R. W. and Cohn, G.M. (2008). Jewish perspectives on the ethics of tax evasion. *Journal of Legal, Ethical and Regulatory Issues* (11.2), pp. 1-32.

Maslow, A. H. (1970). Motivation and Personality. Second Edition. New York: New York,Harper.

Michaels, T. (2009). Exporting Yiddish socialism: New York's role in the Russian Jewish workers movement. *Jewish Social Studies.* Vol. 16, Issue 1, pp. 1-16.

Milliman, J.F., Czaplewski, A.j., and Ferguson, J.M. (2001). An exploratory empirical assessment of the relationship between spirituality and employee work attitudes. *Academy of Management proceedings, 2001.*

Moore, T.W. (2008). Do perceived differences in religion matter at work? Culture and Religion, 9, pp. 267-286.

Moorhouse, H. (1987). The work ethic and leisure activity: The hot rod in post-war America. In P. Joyce (Ed.) *The Historical Meanings of Work.* Cambridge University Press: 237-257).

Mowday, R., and Steers, R.M. (1979). The measure of organizational commitment. *Journal of Vocational Behavior,* 14, pp. 224-247.

Neusner, J. (1975). Review of ideas of Jewish history, edited, with introduction and notes by Michael A. Meyer. *History and Theory* 14/2, pp. 212-226.

O'Reilly III., C. A. and Caldwell, D. F. (1980). Job Choice: The impact of intrinsic and extrinsic factors on subsequent satisfaction and commitment. *Journal of Applied Psychology*, Vol. 56, No. 5, pp. 559-565.

Oshagbemi, T., and Hickson, C. (2003). Some aspects of overall job satisfaction: A binomial logit model. *Journal of Managerial Psychology, 18*(4), pp. 357-367.

Parboteeah, K.P.; Hoegl, M. and Cullen, J.B. (2008). Ethics and religion: An empirical test of a multidimensional model. *Journal of Business Ethics* 80, pp. 387-398.

Pava, M.L. (1998). The substance of Jewish business ethics. *Journal of Business Ethics*, 17 (6), pp. 603-617.

Pereira, M. C., and Coelho, F. (2013). Work hours and well being: An investigation of moderator effects. *Social Indicators Research*, *111*(1), pp. 235–253.

Petty, M.M., McGee, G.W. and Cavender, J.W. (1984). A meta-analysis of the relationship between individual job satisfaction and individual performance, *Academy of Management Review,* pp. 712-721.

PewResearch (2008). U.S. Religious Landscape Survey: Religious Beliefs and Practices. Retrieved on June 6, 2014 from: http://www.pewforum.org/2008/06/01/u-s-religious-landscape-survey-religious-beliefs-and-practices/

Plantinga, A. and Tooley, M. (2008). *Knowledge of God: Great Debates in Philosophy.* Maldan, MA:Blackwell Publishing.

Rani, U. and Unni, J. (2009). Do economic reforms influence home basted work? Evidence from India. *Feminist Economics,* Vol 14, Is. 3 pp. 191.225.

Rich, K. L. (2007). Using a Buddhist sangha as a model of communitarianism in nursing. *Nursing Ethics,* Vol. 14, Is. 4, pp. 466-477.

Rokeach, M. (1973) *The nature of human values.* New York: Free Press.

Ruegger, D. and King, E. W. (1992). A study of the effect of age and gender upon student business ethics. *Journal of Business Ethics,* 11, pp. 179-186.

Ryken, L. (1986). *Worldly saints: The Puritans as they really were.* Zondervan Publishing House, Grand Rapids, MI.

Sarker, S.J., Grossman, A. and Chinmeteepituck, P. (2003). The relationships of age and length of service with job satisfaction: an examination of hotel employees in Thailand. *Journal of Managerial Psychology,* Vol. 18, Iss. 7/8, pp.745-758.

Satlow, M. L. (2006). Defining Judiasm: Account for "religions" in the study of religion. *Journal of the American Academy of Religion,* Vol. 74, No. 4, pp. 837-860.

Sharma, R, and Jyoti, J.(2009). Job satisfaction of university teachers: An empirical study. *Journal of Services Research*, 9(2), pp. 51-80.

Sharma, RD. and Jyoti, J. (2005). What influences job satisfaction the most? *Business Vision*, 2, pp. 1-26.

Sherman D. and Hendricks, W., (1987). *Your work matters to God.* Colorado Springs: NavPress.

Siu, N. Y. M., Dickinson, J.R. and Lee, B. Y. Y. (2000). Ethical evaluations of business activities and personal religiousness. *Teaching Business Ethics* 4, 239-256.

Skjorshammer, S. (1979). *Religion and job satisfaction.* Unpublished Ph.D. Dissertation. Emory University. Atlanta, Georgia.

Sloane, P. J., and Williams, H. (2000). Job Satisfaction, Comparison Earnings, and Gender. *LABOUR*, *14*(3), pp. 473–502.

Smith, A. (1982 [1759]). *The theory of moral sentiments.* Edited by Raphael, D.D. and Macfie, A.L.*,* Liberty Fund, Inc.: Indianapolis, IN.

Smith, P. and E. Oakley (1996). The value of ethics education in business school curriculum. *College Student Journal* 30(3), 274-283.

Smith, Y. S. (2011). Three myths of good hard work. *Journal of Biblical Integration in Business,* Vol. 13, pp. 87-99.

Snoep, L. (2008). Religiousness and happiness in three nations: A research note. *Journal of Happiness Studies*. Vol 9, Is 2: pp. 207-211.

Sousa-Poza, A., and Sousa-Poza, A. A. (2003). Gender differences in job satisfaction in Great Britain, 1991–2000: permanent or transitory? *Applied Economics Letters*, *10*(11), 691–694.

Stone, H.W., Cross, D.R., and Purvis, K.B. (2003). A study of the benefit of social and religious support on church members during times of crisis. *Pastoral Psychology,* 51, pp. 327-340.

Tait, M., Padgett, M. Y., and Baldwin, T.T. (1989). Job and life satisfaction: A reevaluation of the strength of the relationship and gender effects as a function of the date of the study. *Journal of Applied Psychology,* 74(3), 502-507.

Tang, T. LP & Chiu, R. K. (2003). Income, money ethic, pay satisfaction, commitment, and unethical behavior: Is the love of money the root of evil for Hong Kong employees? *Journal of Business Ethics,* 46(1), 13-30.

Tsalikis, J. and Lassar, W. (2009). Measuring consumer perceptions og business ethical behavior in two Muslim countries. *Journal of Business Ethics,* 89 (1), pp. 91-98.

Tu, L.; Plaisent, M.; Bernard, P.; and Maguiraga, L. (2005). Comparative age differences of job satisfaction on faculty at higher education level: China and Taiwan. *The International JournalofEducationalManagement,* 19(2/3), pp. 259-267.

Turner, J. H. (1997). *The institutional order.* Addison-Wesley Educational Publishers, New York: NY.

U.S. Department of labor (n.d.). *Religious discrimination and accommodation in the workplace.* Retrieved on February 24, 2014 from: http://www.dol.gov/oasam/programs/crc/2011-Religious-Discrimination-and-Accommodation.htm.

Van den Berg, P.T. and Feij, J.A. (2003). Complex relationships among personality traits, job characteristics, and work behavior. *International Journal of Selection and assessment.* Vol. 11, Is. 4, pp. 326-40.

Vermillion, L. J., Lassar, W. M. and Winsor, R. D. (2002). The Hunt-Vitell general theory of marketing ethics: Can it enhance our understanding of principal-agent relationships in channels of distribution? *Journal of Business Ethics, 41*(3), 267-285.

Vitell, S. J. (2009). The role of religiosity in business and consumer ethics: A review of the literature. *Journal of Business Ethics* 90, pp.155-167.

Von Bergen, C.W. (2009). Conscience in the workplace. *Employee Relations Law Journal*, 9(1), 3-10.

Vroom, V.H. (1964). *Work and Motivation.* New York: NY: Wiley

Walker, A. G. (2013). The relationship between the integration of faith and work and life and job outcomes. *Journal of Business Ethics.* 112, pp.453-461.

Warr, P. (2008). Work values: Some demographic and cultural correlates.*Journal of Occupational and Organizational Psychology*, 81, pp. 751-775.

Weaks, M. and Vincent, M.A. (2007). Using religious affiliation to spontaneously categorize others. *The International Journal for the Psychology of Religion,* 17, pp.317-331.

Weaver, C. N. (1980). Job satisfaction in the United States in the 1970s. Journal of Applied Psychology. Vol. 65, Is. 3, pp. 364-367.

Weber, M. (1958 [1920]. *The Protestant ethic and the spirit of capitalism* (T. Parsons, Trans.) New York: Scribner.

Weiss, D. J; Dawis, R. V; England, G. W. and Lofquist, L. H (1967). *Manual for the Minnesota Satisfaction Questionnaire.* Minneapolis: MN. Industrial relations Center, University of Minnesota.

Wingren, G. (1957), *Luther on Vocation* (C. Rasmussen, Trans.), Mahlenberg Press, Philadelphia.Witmer, J.M. and Sweeney, T.J. (1992). A holistic model for wellness and prevention over the life span. *Journal of Counseling and Development,* 71, pp. 140-148.

Wolkomir, M.,M. Futreal, E. Woodrum, and T. Hoban (1997).Substantive religious belief and environmentalism. *Social Science Quarterly* 78(1), 96-108.

Worthington, E., Wade, N., Hight, T., McCollough, M., Berry, J., Ripley, J., Berry, J. Schmitt, M. and Bursley, K. (2003). The religious commitment inventory-10: Development, refinement, and validation of a brief scale for research and counseling. *Journal of Counseling Psychology,* Vol. 50, No 1, pp. 94-96.

Wright, T.A. (2006). The emergence of job satisfaction in organizational behavior. *Journal of Management History,* 12, pp. 262-277.

Wyschogrod, E. (1990). Works that "faith": The grammar of ethics in Judaism. *Cross Currents,* Is 40, No. 2, pp. 176-193.

Yeshe, L. (1998). *Becoming your own therapist* (S. Carlier, Trans.). Weston, MA: Lama Yeshe Wisdom Archive.

Yousef, D. A. (2001). Islamic work ethic: A moderator between organizational commitment and job satisfaction in a cross-cultural context. *Personnel Review.* Vol. 30, Is. 2: 152-   169.

Zellers, K, and Perrewe, P. (2003). In R. Giacalone and C Jurkiewicz (Eds.), *Handbook of workplace spirituality and organizational performance*, New York, New York: M.E. Sharp: 300-313.

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[i] This discussion is in no way meant to imply that people who are not religious do not have these characteristics, merely that religions can encourage these positive values in their adherents.

[ii] This study was approved by the IRB committee of the (authors' university). All work was performed in accordance with the ethical standards laid down in the 1964 Declaration of Helsinki.

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AN INVESTIGATION OF THE RELATIONSHIPS BETWEEN THREE TYPES OF CONFLICT AND PERCEIVED GROUP PERFORMANCE IN CULTURALLY DIVERSE WORK GROUPS

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ABSTRACT

While group and teamwork have become essential to organizations, the complexity of cultural diversity and intra-group interactions among culturally diverse group members have not been examined thoroughly. Moreover, research conducted in the past might not adequately reflect effects of today's intensified globalization and cultural assimilation of ethnically diverse individuals. This study empirically investigates the relationships between three types of intra-group conflict (task, process, and relationship) and perceived group performance in culturally diverse work groups. While task conflict was found to be positively related to perceived group performance, process conflict was negatively related to perceived group performance in culturally diverse work groups. The study did not confirm a negative relation between the relationship type of conflict and perceived performance in culturally diverse work groups.

INTRODUCTION

Cultural diversity of the workforce is now a reality. Culturally diverse work groups and teams have become essential work units in all types of organizations around the globe. Cultural diversity in work groups in the United States reflects a cultural mosaic of work environments in organizations around the world. Interaction of multiple cultures brings the need for intercultural understanding (Marga, 2010) to better manage intergroup interactions, to prevent conflicts, and to help culturally diverse groups and teams reach their performance potential.

Literature reveals mixed results on the benefits and harm of conflict to groups and organizations. Early organizational conflict theorists suggested that conflict is detrimental to organizational functioning and focused much of their attention on the causes and resolution of conflict. More recently, researchers have theorized that conflict is beneficial under some circumstances (Tjosvold, 1991).

Work group members experience conflicts that can be categorized into relationship, task, and process types of conflict (Amason & Sapienza, 1997; Jehn, 1992, 1997; Pelled, 1996; Pinkley, 1990). Having performed a longitudinal study, Jehn and Mannix (2001) were able to create an ideal conflict profile for members of work groups. These members had "similar pre-established value systems, high levels of trust and respect, and open discussion norms around conflict during the middle stages of their interaction" (p. 248).

While relationship conflict is an awareness of interpersonal incompatibilities that includes emotions, task conflict is an awareness of differences in opinions regarding a group task (Jehn & Mannix, 2001). Process conflict (Jehn, 1997; Jehn et al., 1999) is an awareness of differences regarding the way for a task to be accomplished.

Researchers found that moderate levels of task conflict have been beneficial to group performance on selected types of tasks (Jehn, 1995; Shah & Jehn, 1993). Differences of opinion about the work tasks improve decision quality due to the synthesis of group opinions (Mason & Mitroff, 1981; Schweiger & Sandberg, 1989; Schwenk, 1990). Low levels of relationship conflict help group members develop relationships necessary for effective performance. Process conflict has not been investigated extensively (Jehn & Mannix, 2001). Jehn (1992) found that the process conflict was negatively associated with group morale and positively associated with decreased productivity.

A substantial amount of research findings on diversity effects conducted prior to the 1980s indicate a negative relationship between ethnic diversity and performance outcomes based on faulty work processes. This relationship is explained by process-oriented difficulties in communication, coordination, and collaboration that occur when a groups' diversity is constantly increasing (Tajfel, 1981; Turner, 1982, 1985).

Culturally diverse teams and groups differ in the degree of diversity ranging from culturally homogenous to culturally heterogeneous. Jehn et al. (1997) argue that studies on culturally diverse teams demonstrate the following problems experienced by moderately heterogeneous groups: relational conflict, significant communication problems, and low team identity that have a dysfunctional impact on team effectiveness. Further, heterogeneous teams report reduced satisfaction with the team work that also results in negative team performance (Ravlin, Thomas, & Ilsev, 2000; Earley & Mosakoski, 2000; Jehn, Northcraft, & Neale, 1999). It was found that the composition of the team determines the success of the group and may prevent the group from reaching its performance potential (Earley & Mosakoski, 2000; Earley & Gibson, 2002; Ravlin et al. 2000; Jehnet al.1999).

Research on the antecedents of group performance in organizations posits that success depends on the ability of the work group to manage rather than avoid disagreements (Tjosvold, 1991; Gruenfeld, Mannix, Williams, & Neale, 1996). Further, it was found that unmanaged conflicts have detrimental effects on group performance (Bettenhausen, 1991; Jehn, 1997).

Meta-analyses of Bowers, Pharmer, and Salas (2000) and Webber and Donahue (2001) reveal mixed findings on the direct relationships between different types of diversity and performance. Specifically, these researchers report that neither surface nor deep-level diversity can be reliably linked to performance. Other researchers suggest that there should be some mediators that impact performance in diversity groups reported in findings (Van Knippenberg, De Dreu, & Homan, 2004). Further, research findings reveal that relationship and process conflict have been negatively associated with performance and morale, while task conflict has been shown to have positive effects on performance (Jehn, 1995, 1997; Amason & Sapienza, 1997).

The purpose of this study is to empirically investigate the relationships between intra-group conflict (task, process, and relationship) and perceived group performance in culturally diverse work groups. The major research question posed in this study is: *What is the relationship between conflict and perceived group performance in culturally diverse work groups?*

LITERATURE REVIEW
Similarity–Attraction Theory

There are three major theories widely used in analyzing the relationships between cultural diversity and group/organizational performance outcomes: information and decision-making

theory; social identification and categorization theory; and similarity/attraction theory. The information and decision-making theory predicts a positive relationship between ethnic diversity and organizational performance outcomes, whereas social identification and categorization theory and similarity/attraction theory predict negative effects (Pitts & Jarry, 2007).

Categorization often involves visible demographic characteristics such as age, gender, and ethnicity. Further, individuals quickly stereotype and make judgments about out-group members with a biased perception of individuals from different ethnic backgrounds as deficient, or untrustworthy (Loden & Rosener, 1991). In an increasingly diverse organization, the number of out-groups may outnumber the number of in-groups, which is expected to cause trust, communication, and cooperation problems (Pitts & Jarry, 2007).

The similarity/attraction theory research posits that similarity in attributes, especially demographic variables, increases interpersonal attraction (Byrne, Clore, & Worchel, 1966). Individuals with similar backgrounds may find it easier to collaborate with one another. Lincoln and Miller (1979) find that individuals tend to select similar people out of a number of different individuals with whom to interact. Similarity makes it easier for one to have his or her values and ideas reinforced, while dissimilarity may leave room for doubt whether these values and ideas are right. Early research based on similarity/attraction theory finds that dissimilarity leads to decreased communication, communication errors, and message distortion (Triandis, 1960).

Byrne's (1971) work on the attraction–similarity paradigm finds that individuals are more attracted to others whom they believe hold similar attitudes to themselves and judge those individuals as more intelligent and knowledgeable. In his classic research on cultural diversity, Triandis (1959, 1960) found that members of culturally dissimilar groups are less likely to be attracted to one other and have more difficulty in communicating with each other than members of culturally homogeneous groups. Other researchers (Hoffman, 1959; Hoffman & Maier, 1961) find that racially diverse groups tend to have more process-related problems than racially homogeneous groups.

In sum, similarity–attraction approach highlights the problems with distinctiveness or difference in groups. In this paradigm, individuals will be more attracted to similar others and will experience more cohesion (O'Reilly, Caldwell, & Barnett, 1989), less relational conflict (Jehn et al., 1997), lower turnover (Wagner, Pfeffer, & O'Reilly, 1984), and more commitment (Tsui, Egan, & O'Reilly, 1992) than in homogeneous groups.

In this study, we posit that members of culturally diverse work groups will be more willing to cooperate with other members who share similar cultural values and characteristics. Further, the similarity-attraction based on cultural values will result in less miscommunication and reduced conflict in such groups.

Intra-group Conflict

Ongoing literature reports mixed results from empirical studies on the positive and negative impact of conflict to groups and organizations (Jehn, 1995; De Dreu & Weingart, 2003; De Wit, Greer & Jehn, 2012). The history of research on conflict reveals that early organizational conflict theorists thought of conflict as dysfunctional to organizations while contemporary researchers agree that conflict is beneficial under some circumstances (Tjosvold, 1991).

While groups have become building blocks for organizations, they experience their own intrinsic problems of communication, coordination, and conflict management (Jehn, 1995). Having conducted a meta-analysis on the relationship between intra-group conflict to group

outcomes, De Dreu and Weingart (2003) have found stable negative relationships between relationship and process conflict and group outcomes. De Wit et al. (2012) extended this study by conducting a meta-analysis of 116 empirical studies of intra-group conflict ($n = 8,880$ groups) and its relationship with group outcomes. New trends in research on these relationships were identified. Some of the findings are consistent in both meta-analyses. Contrary to the results of the study by De Dreu & Weingart (2003), De Wit et al. (2012) did not find a strong and negative relationship between task conflict and group performance.

Jehn (1995) analyzed the structure of 105 work groups and management teams to find out whether conflict can be beneficial. Multiple methods were used to examine the effects of conflict on both individual- and group-level variables to provide a more refined model of intragroup conflict. Results show that type of conflict and the structure of the group produce the setting for conflict. Relationship and task conflicts are negatively associated with individuals' satisfaction, liking of other group members, and intent to remain in the group. In groups performing very routine tasks, disagreements about the task are detrimental to group functioning. Further, in groups performing non-routine tasks, disagreements about the tasks do not have a detrimental effect, and in some cases, such disagreements are quite beneficial. Contrary to expectations, norms encouraging open discussion of conflict have not been always advantageous.

Jehn (1992) finds that of the three conflict types, process conflict has been the least examined. In one study, process conflict is associated with a lower level of group morale as well as with decreased productivity. Jehn (1997) argues that process conflicts interfere with task content quality and often misdirect focus to irrelevant discussions of member ability. Jehn, Northcraft, and Neale (1999) find that groups who continually disagreed about task assignments have been unable to effectively perform their work.

Jehn and Mannix (2001) find that executive-MBA and MBA teams with similar or congruent work-related values are more likely to have constructive (task-focused) conflict and less likely to have destructive (relationship-focused) conflict over time than are teams that have incongruent values. As a result, they have higher levels of performance than groups with incongruent values. Mannix and Neale (2005) find that groups that are diverse on age and ethnicity are more likely to perceive greater value incongruence, and this perception is more relevant than actual value incongruence (as measured objectively) for outcomes such as conflict, trust, respect, and performance. The researchers argue that values become a mechanism by which diverse groups are able to create social integration. At the same time, however, individuals are able to remain distinct, maximizing the benefits of diversity.

Moderate levels of task conflict have been shown to be beneficial to group performance on certain tasks types (Jehn, 1995; Shah & Jehn, 1993). The researchers note that when given a complex cognitive task, teams benefit from differences of opinion about the work being done and ideas. Task conflict improves decision quality because the synthesis that emerges from the conflict is generally superior to the individual perspectives themselves (Mason & Mitroff, 1981; Schweiger & Sandberg, 1989; Schwenk, 1990).

Perceived Group Performance

Research findings on diversity effects prior to the 1980s reveal a negative relationship between ethnic diversity and performance outcomes. This phenomenon is explained by an increasing group diversity that is leading to communication, coordination, and collaboration problems (Tajfel, 1981; Turner, 1982, 1985).

Cultural composition in diverse teams and groups ranges from culturally homogenous to culturally heterogeneous. Jehn et al. (1997) find that moderately culturally heterogeneous groups experience relationship conflict, significant communication problems, and low team identity that result in low team effectiveness. Reduced satisfaction with team work in culturally heterogeneous teams also results in negative team performance (Ravlin et al., 2000; Earley & Mosakoski, 2000; Jehn et al., 1999). Scholars report that the composition of the team determines the success of the group and may prevent it from reaching its performance potential (Earley & Mosakoski, 2000; Earley & Gibson, 2002; Ravlin et al., 2000; Jehn et al., 1999). Although existing research studies suggest important differences in teamwork among various cultures, they "do not adequately address the complexity of issues affecting culturally diverse teams and do not identify the specific factors that contribute to these differences" (Earley & Gibson, 2002, as cited in Aritz & Walker, 2010, p. 21).

In a group of two or more people, diversity is any difference in which the individuals vary on some dimension (McGrath et al., 1995). Researchers have found that individuals in intergroup relationships tend to categorize others based on a number of available, even minor, attributes and dimensions (Triandis, Kurowski, & Gelfand, 1993). This categorization results in the modification of behaviors determined by the level of diversity among the categories. Social categorization theory (Turner, 1985) argues that individuals will behave differently in a homogenous group compared to their behavior in a heterogeneous group.

In addition to process changes in behavior, diversity results in significant changes in group outcomes. Greater diversity in a group of people may result in a better idea generation and problem solving (Adler, 2002). The cultural synergy approach to diversity posits that if heterogeneity within a group is managed well, the end-result will be greater than the sum of the individual contribution by each member.

Empirical research on the diversity outcomes reveals mixed results. Although some studies report that diverse groups outperform homogenous groups (Jackson, 1992), other studies find that homogenous groups do not experience the process loss due to communication problems and excessive conflict that are often found in diverse groups (Ancona & Caldwell, 1992).

Jehn et al. (1999) conducted a field study to discern the impact of diversity in 92 functioning work groups using a multifaceted categorization scheme. Three types of diversity have been included: social category, informational, and value diversity. Study findings reveal that different types of work-group diversity have different effects on group processes and outcomes. It has been found that informational diversity increase task conflict within the group, which positively influences group performance; social-category diversity positively influences group members' morale; and perceived value diversity decreases member satisfaction, intent to remain, and commitment to the group.

Townsend and Scott (2001) adapted the categorization scheme of Harrison et al. (2002) to study the effects of surface- and deep-level diversity in self-directed work teams in the textile industry. They examined attitudinal (team commitment, cohesion, attitudes toward performance), performance, and demographic data from 1,200 workers in 122 work teams. Their findings reveal effects for both types of diversity: for the surface-level effects, racial differences in individually held perceptions are reported. For the deep-level diversity, differences in attitudes help explain the effects of racial composition on team performance.

METHODOLOGY

A proposed study model is graphically depicted in Figure 1. It addresses the major research question: *What is the relationship between intra-group conflict and perceived group performance in culturally diverse work groups?*

Figure 1: Hypothesized model
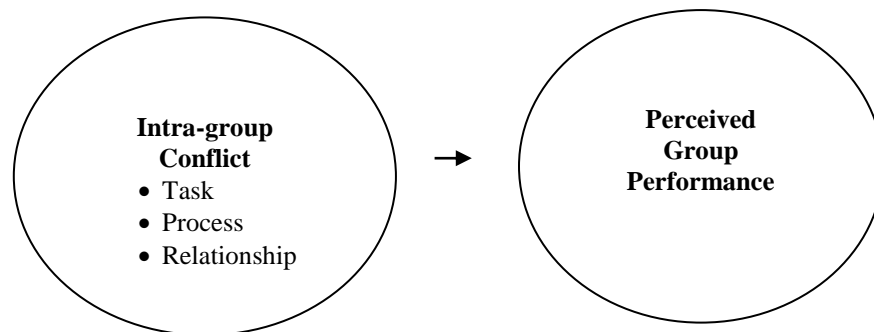
Hypotheses are as followings.

H1:   Task conflict in culturally diverse work groups is positively related to perceived group performance.

H2:   Process conflict in culturally diverse work groups is negatively related to perceived group performance.

H3:   Relationship conflict in culturally diverse work groups is negatively related to perceived performance.

Instruments

This study used the Intragroup Conflict Scale (Jehn, 1995) to measure the relationship and task types of conflict with process conflict items emanating from Shah and Jehn (1993). The internal reliability was good as demonstrated by the Cronbach Alpha for the relationship, task, and process types of conflict of 0.94, 0.94, and 0.93, respectively. The items referred to the work group as the unit of analysis. To examine the amount and type of conflict in the work groups, nine items measured the presence of conflict on a seven-point Likert scale, ranging from 1 = "None" to 7 = "A lot."

Perceived group performance was self-evaluated and reported by group members regarding their own performance of work tasks as a group (Campion, Papper & Medsker 1996). The instrument demonstrated a good internal reliability: Cronbach Alpha was 0.94. Perceived Group Performance was measured by a seven-item instrument adapted from Puck et al.'s (2006) study. This study's participants expressed their agreement or disagreement with the instrument statements on a seven-point Likert-type scale. A work group was defined as two or more individuals who work together on work-related tasks (Pelled, 1996; O'Reilly, Caldwell & Barnett, 1989).

Sample

The sample was drawn from companies listed on DiversityInc. (2013) and Black Enterprise Magazine (2013) lists that represent cultural diversity well. The first list is the DiversityInc Top 50 Companies for Diversity that has been published annually by DiversityInc since 2001. The company conducts a survey that produces a detailed, empirically driven ranking based on four key areas of diversity management: CEO commitment to diversity, workforce diversity and human capital, corporate/organizational communications, and supplier diversity. In 2014, there were 1,215 companies that completed the survey. The voluntary and free participation in the survey has been increasing every year. The Top 50 Companies for Diversity list provides detailed empirical ranking of participating companies. The workforce of the included companies is ethnically and culturally diverse, and the companies themselves are well known in the U.S. and internationally (DiversityInc. http://www.diversityinc.com/the-diversityinc-top-50-companies-for-diversity-2014).

The Black Enterprise Magazine annually identifies forty companies that excel in one or more of the following categories: supplier diversity, senior management, board involvement, and employee base. The listing includes companies that have a high percentage of "African Americans and members of other ethnic minority groups represented in a given company's total workforce" (Black Enterprise Magazine, 2013).

Pilot Study

A pilot study was conducted to test and refine the instrument. Sixty-five individuals were selected who work in culturally diverse organizations in the metro Jackson, MS. The subjects represented various sectors of industries such as service, manufacturing, and government. To enhance the response rate, drop-off and face-to-face survey methods were used for survey distribution and collection. Data from the returned surveys were checked for completeness of responses, and whether the participants understood and answered properly, and for the feasibility of statistical techniques to be used in the study. The pilot study confirmed high reliability of the study instruments.

Survey

A computerized structured questionnaire was used to gather data from the respondents. The survey was electronically delivered to 870 participants who were assured of the anonymity of their responses with a consent form presented at the beginning of the survey. Qualtrics (2015), an online survey service provider, was used as a platform to source subjects and to collect data for the main survey. A list of company names was provided to Qualtrics so that it could target employees in that domain. Qualtrics was instructed to randomly select employees who work in those companies. The first item in the electronic survey was set up to serve as a screening question. This measure ensured that the surveys collected the data only from the respondents who worked in culturally diverse groups.

The collected data yielded a sample size of 375 and a response rate of 43.10 percent. Prior to the analysis, the data were screened and cleaned. All variables were checked for outliers. Next, 495 surveys were deemed unqualified for spending insufficient time to complete survey and were removed from further analysis. The remaining 375 surveys were checked to ensure that

answers to all questions had been obtained. For missing-value treatment, observations with missing values were removed using the casewise deletion method to maintain the most conservative level of assurance. Further, the data were examined to determine whether the scoring scheme had been used consistently. One hundred and fifty-three partially filled surveys were removed from the analysis. The final usable sample consisted of 222 observations. Assuming significance level of 0.05, moderate effect size of 0.5, and sample size of 200, the power of the test is over 0.9 which is very high. Another minimum sample size guideline for multiple regression is that number of sample should be greater than number of variables times five to ten.

Statistical Method

Multiple regression analysis with stepwise estimation of the regression model was utilized to examine the relationship between three types of conflict and perceived performance in culturally diverse work groups in this research.

RESULTS

The demographic data collected during the survey included gender, age, ethnicity of the respondents and the primary language they used at work, regions, education levels, employment types, tenure, cultural composition of work groups at respondents' employment, cultural composition of their supervisors and subordinates (where appropriate), supervisory roles, and organization types. The demographic data with frequencies and percentages are presented in the tabular form below.

Table 1 demonstrates that the sample was comprised of 167 male respondents (75.2 percent) and 55 female respondents (24.8 percent). The total sample size was 222 respondents.

Table 1 GENDER		
Gender	**Frequency**	**Percent**
Male	167	75.2
Female	55	24.8
Total	222	100.0

The results revealed that the majority of the participants were in the 25-34 age group (45.9 percent) followed by the 35-44 age group (21.6) and 45-54 (16.7 percent). Respondents 55 years and older accounted for 10 percent of the sample (Table 2).

The data demonstrated that about one-third of the participants worked in the Northeast region of the United States (30.6 percent), another 31.5 percent of the participants worked in the South region, while there was equal distribution of participants who were employed in the Midwest and West regions of the United States - 18.9 percent in each of the regions. The data also demonstrated (Table 3) that the study sample was well diversified. The majority of the respondents were White/Caucasian (46.4 percent) followed by Asians (25.7 percent) and American Indians / Native Americans (11.3 percent). Hispanics accounted for 6.8 percent and Blacks accounted for 5.0 percent of the sample.

Table 2 AGE		
Age	Frequency	Percent
18-24	13	5.9
25-34	102	45.9
35-44	48	21.6
45-54	37	16.7
55-64	19	8.6
65+	3	1.4
Total	222	100.0

Table 3 ETHNICITY		
Category	Frequency	Percent
African	8	3.6
American Indian / Native American	25	11.3
Black / African American	11	5.0
Asian	57	25.7
Hispanic / Latino	15	6.8
White / Caucasian	103	46.4
Pacific Islander	3	1.4
Total	222	100.0

Eighty percent of the participants were employed full-time, the remaining twenty percent held part-time jobs or was self-employed. The data indicated that participants were at work long enough to have interactions with culturally diverse group members on different occasions: More than one-third of the sample respondents had been on their current jobs for 1-4 years (37.8 percent), followed by another large group of those who had held the same job for 5-10 years (30.6 percent). Almost one-fourth of the respondents had been working for more than 10 years: 11-15 years (13.5 percent) and over 15 years (10.4 percent). The data revealed that 86 percent of the respondents worked in groups comprised from 21 to 60 percent of employees with various cultural/ethnic backgrounds. The data indicated that a majority of the participants held high school diplomas (32.9 percent) and associate degrees (27.9 percent) followed by B.A./B. S. degree holders (17.6 percent) and participants with master's degrees (14.4 degrees). Employees with Ph.D. degrees or those who had more than 20 years of education comprised 5 percent of the sample.

Table 4 ETHNICITY/RACE OF THE STUDY PARTICIPANTS' SUPERVISORS		
Ethnicity / Race	Frequency	Percent
African	9	4.1
American Indian / Native American	22	9.9
Black / African American	20	9.0
Asian	47	21.2
Hispanic / Latino	30	13.5
Pacific Islander	6	2.7
White / Caucasian	78	35.1
Other	10	4.5
Total	222	100.0

The distribution of the ethnicity/race of the participants' supervisors was quite broad: majority of the supervisors were White/Caucasian (35.1 percent), one-fifth were Asians (21.2 percent), followed by almost equal numbers of Black / African American supervisors (9.0 percent) and American Indian / Native American supervisors (9.9 percent), as presented in Table 4.

The data demonstrated that two-thirds of the sample respondents were in the supervising position (67.6 percent), while the one-third (32.4 percent) did not supervise employees. Data presented in Table 5 demonstrate results of the breakdown of the cultural composition of the respondents' employees. The data revealed that 30.2 percent of the respondents supervise a pool of employees that is 21 - 40 percent culturally diverse and 27.5 percent of the respondents supervise employees whose cultural composition is 41-60% diverse. There is almost an equal share of respondents who supervise workforce that is less than 20 percent culturally heterogeneous (27.9 percent of the respondents). Last, 10.8 percent of the subordinates work in highly diverse environments: Their employees are 61-80 percent culturally diverse.

Table 5 PROPORTION OF CULTURALLY DIVERSE SUBORDINATES (FOR PARTICIPANTS IN SUPERVISORY ROLES)		
Proportion of Culturally Diverse Subordinates	Frequency	Percent
0 - 20%	62	27.9
21 - 40%	67	30.2
41 - 60%	61	27.5
61 - 80%	24	10.8
81 -100%	8	3.6
Total	222	100.0

The summary statistics' mean and variance for the intra-group conflict construct were 3.906 (min. = 3.419; max. = 4.464; range = 1.045) and .197, respectively. The item mean and standard deviation values are presented in Table 6. To preserve consistency in scales, the construct was also measured on the seven-point Likert scale, from 1 (none) to 7 (a lot). Participants stated how well the items described situations, employees, and work in their organizations. The mean was below the midpoint, which was four. This value suggested that as a whole, participants had about average conflict levels in culturally diverse work groups.

Table 6 DESCRIPTIVE STATISTICS OF THE INTRA-GROUP CONFLICT CONSTRUCT		
Variable Name	Mean	Std. Deviation
Conflict (Relationship 1)	4.46	1.682
Conflict (Relationship 2)	3.73	1.914
Conflict (Relationship 3)	4.37	1.777
Conflict (Task 1)	4.44	1.632
Conflict (Task 2)	3.52	1.846
Conflict (Task 3)	3.54	1.836
Conflict (Process 1)	3.51	1.947
Conflict (Process 2)	4.16	1.896
Conflict (Process 3)	3.42	1.893

The perceived group performance construct was measured on the seven-point Likert scale from 1 (none) to 7 (a lot). Participants had to state whether the survey items best described performance in their groups. For this construct, the data revealed that the summary statistics' mean was 5.327. It was above the midpoint, which was four. The range was .241 (min. = 5.191; max. = 5.432) and the variance was as low as .012. The six items of the construct indicated that members of culturally diverse work groups had high levels of perceived performance of their groups.

Table 7
DESCRIPTIVE STATISTICS OF THE PERCEIVED GROUP PERFORMANCE CONSTRUCT

Variable Name (Item No.)	Mean	Std. Deviation
Performance (1)	5.23	1.294
Performance (2)	5.28	1.272
Performance (3)	5.43	1.224
Performance (4)	5.43	1.216
Performance (5)	5.19	1.368
Performance (6)	5.40	1.287

Reliability Analysis

The scales used for this study were proven to show high levels of reliability as measured by Cronbach Alpha. Internal consistency can be measured by a number of indicators. The most commonly used one is Cronbach Alpha coefficient that should be above 0.7 (Pallant, 2007). The measures of this study attained excellent item-specific and overall reliability. The Cronbach Alpha coefficient for the overall model construct was 0.97.

Validity Analysis

The validity of a scale or an instrument refers to the degree to which it measures the variables of interest (Pallant, 2007). Content validity refers to "the adequacy with which a measure or scale has sampled from the intended universe or domain of content" (p.7). This study utilized instruments that were used by researchers in the past to measure the same variables of interest to this study. These instruments exhibited high content validity, and therefore were included in this research (Campion, Papper & Medsker, 1996; Earley & Mosakowski, 2000; Gee, Walsemann & Takeuchi, 2010; Hartman & McCambridge, 2011; Jehn, 1995; Jehn & Mannix, 2001; Mok, 1975; Puck et al., 2006; Shah & Jehn, 1993; Simonin, 1999; Schwartz 1992, 1994, 2006).

Construct validity is to test an instrument "in terms of theoretically derived hypotheses concerning the nature of the underlying variable or construct" (Pallant, 2007, p.7). The instruments used for this study demonstrated high construct validity in prior research and were included in this study to further empirically examine hypothesized or tested relationships among variables (Campion, Papper & Medsker, 1996; Earley & Mosakowski, 2000; Gee, Walsemann & Takeuchi, 2010; Hartman & McCambridge, 2011; Jehn, 1995; Jehn & Mannix, 2001; Mok, 1975; Puck et al., 2006; Shah & Jehn, 1993; Simonin, 1999; Schwartz 1992, 1994, 2006).

Hypotheses Test

The assertion of the hypotheses was that culturally diverse work group members experienced significant levels of conflict that affected perceived group performance. Specifically, task conflict was positively related to perceived group performance, whereas process and relationship types of conflict negatively impacted perceived group performance in culturally diverse work groups.

Multiple regression analysis was used to test the hypotheses. Three types of conflict were employed as independent variables and perceived group performance as a dependent variable. Multicollinearity diagnostics revealed that all correlations between the dependent and independent variables were less than .5 and that there were no two highly correlated variables in this output. Additionally, VIF values were examined. All VIF test results were less than a cut-off value of 10. The independent variables had the desirable characteristics, and therefore, all variables were retained for further analysis.

Table 8	
MULTICOLLINEARITY DIAGNOSTICS IN CONFLICT VARIABLES	
Variables	**VIF**
Conflict (Task)	6.791
Conflict (Process)	6.194
Conflict (Relation)	2.467

Multiple regression analysis produced the following results. The overall model fit was tested and was found statistically significant with F = 6.849, df =3and a p - value = .000. Although adjusted R^2 results were relatively low, the p - value was .000 at significance level of .05 and the model was deemed fit to the data. Low adjusted R^2 of the model would imply the existence of major predictors of group performance, other than the three conflict variables. However, an inclusion of other plausible independent variables is not considered. Instead, all other variables are assumed to remain constant and considered as control variables.

The multiple regression analysis demonstrated a significant relationship between the two dimensions of conflict variables - task conflict and process conflict - and perceived group performance in culturally diverse work groups. These variables made a statistically significant unique contribution to the model at p = .004 and .010 respectively (Table 9).

Table 9				
MULTIPLE REGRESSION MODEL COEFFICIENTS				
	B	**Std. Error**	**t**	**sig***
(Constant)	1.960E-17	.066	.000	1.000
Conflict (Task)	.377	.131	2.885	.004
Conflict (Process)	-.340	.131	-2.597	.010
Conflict (Relationship)	.052	.103	.501	.617

*p < .05

The signs for beta coefficients of Task and Process Conflict variables were in the expected direction. The sign for the task conflict variable was positive and the sign for the process conflict variable was negative, t = .377 and t = -.340 respectively. The results indicated that there was a strong positive relationship between the task conflict and perceived group performance in culturally diverse work groups. The data also demonstrated a strong negative relationship

between process conflict and perceived group performance in such groups. No significant relationship was found between relationship type of conflict and perceived group.

        The multiple regression analysis lent support to Hypothesis 1 that tested a positive relationship between task conflict and perceived group performance. Hypothesis 2 predicted a negative relationship between process conflict and perceived group performance in culturally diverse work groups. Results of the multiple regression analysis were significant and in the direction as hypothesized. Thus, Hypothesis 2 was also supported by the data. While Hypothesis 3 tested a negative relationship between task conflict and perceived group performance, the multiple regression analysis failed to indicate that this relationship existed. Thus, Hypothesis 3 was not supported by the data.

CONCLUSION

        This study sought to fill the gap in the literature and to provide managers and other practitioners with first-hand data analysis of relationships between three types of intra-group conflict and perceived performance in culturally diverse work groups in organizations in the United States. The extant research on the topic was conducted decades ago. However, rapid globalization, which resulted in high cultural diversity of the current U.S. workforce, demands better understanding of work processes in culturally diverse work groups.

Study Implications

        Present study findings, based on results of testing relationships between task, process and relationship types of conflict and perceived group performance in culturally diverse work groups, have significant practical implications. Earlier research found that moderate levels of task conflict were beneficial to group performance on selected types of tasks (Jehn, 1995; Shah & Jehn, 1993). This study confirmed prior research findings and extended them to processes in culturally diverse work groups. Thus, some disagreements or differences in opinions about work tasks, that may result in low to medium levels of conflict in culturally diverse groups, actually increase perceived performance in such groups.

        Process conflict in groups has not been extensively empirically examined (Jehn & Mannix, 2001). Past research revealed that the process conflict was negatively associated with work group productivity (Jehn, 1992). Present research confirms this relationship. Further, this study finds that process conflict, or differences in opinion regarding how a work task needs to be performed, is detrimental to the perceived performance in culturally diverse work groups. Managers and group members themselves may need to clearly structure tasks, take steps to prevent miscommunication, and use effective conflict management strategies to prevent or manage process conflict in culturally diverse work groups.

        Managers may also find it useful to learn that although prior research found negative association between relationship conflict and group performance (Jehn, 1995, 1997; Amason & Sapienza, 1997), current study did not confirm this finding. Managers and practitioners who will manage conflicts in culturally diverse work groups are advised to take proactive steps to avoid task and process conflicts in these groups. As the old adage goes, an ounce of prevention is worth a pound of cure.

Study Limitations

One of the study's limitations is the self-reported measures of variables of interest to the study. However, as behavior in organizations is partly governed by employees' perceptions, it was important to examine perceptions of culturally diverse work group members about intra-group conflict and its impact on perceived group performance in their own work groups.

Another possible study limitation is that the sample consisted of respondents from various industries and regions. Providing results across industries and various types of organizations could limit the study's internal validity. In other words, the use of a sample that consisted of participants from various industries produced averaged out results. More accurate idiosyncratic results could have been attained when drawing samples from a specific organization or an industry.

Directions for Future Research

The present study's scope was limited to the examination of relationships between the intra-group conflict and perceived group performance in culturally diverse groups. Thus, future research would extend this study to investigate the impact of the intra-group conflict and objective performance measures of that group's performance.

Next, it would be desirable to examine whether work group members have developed a shared group identity that can help them boost their group performance while minimizing conflicts. It would also be interesting to conduct a longitudinal study to examine how group dynamics affect performance results in the long run. The effects of the intensity of the group members' interactions and the level of rigor (professional and/or staff) of the group members would be desirable for future investigations.

Cultural assimilation of immigrants and temporary workers to the U.S. culture could be another variable of interest to future researchers. In addition, there could be significant differences in the degrees of assimilation to the U.S. culture in first-generation and second-generation immigrants. This would result in another valuable dimension of interactions in culturally diverse work groups. Diverse work groups possess quite different characteristics when compared to the general US labor force in terms of age, technology assimilation, and globalization. When conducting studies by means of online survey distribution, researchers would attract more respondents from younger generations. Meaningful results could be obtained by stratifying samples further in that age group to have a better understanding of the correlation between globalization and cultural assimilation of ethnically diverse individuals.

Prior researcher found a negative relationship between the relationship type of conflict and perceived performance in culturally diverse work groups. However, the present study did not confirm this findings and further research is needed to prove this relationship.

Latest advances in technologies stimulate global business development. In response to the demands of globalization, businesses employ virtual groups and teams, meaningful findings could be obtained by replicating this study in the virtual workforce.

REFERENCES

Adler, N.J. (2002). *International dimensions of organizational behavior*, Cincinnati: South-Western.

Amason, A., & Sapienza, H. (1997). The effects of top management team size and interaction norms on cognitive and affective conflict. *Journal of Management, 23*, 496-516.

Ancona, D.G. & Caldwell, D.F. (1992). Demography and design: Predictors of new product team performance. *Organization Science*, *3*(2), 321–341.

Aritz, J. & Walker, R. (2010). *Journal of Business Communication*, *47*(1), 20-41, doi: [10.1177/0021943609340669]

Bettenhausen, K. L.(1991). Five years of groups research: What we have learned and what needs to be addressed. *Journal of Management, 17*, 345-381.

Black Enterprise Magazine. http://www.blackenterprise.com/mag/how-we-compiled-the-40-best-companies-for-diversity. Last accessed on August 15, 2013.

Bowers, C., Pharmer, J., & Salas, E. (2000). When member homogeneity is needed in work teams: A meta-analysis. *Small Group Research*, *31*, 305–327.

Byrne, D., Clore, G., & Worchel, P. (1966). The effect of economic similarity-dissimilarity as determinants of attraction. *Journal of Personality and Social Psychology*, *4*, 220–224.

Byrne, D. (1971). The attraction paradigm. New York: Academic Press.

Campion, M.A., Papper, E.M., & Medsker, G.J. (1996). Relations between Work Team Characteristics and Effectiveness: A Replication and Extension, *Personnel Psychology*, *49*(2), 429–52.

De Dreu, C. K., & Weingart, L. R. (2003). Task versus relationship conflict, team effectiveness, and team member satisfaction: A meta-analysis. *Journal of Applied Psychology, 88,* 741–749. doi: [10.1037/ 0021-9010.88.4.741]

De Wit, F.R., Greer, L.L., & Jehn, K. A. (2012). The paradox of intragroup conflict: A meta-analysis. *Journal of Applied Psychology, 97*(2), 360–390.

DiversityInc. http://www.diversityinc.com/the-diversityinc-top-50-companies-for-diversity-2014. Last accessed on June 12, 2014.

Earley, P.C. & Mosakowski, E. (2000). Creating hybrid team cultures: An empirical test of transnational team functioning, *Academy of Management Journal*, *43*(1), 26–49.

Earley, C. P., & Gibson, C. B. (2002). *Multinational work teams: A new perspective*. Mahwah, NJ: Lawrence Erlbaum.

Gee, G., Walsemann, K. & Takeuchi, D. (2010). English proficiency and language preference: testing the equivalence of two measures. *American Journal of Public Health*, *100*(3), 563–569. doi: [10.2105/AJPH.2008.156976]

Gruenfeld, D., Mannix, E. A., Williams, K. Y., & Neale, M. A. (1996). Group composition and decision making: How member familiarity and information distribution affect process and performance. *Organizational Behavior and Human Decision Processes, 67*, 1-15.

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). Multivariate Data Analysis. (6th ed.). Pearson Prentice Hall.

Harrison, D., Price, K., Gavin, J., & Florey, A. (2002). Time, teams, and task performance: Changing effects of surface- and deep-level diversity on group functioning. *Academy of Management Journal, 45*, 1029–1045.

Hartman, J.L. & McCambridge, J. (2011). Optimizing millennials' communication styles. *Colorado State University Business Communication Quarterly*, *74*(1), 22- 44. doi: [10.1177/1080569910395564]

Hoffman, L. (1959). Homogeneity and member personality and its effect on group problem solving. *Journal of Abnormal and Social Psychology, 58,* 27–32.

Hoffman, L., & Maier, N. (1961). Quality and acceptance of problem solutions by members of homogeneous and heterogeneous groups. *Journal of Abnormal and Social Psychology, 62*, 401–407.

Jackson, S. E. (1992). Consequences of group composition for the interpersonal dynamics n strategic issue processing. In J, Dutton, A. Hufi, & P. Shrivastava (Eds.). *Advances in strategic management,* vol. 8: 345-382. Greenwich, CT: lAI Press.

Jehn, K. (1992). *The impact of intragroup conflict on effectiveness: A multimethod examination of the benefits and detriments of conflict.*Unpublished doctoral dissertation. Northwestern University Graduate School of Management, Evanston, IL.

Jehn, K. (1995). A multimethod examination of the benefits and detriments of intragroup conflict. *Administrative Science Quarterly, 40*, 256-282.

Jehn, K. (1997). A qualitative analysis of conflict types and dimensions in organizational   groups. *Administrative Science Quarterly, 42*, 530-557.

Jehn, K. A., Chadwick, C., & Thatcher, S. M. B. (1997). To agree or not to agree: The effects of value congruence, individual demographic dissimilarity, and conflict on workgroup outcomes. *International Journal of Conflict Management*, 8, 287-305.

Jehn, K. A., Northcraft, G. B., & Neale, M. A. (1999). Why differences make a difference: A field study of diversity, conflict, and performance in workgroups. *Administrative Science Quarterly*, *44*, 741-163.

Jehn, K. & Mannix, E. (2001). The dynamic nature of conflict: A longitudinal study of intragroup conflict and group performance. *Academy of Management Journal*, *44*(2), 238-251. doi: [10.2307/3069453]

Lincoln, J., & Miller, J. (1979). Work and friendship ties in organizations: A comparative analysis of relational networks. *Administrative Science Quarterly, 24,* 181–199.

Loden, M. & Rosener, J. (1991), *Workforce America! Managing employee diversity as a vital resource*, Burr Ridge: Irwin.

Mannix, E. & Neale, M. (2005). What differences make a difference? The promise and   reality of diverse teams in organizations. *Psychological Science In the Public Interest, 6*(2), 31–54.

Marga, A. (2010). Globalization, multiculturalism and brain drain. *Journal of Organizational Transformation and Social Change, 7*(1), 105–115. doi: [10.1386/jots.7.1.105_1]

Mason, R. O., & Mitroff, L.L. (1981). *Challenging strategic planning assumptions.* New   York: Wiley.

Mok, P. (1975). *Interpretation manual for communicating styles and technology*. Richardson, TX: Training Associates Press.

O'Reilly, C., Caldwell, D., & Barnett, W. (1989). Work group demography, social integration and turnover. *Administrative Science Quarterly, 34*, 21–37.

Pallant, J. (2007). *SPSS Survival Manual.* Education Berkshire, England: Open University Press, McGraw Hill.

Pelled, L. (1996). Demographic diversity, conflict, and work group outcomes: An intervening process theory. *Organization Science, 6*, 615-631.

Pinkley, R. (1990). Dimensions of the conflict frame: Disputant interpretations of conflict. *Journal of Applied Psychology, 75*, 117-128.

Pitts, D. & Jarry, E. (2007). Ethnic diversity and organizational performance: Assessing diversity effects at the managerial and street levels, *International Public Management Journal*, *10*(2), 233-254. Doi: [10.1080/10967490701323738]

Puck, J., Rygl, D., & Kittler, M. (2006). Cultural antecedents and performance consequences of open communication and knowledge transfer in multicultural process-innovation teams. *Journal of Organizational Transformation and Social Change*, 3(*2*), 223–241, doi: 10.1386/jots.3.2.223/1

Qualtrics. http://www.qualtrics.com/ Last accessed on Nov. 20, 2015

Ravlin, E. C., Thomas, D. C., & Ilsev, A. (2000). Beliefs about values, status, and legitimacy in multicultural groups: Influences on intra-group conflict. In P. C. Earley & H. Singh (Eds.), *Innovations in international and cross-cultural management,* 58-83, Thousand Oaks, CA: Sage.

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

Schwartz, S. H. (1994). Beyond individualism/collectivism: New cultural dimensions of   values. In U. Kim, H. C. Triandis, C. Kagitcibasi, S. Choi, & G. Yoon (Eds.), Individualism and collectivism: Theory, method, and applications, 85–119, Thousand Oaks, CA: Sage Publications.

Schwartz, S. H. (2006). A theory of cultural value orientations: Explication and applications. *Comparative Sociology, 5,* 137–182.

Schweiger, D., & Sandberg, W. (1989). The utilization of individual capabilities in group approaches to strategic decision making. *Strategic Management Journal, 10*, 31-43.

Schwenk, C. (1990). Conflict in organizational decision making: An exploratory study of   its effects in for-profit and not-for-profit organizations. *Management Science, 36*, 436-448.

Shah, P., & Jehn, K. (1993). Do friends perform better than acquaintances? The interaction of friendship, conflict and task. *Group Decision and Negotiation, 2*, 149-166.

Simonin, B. (1999). Ambiguity and the process of knowledge transfer in strategic alliances. *Strategic Management Journal, 20*(7), 595-623.

Tajfel, H. (1981). Human groups and social categories: Studies in social psychology. Cambridge, England: Cambridge University Press.

Tjosvold, D. (1991). Rights and responsibilities of dissent: Cooperative conflict. *Employee Responsibilities and Rights Journal, 4,* 13-23.

Townsend, A., & Scott, K. (2001). Team racial composition, member attitudes, and performance: A field study. *Industrial relations, 40*, 317–337.

Triandis, H. (1959). Cognitive similarity and interpersonal communication in industry. *Journal of Applied Psychology, 43*, 321–326.

Triandis, H. (1960). Cognitive similarity and communication in a dyad. *Human Relations, 13,* 279–287.

Triandis, H., Kurowski, L., & Gelfand, M. (1993). Workplace diversity. In H. Triandis, M. Dunnette, & L. Hough (Eds.), Handbook of industrial and organizational psychology (Vol. 4, pp. 769–827). Palo Alto, CA: Consulting Psychologists Press.

Tsui, A., Egan, T., & O'Reilly, C. (1992). Being different: Relational demography and organizational attachment. *Administrative Science Quarterly, 37*, 549–579.

Turner, J. (1982). Toward a cognitive definition of the group. In H. Tajfel (Ed.), Social identity and intergroup relations. Cambridge, U.K.: Cambridge University Press.

Turner, J. (1985). Social categorization and the self-concept: A social cognitive theory of   group behavior. *Advances in group processes, 2*, 77–121, Greenwich, CT: JAI Press.

Van Knippenberg, D., De Dreu, C., & Homan, A. (2004). Work group diversity and group performance: An integrative model and research agenda. *Journal of Applied Psychology, 89,* 1008–1022.

Wagner, G. W., Pfeffer, J. & O'Reilly, C. (1984). Organizational demography and turnover in top-management groups. *Administrative Science Quarterly, 29*, 74-92.

Webber, S., & Donahue, L. (2001). Impact of highly and less job-related diversity on work group cohesion and performance: A meta-analysis. *Journal of Management, 27,* 41–162.

APPENDIX
Intragroup Conflict Scale*

Relationship Conflict

1. How much relationship tension is there in your work group?

        None   A lot
        1   2   3   4   5   6   7

2. How often do people get angry while working in your group?

        None   A lot
        1   2   3   4   5   6   7

3. How much emotional conflict is there in your work group?

        None   A lot
        1   2   3   4   5   6   7

Task Conflict

4. How much conflict of ideas is there in your work group?

        None   A lot
        1   2   3   4   5   6   7

5. How frequently do you have disagreements within your work group about the task of the project you are working on?

        None   A lot
        1   2   3   4   5   6   7

6. How often do people in your work group have conflicting opinions about the project you are working on?

        None   A lot
        1   2   3   4   5   6   7

Process Conflict

7. How often are there disagreements about who should do what in your work group?

        None   A lot
        1   2   3   4   5   6   7

8. How much conflict is there in your group about task responsibilities?

        None   A lot
        1   2   3   4   5   6   7

9. How often do you disagree about resource allocation in your work group?

        None   A lot
        1   2   3   4   5   6   7

*Published in Jehn and Mannix (2001). Based on Intragroup Conflict Scale (Jehn, 1995) with process conflict items from Shah and Jehn (1993)

ORGANIZATIONAL CREATIVITY AND THE TOP MANAGEMENT TEAM (TMT): AN INTERACTIONIST PERSPECTIVE

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ABSTRACT

This study examines organizational creativity of the top management team (TMT) at the individual and group levels and the organizational context. The emphasis of the study is on the constellation of personality traits and behaviors at the (TMT) which facilitate and foster organizational creativity. This study increases our understanding of the interaction between specific characteristics of the person, group, and contextual factors that contribute to a creative global organization. The findings highlight the importance of individual and team personality in the design and reinforcement of a creative organizational business environment. The study demonstrates creativity at the organizational level influenced by creative leader personalities stimulates creativity; encourages the development of new ideas; supports innovation through creativity by encouraging vision, recognition for creative work and norms of actively sharing ideas across the organization. The study enhances our knowledge about the interaction of the competencies of a creative leader and a creative organization in a global, knowledge-based economy.

Keywords: *creativity, Top Management Team, Organizational context, personality, Hogan Assessments*

INTRODUCTION

In the global economy there is increasing recognition that a creative workforce is a competitive advantage (Agars, Kaufman, Deane, & Smith, 2012). It is increasingly important for a business to create unique products, services and use innovative processes to gain competitive advantages (Gates, 2010; Ford, 1999). "Rising complexity leads CEOs from around the world to cite creativity as a way to capitalize on the future of business" (Nancherla, 2010, p. 26). Creativity is a driving and a constraining force facing businesses today given economic conditions. "Yet, past history also shows that the greatest innovation can come during periods of severe economic stress" (Jaruzelski & Holmes, 2009, p. 2). Executives must be able to develop creative approaches to meet the strategic and operational demands to ensure the viability of the firm. Organizations feel increasing pressure to be creative and innovative on an ongoing basis to gain a competitive advantage and ensure their long-term survival. According to Munroe (2011), "there is a wide agreement that innovation is the best way to sustain economic prosperity. innovation increases productivity, and productivity increases the possibility of higher income, higher profits, new jobs, new products, and a prosperous economy. Once you open the curtains

to the world economy, you see the sunlight. It's not all cloudy. We need to transform smart ideas that tackle and address real problems into products and services that everybody wants." (para 23)

From a business perspective linking the two constructs of creativity and innovation together makes sense as "creativity for its own sake has minimal value (Agars et al., 2012).

It is a priority for an organization to encourage creativity and by extension innovation as keys to long-term success. Creativity or the ability to encourage and recognize creativity as a leadership quality is stressed across geographic locations and industries (Gumusluoglu and Ilsev, 2009). Leadership provides a solid foundation to influence creativity and innovative leaders behave differently (Dyer, Gregersen, & Christensen, 2009). However, predicting creativity at the organization level is a complex topic that psychologists and organizational scientists have studied for years. Researchers have approached the topic from multiple viewpoints i.e., differences in individual cognitive ability, personality, motivation and social perspectives (Guilford, 1967; McCrae, 1987; Amabile, 1983; Perry-Smith & Shalley, 2003). Amabile's (1988) componential theory looked at the influences on creativity - three within-individual components: domain-relevant skills, creativity-relevant processes (cognitive and personality processes conducive to novel thinking), and task motivation; one outside the individual component, the surrounding environment also called the social environment. Amabile (2012) specifies that creativity requires a confluence of all components. Creativity is highest when an intrinsically motivated person with high domain expertise and high skill in creative thinking works in an environment that supports creativity (Amabile, 2012). It remains a challenge to identify which definitions and which lessons are appropriate to apply from the general creativity literature to the business setting (Agars et al., 2012).

PURPOSE

The purpose of the study is to examine the personalities and traits of the top management team (TMT), the context of the social environment, and explores how individual level personality traits impact and foster group and organization level creativity. This study was conducted in the natural organizational setting of one gaming company, a top performing multinational company producing game content, technology, customized programs, and managed casinos. Barron and Harrington (1981) noted the need for but recognized the difficulty of gathering "rich psychological data on creative individuals" (p. 466). This study provides such data concerning the TMT at the individual and group level, as well as the organizational context they provide in an organization recognized as a creative company. "Although the experimental research is important in establishing causal connections between the social environment, motivation and creativity, the most directly relevant information comes from interview and survey studies within corporations" (Amabile, 1997, p. 46).

Research Questions

This study examines the premise of organizational creativity as a complex interaction of the creativity of the individual, group, and larger organization levels with an emphasis on the personality of the TMT. This work addresses previous calls for research into the dynamic interaction of individual characteristics, group characteristics, and organizational characteristics, creative behaviors, and creative situations to better explain creativity in the business setting. Personality is one of the elements that can explain some aspects of creativity. Such individual

characteristics influence creativity at the group level. Special qualities include curiosity, ambition, and risk orientation (Amabile, 1988; Woodman, Sawyer, & Griffin, 1993).

Research Question One

Among the members of the TMT what individual level leadership personality traits and behaviors foster creativity?

Creativity is enhanced in an environment that promotes free exchange of ideas and information where risk taking is encouraged and supported. Influence processes used by group leaders can influence creativity (Amabile, 1988; Woodman et al., 1993).

Research Question Two

What qualities of the TMT enhance creativity at the group level?

The creative performance of an organization is influenced by the creative performance of its constituent groups which enhance creativity. Creativity relevant personality and behavior characteristics are the foundation for the interactionist and componential model of creativity stating the each level of creativity is needed for creativity to be produced at the organizational level (Amabile, 1988).

Research Question Three

Does creativity at the individual and TMT level contribute to creative performance outcomes at the organizational level?

LITERATURE REVIEW

The interactionist model proposed by Woodman et al. (1993) of the conceptual links among creative persons, processes, situations, and products serves as the framework for analysis and discussion with the emphasis on the personality of the TMT. An integrative definition of creativity was applied while conducting this study. Woodman et al. (1993) define organizational creativity as the "creation of a valuable, useful new product, service, idea, procedure, or process by individuals working together in a complex social system" (p. 293). Furthermore, they frame organizational creativity as a "subset" of innovation and both as processes that are a part of organizational change and adaptation (p. 293).

Creative performance is commonly defined as the generation of novel and useful ideas, processes and products (Simmons & Sower, 2012; Gumusluoglu & Ilsev, 2009; Shalley, Zhou, & Oldham, 2004). These ideas can range from incremental changes to radical changes which also may have varying degrees of usefulness. There is a common underlying assumption that the "newer" or more "radical" an idea and the more "useful" it is: the more it will improve performance.

As a multi-step process, for creativity, an individual level variable, to effectively impact performance, it must progress from the idea stage to the implementation stage. Innovation, generally an organizational level variable, is defined as the successful implementation of creative outcomes (Simmons and Sower, 2012; Gumusluoglu and Ilsev, 2009). Innovation begins with creative ideas that are translated into inventions, services, processes, and methods (Gallo, 2011). It has been noted that the most important antecedent of innovation is creativity (Amabile, Schatzel, Moneta, & Kramer, 2004; Zhou & George, 2003; Shin & Zhou, 2003).

THE INDIVIDUAL: FACTORS THAT IMPACT CREATIVITY

Personality and Creativity

Amabile (1988) viewed the individual's creativity as the "raw material for organizational innovation and, therefore must be central to the organizational model" (p. 150). Woodman et al. (1993) proposed a theoretical framework, interactionist in nature, for organizational creativity in complex environments. Their conceptual framework identified the individual, group and organizational characteristics that create the appropriate conditions for creativity to emerge in the greater organization. Of particular interest to this research is their discussion of individual creativity which they postulated as "a function of antecedent conditions, cognitive styles and abilities, personality, motivational factors and knowledge" (Woodman et al., 1993, p. 310). According to Woodman et al. (1993) individual factors "both are influenced by and influence social and contextual factors. The group in which the individual creativity occurs establishes the immediate social influences on individual creativity" (p. 301).
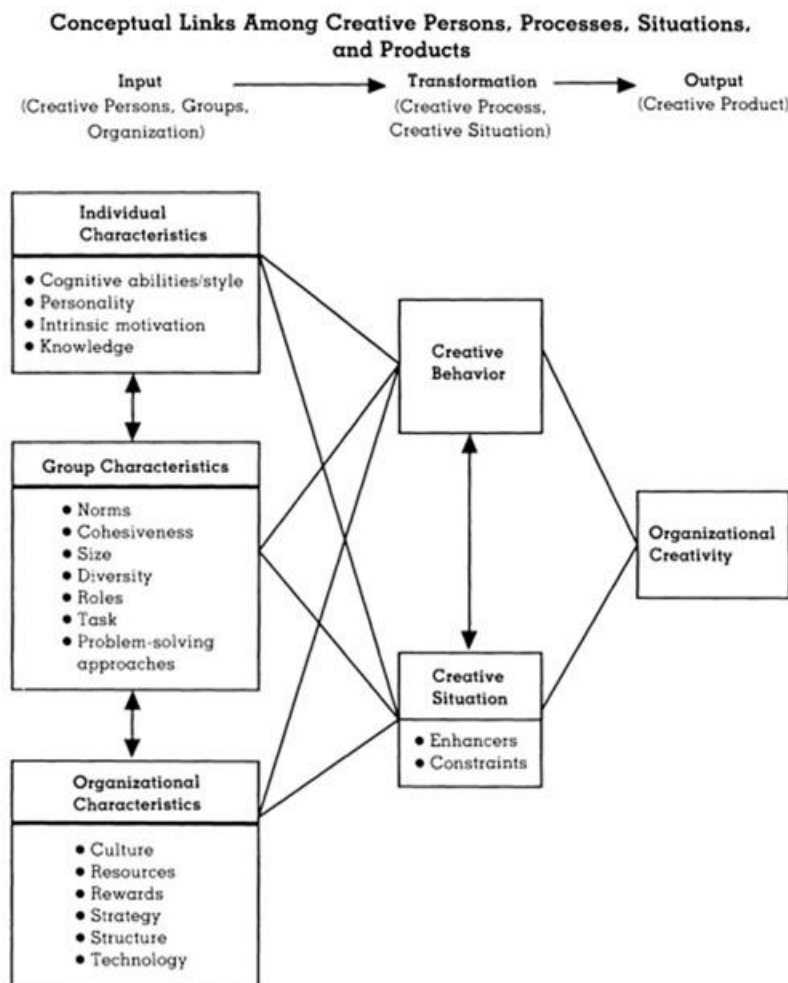
Figure 1.1: Source: "Toward A Theory of Organizational Creativity" by R.W. Woodman, J.E. Sawyer, & R.W. Griffin, 1993). Academy of Management　　　Review, 18(2), p. 309.

Barron and Harrington (1981) described 15 years of work on the relationship between creativity and personality as leading to the emergence of certain "core characteristics (e.g. high valuation of esthetic qualities in experience, broad interests, attraction to complexity, high energy, independence of judgment, autonomy, intuition, self-confidence… finally a firm sense of self as creative) (p. 452)."

After conducting three large-scale studies Amabile (1988) proposed a componential theory of individual creativity that encompassed "various personality traits" and "special qualities of the problem-solver, including persistence, curiosity, energy, and intellectual honesty". In addition, "self-motivation " or "being driven, excited by the work itself, enthusiastic, attracted by the challenge of the problem" was noted. "Special cognitive abilities, risk orientation, and expertise in the area" were included. Finally, lesser mentioned qualities included being brilliant, somewhat naïve and not tied to the "old ways of doing things", interpersonal skills and synergy that comes about because of the individuals comprising the team (p. 128-129).

Williams (2004) found that "openness to experience" and "attitude toward divergent thinking (ATDT)" (p. 187) was positively correlated to individual creativity. Puccio and Grivas (2009) specifically studied personality traits in relation to each phase in the creativity process model using the Creative Problem Solving (CPS) model. They found that those who possess a high degree of energy for the ideation stage of the creativity process have traits such as impulsiveness and restless, and are impatient, eager and open to change. The idea generation stage is related to personality traits such as "willingness to challenge prevailing thought, need for change and attraction to variety" (Puccio & Grivas, 2009, p. 247).

Most important to this study they found that dominance and conscientiousness were significantly related to the implementation phase (corresponding to the diffusion stage in the Innovation Value Chain by Hansen and Birkinshaw, 2007), which is driven by decisions on which creative ideas to move forward made by the top leaders. Similarly, Shalley et al. (2003) reviewed studies concerning the link between personality and creativity and concluded that when using the five factor model of personality each factor "is connected to individual's creativity" (p. 937) with openness to experience being the most consistent finding across the studies reviewed. They also suggested that these personality factors influence how employees respond to contextual factors in the organization.

Instead of taking an approach which directly examines a person's traits, Hogan and Shelton (1998) suggest that performance in an organizational setting is linked to more than simply one's traits. Their first definition of personality states that personality originates from the outside as "the manner in which a person is perceived and described by others" or their reputations (p. 131) and can be used to predict performance. They also identify a second definition of personality that "concerns the processes inside people that explain their actions and create their reputations" or identity. Identity they suggest "is an expression for a person's hopes, dreams, goals, aspirations and idealized self-image" (p. 132) and this identity strongly influences social interactions and can be used to explain performance. They remark that "the universal features of personality concern human motivation" (p. 130). Thus Hogan and Shelton (1998) define personality in terms of "three broad categories of concepts: motivation, identity, and reputation (p. 141).

Motivation and Creativity

Amabile (1988) found that intrinsic motivation was essential to creative performance and that the individual needed to be working in a context that did not "swamp intrinsic motivation with extrinsic constraints" (p. 145). As noted, Hogan and Shelton's (1998) definition of personality included motivation as a basic overarching concept. However, the link between motivation and creativity has also been studied directly. Zhang & Bartol's (2010) study in China found that empowering leadership affected psychological empowerment which then impacted employee intrinsic motivation and engagement in the creative process. Similarly, in a review of the effects of personal and contextual characteristics on creativity, Shalley et al. (2004) suggest that additional study on the role of intrinsic motivation in creativity using a variety of measures of motivation should be undertaken.

THE GROUP: FACTORS THAT IMPACT CREATIVITY

Top Management Team (TMT)

Damanpour (1991) found that "a dominant coalition's favorable attitude toward change, communicated well to organizational members, creates a climate supportive of innovation throughout an organization" (p. 581). West and Anderson (1996) conducted a longitudinal study of top management teams and found that the make-up of the TMT impacted the "quality of innovation" while the "level of innovation may be more a consequence of the team's characteristics social processes" (p.680). "The highest levels of management can influence individual creativity by setting the overall organizational climate" (Amabile, 1988, p. 152).

The Organization: Factors that Impact Creativity

Creativity can be powerfully influenced by elements of the organization. Williams (2004) found that high degree of structure directly impacted the divergent thinking of workers. Amiable, Conti, Coon, Lazenby, and Herron (1996) developed the KEYS instrument in order to "assess the climate for creativity" (p. 1995). They found that such factors as autonomy, challenging work, encouragement, group support, work pressures and resources do "make a difference in the level of creativity in organizations" (p. 1180). Creativity is complex, multilevel and requires leadership in order to benefit from new and improved ways of working. Organizational creativity involves understanding and analyzing the individual, the work team, and the organizational context (Anderson, Potocnik, & Zhou, 2014).

Leadership

Mumford, Zaccaro, Harding, Jacobs, and Fleishman (2000) emphasized that leaders must be able to solve novel, ill-defined organizational problems and be capable of formulating solutions that will work in complex organizational environments. The skills needed to solve organizational leadership problems include complex creative problem-solving skills associated with identifying problems, understanding the problem, and generating potential solutions; social judgment skills associated with the refinement of potential solutions and the creation of implementation frameworks within a complex organizational setting; and social skills associated with motivating and directing others during solution implementation (Mumford et al., 2000).

METHODOLOGY

Subject Company: Internal and External Validation of Creativity

This case study was conducted in a gaming company in the gaming industry where creativity is particularly important for success. The company's success is illustrated by the fact that the subject company was purchased at a 60% premium in late 2013 for a total of well over one and a half billion dollars. This company was ranked 5th by the Crain's Eureka Index with respect to patents issued in the state in which it is located. The company was granted over 200 patents in 2012. Further in 2013, as of the end of April, it had attained an equal number of patents. The company was reported to have the largest patent portfolio in the gaming industry. The company employed over half of the dozen of most prolific patent winners in the state in which they are located demonstrating that the company had both a culture actively promoting creativity and top management support for these creative efforts.

Further, approximately one third of the company's U.S. employees work in research and development (R & D) with over 15% of the company's revenue allocated to R & D. This activity takes place in a $40 million technology center located in the U.S. The company's Chief Innovation Officer is quoted as saying, "This place reeks of creativity" (citation omitted to maintain anonymity).

Multiple awards received for the company as a whole, as well as individuals within the organization, also provide external validation of the organization's creativity. The method used to identify this company as a creative company is the Consensual Assessment Technique (Herrmann & Felfe, 2014). This method defines a creative product or response as "…the extent that appropriate observers independently agree it is creative" (p. 211). They suggest that this method is valid and captures both the quantity and quality of creating ideas. Thus, this company is both internally and externally validated as a recognized as a creative company in an industry where creativity is both necessary and rewarded and an interesting study in creativity.

This is a multinational company with multiple sites serving multinational customers and it exists in a very competitive environment -- the gaming industry where the technology is a significant part of the competitive environment. Global intellectual property rights are also a major concern in this industry. Case study research facilitated access to leadership data concerning the top level of management under complexity and access to the organizational information necessary to test theory. Results were able to be measured and shared as long as anonymity was protected.

Company Information Source

The company information was obtained from the company website, information published concerning the company in business publications, articles announcing their awards, and patent information. However, the subject company did not wish to be identified and citing these sources would make company identification possible. All information was verified by the action researcher who has extensive knowledge of the organization.

DATA COLLECTION METHODOLOGY

The subject global gaming company partnered with two organizational behavior consulting firms with the goal of better understanding both the individual and the overall group characteristic of the TMT. This team consisted of the C-Suite members and other key executives. The success or failure of this team in the competitive gaming environment was based largely on creativity, innovation, and operational leadership.

The executive team members each exhibit personality characteristics, behavioral tendencies, and work-related values that contribute to overall team effectiveness. The outcome of these group personality characteristics comprises and supports an overall culture/climate that characterizes executive team's internal and external interactions.

Sample

The 17 subjects of this study are the TMT of a global gaming company that designs, manufactures, markets and sells video and mechanical reel-spinning gaming machines, video lottery terminals and in gaming operations which consists of the placement of leased participation gaming machines in legal gaming venues. The success or failure of this team was based largely on creativity, innovation, and operational leadership. The gaming firm's executive team members each exhibit personality characteristics, behavioral tendencies, and work-related values that contribute to their overall creativity, innovation, and operational leadership.

Data Collection Instruments

Hogan Leadership Series assessments examine leadership characteristics at the individual level and combine to provide a profile of the team and the overall culture that characterizes the executive team's internal and external interactions. The Hogan instruments are part of the Lead measurement series which is tailored towards executive level leadership assessment and development (see Appendix A). The instruments were administered according to the documented standards by a Hogan certified associate who also holds a PsyD. The construction of the scales, the reliability and the validity statistics of the scales, as well as extensive documentation of other psychometric properties of the instruments are available in the instrument manuals which also contain guidance in interpreting the results. Academic studies have been published both providing information about these instruments (e.g. Hogan, Barrett, & Hogan, 2007) and using these instruments in research (e.g. Furnham, Trickey, & Hyde, 2012).

The three assessments of the Lead Series include the *HPI, HDS,* and *MVPI.* Applying these results help individuals and teams gain insight regarding the impression they make on others via their habitual response tendencies. The MVPI has been validated in over 100 organizations. Although the HPI and HDS provide insight regarding stable and automatic behavioral tendencies, these tendencies are amenable to modification if underpinned by self-awareness and a strong commitment to personal development, increased attention to learning and improvement, confidence in one's creative abilities, and willingness or motivation to pursue novel efforts in given setting (Choi, 2004). Similarly, although individuals cannot change their values (as measured by the MVPI), they may gain an appreciation of how values impact decision-making and actions and thus, strive to gain a better understanding regarding alternate points of view and the culture they create.

Instruments and Measures

The method of scale development and the scale metrics such as the reliability and validity as well as correlations with similar scales are well documented in the Hogan and Hogan manuals available for each assessment. It is important to note that these scales were designed to specifically measure these constructs, such as personality, relative to their impact on aspects of work performance. The discussion that follows will focus on the scales from each instrument (HPI, HDS, & MVPI) that are tested by Hogan Assessment and are the most theoretically linked to assessing creativity. However, all scales were assessed and are reported to present the full context.

Hogan Personality Inventory (HPI)

The HPI is one of the industry gold standards for measuring personality as it relates to workplace performance; used for 28 years to predict employee performance and help organizations reduce negative (and increase positive) performance indicators. The instrument measures seven dimensions of normal personality which have been identified as relating to different components of leadership performance. The results identify how individuals approach work and interact with others through these seven personality variables (Hogan Personality Inventory Overview Guide). The HPI has been normed on over 500,000 individuals (www.hoganassessments.com).

Hogan Potential (HPI) Competency Scales for Creativity Profile

The study focused on the three key scales from the assessments associated with creativity. The creativity syndrome is defined by scores above the 65th percentile for Inquisitive and Ambition, and scores below the 35th percentile for Prudence. Inquisitive reflects the cognitive style associated with creativity; low Prudence reflects flexibility and willingness to challenge convention and high Ambition reflects the energy to bring one's tasks to completion (Barron, 1965; Hogan & Hogan, 1992).

Ambition

The Ambition scale is designed to assess the degree, to which a person seems competitive, leader like, and upwardly mobile. Ambition resembles Sociability in that those with high scores are gregarious and outgoing, and those with low scores are shy, quiet, and socially reticent. But Ambition differs from Sociability in those persons with high scores seem hard working and achievement oriented; rather than enjoying other's company for its own sake, they often have an agenda for their interaction. The three components to ambition concern having high aspirations, working hard, and being willing to test one's skills (Hogan & Hogan, 1992).

Prudence

Persons with high scores on Prudence seem reliable, thorough, dignified, cautious, and responsible. They are conscientious and attentive to detail and they readily follow organizational procedures. They tend to be well liked as managers because their subordinates trust them. They

also may seem formal, reserved, inflexible, and perhaps overly conforming. Their lack of spontaneity and creativity is balanced by reliability and thoroughness (Hogan & Hogan, 1992). Persons with low scores on Prudence seem unconventional, noisy, impulsive, and even irresponsible. They tend to be impatient with details, and careless about rules. Alternatively, they also tend to be flexible, venturesome, and open minded (Hogan & Hogan, 2008).

Inquisitive

This term denotes the cognitive and interpersonal style that causes people to be perceived as bright; suggesting persons with high scores are seen as imaginative, inventive, and artistic, consistent with a theme of creativity. Moreover, persons with high scores also seem witty, active, and energetic. Those with low scores on the Inquisitive scale seem narrow, conventional, lacking in curiosity or imagination, and contented with their lifestyles (Hogan & Hogan, 1992).

Hogan Development Survey (HDS)

The HDS provides insight regarding eleven "derailment" tendencies that, when incited by stress, pressure, or boredom, are capable of impeding work relationships, adversely impacting leadership style, hindering productivity, and limiting overall career potential and effectiveness. This instrument is normed on over 100,000 employed adults from a variety of industries.

Hogan Development Scales (HDS) Characteristics Associated with Creativity

The study focused on the two scales from this assessment associated with creativity syndrome. The Mischievous scale concerns the tendency to appear charming, friendly, and fun loving, but also to seem impulsive, excitement-seeking, and non-conforming. High scorers usually make a favorable first impression, but others find them difficult to work with because they tend to test limits, ignore commitments, and take perhaps ill-advised risks. Although they may seem decisive, bad decisions may result since they are often motivated by pleasure while not fully evaluating the consequences of their choices (Hogan Development Survey, 1999).

The Imaginative scale concerns thinking and acting in ways that are unusual, different, striking, and at times perhaps odd. High scorers tend to be colorful, entertaining, creative, and often quite visible; others may find them hard to work with because they can be unconventional, eccentric, and unaware of how their actions affect others. High scorers are described as creative, innovative, unusual, insightful, unconventional and preoccupied. While they can be a major source of innovation and change in an organization, they may have trouble getting their ideas adopted because they can be easily bored and may lack follow through (Hogan & Hogan, 1997).

Motives, Values, Preferences Inventory (MVPI)

The MVPI assesses an individual's core values and is used to (a) evaluate the fit between an individual's values and an organization's culture and (b) predict occupational success and satisfaction.

Hogan (MVPI) Motives, Values, Preferences, Interests Four Scales Associated with Creativity

The MVPI assessment evaluates the fit between an individual and the organizational culture. The organizational culture is usually defined by the values of top management (Core values and motivators for leadership roles, 2009). Holland (1985) stated "the character of an environment reflects the typical characteristics of its members. If we know what kind of people make up a group, we can infer the climate the group creates" (p. 35). The MVPI results provide a foundation to examine (1) which values the leaders consider salient and important, (2) the values to which leaders devote time and resources, and (3) the criteria by which leaders evaluate success (Hogan et al., 2007).

Security

Security motives are associated with a need for structure, order, predictability, and a lifestyle organized around planning for the future and minimizing financial risk, employment uncertainty, and criticism. High scorers on this scale care deeply about safety, financial security, and avoiding mistakes. Low scorers tend to be independent, open to criticism, and willing to take risks. People with high scores tend to be described as inhibited, conforming, and lacking leadership skills, and they need a sense of job security. People with low scores on the Security scale, appear outgoing, leader like, and enjoy testing the limits, unafraid of taking risks, assertive, open to feedback from staff, and unconcerned about job security (Hogan & Hogan, 1996).

Tradition

Traditional motives are associated with a concern for morality, high standards, family values, appropriate social behavior, and a lifestyle guided by well-established principles of conduct. High scorers value maintaining tradition, custom, and socially acceptable behavior. They tend to be trusting, considerate, responsive to advice, and comfortable in conservative organizations, and set in their ways. Low scorers tend to be unconventional, progressive, and unpredictable (Hogan & Hogan, 1996).

Power

Those motivated by Power desire challenges, competition, and achievement. High scorers care deeply about being successful, getting ahead, and getting things done. They tend to be assertive, confident, and active, but also independent and willing to challenge authority. Low scorers tend to be described as unassertive, socially inhibited, and cooperative. If a person receives a high score on the Power scale, they are strategic about their career, willing to disagree with superiors, demonstrate leadership skills, challenge limits, and are socially competent. Alternatively, low scorers may be somewhat modest, unassertive, and not very strategic about their career, tend to be quiet, careful about following procedures, and will not often disagree with superiors (Hogan & Hogan, 1996).

Commerce

Commercial motives are associated with an interest in earning money, realizing profits, finding business opportunities, and a lifestyle organized around investments and financial planning. High scorers care deeply about monetary matters, are motivated by the prospects of financial gain, are serious about work, attentive to details, and comfortable working within specified guidelines. They tend to be businesslike, direct, and focused on the bottom line. Alternatively, low scorers appear indifferent to commercial value, tend to be easy-going, are impractical, and are unconcerned about material success (Hogan and Hogan, 1996).

RESULTS AND INTERPRETATION

The TMT responses were sent to Hogan Assessments Systems to be scored according to their proprietary methodology. The action researcher received a report containing the numerical results at the individual and group levels on the graphs and the Hogan Assessments interpretation of the numerical results for both the individuals and the team. The interpretation of the individual numerical scores is not provided, however the diversity of the scores among the TMT is noted. The legend for the three assessments displays the average group score as a square black box on each scale in the Appendix at the bottom of Figures 2, 3, and 4). To provide context to, and comparison of, the TMT scores related to creativity, Hogan provides a norming score as shown by the bar interval on the graph.

Hogan (HPI) Potential Report Results Individual and Group Levels

The Personality Inventory (HPI) identifies specific leadership personality traits associated with creativity (see Figure 2). The Inquisitive scale reflects the cognitive style associated with creativity; low Prudence reflects the necessary flexibility and willingness to challenge convention; and high Ambition reflects the energy to bring one's tasks to completion (Barron, 1965). Hogan's defines the creativity syndrome as scores above the 65th percentile for Inquisitive and Ambition, and scores below the 35th percentile for Prudence.
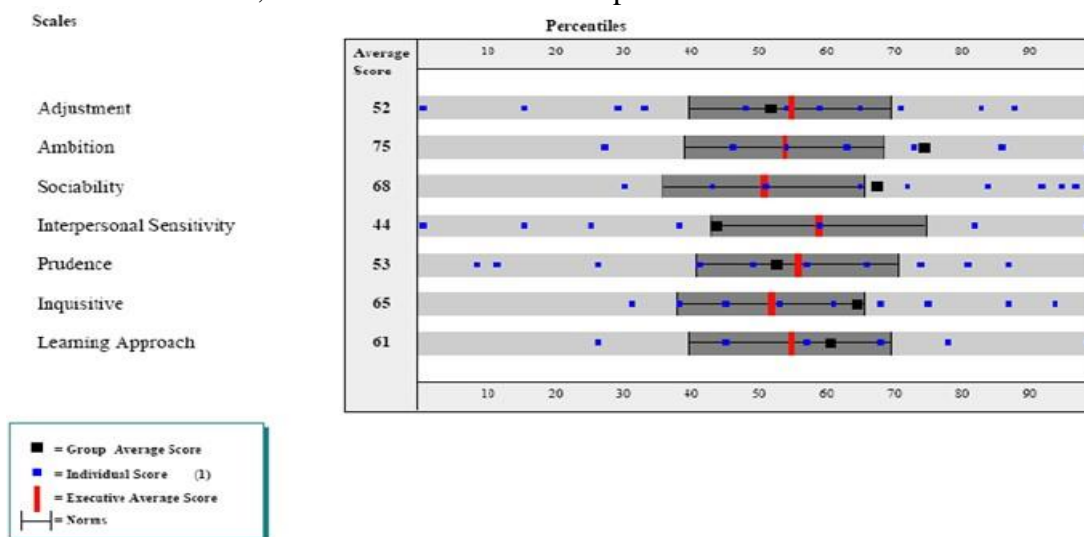

Figure 2. TMT Team and Individual HPI Results

The scale most directly related to creativity is Inquisitive "the degree to which a person is perceived as bright and interested in intellectual matters" (Hogan, Hogan, & Warrenfeltz, 2007, p. 45). High scoring individuals (scores ranging from 65% -100%) tend to be imaginative, have many ideas, and are resourceful problem solvers (2007). The assessment results indicate that the TMT average score is at the 65th percentile and over half of the TMT members have individual above the 65th percentile. At the team level results suggest that the TMT is comprised of strategic and outside the box thinkers who can implement a variety of ideas and solutions.

The Ambition scale "measures the degree to which a person seems socially self-confident, leader-like, competitive and energetic" (Hogan et al., 2007, p. 33). High scores (65%-100%) indicate the individual tends to be driven and focused on achieving results and success. The TMT's average score is at the 75th percentile and three quarters of the members have individual scores higher. The performance implications for these scores are associated with initiative, being competitive, and leading others to focus on business goals.

The Prudence scale "measures the degree to which a person seems conscientious, conforming, and dependable" (Hogan et al., 2007, p. 42). Low scores range from (0%-35%). Low scoring individuals are viewed as quick to act, flexible, comfortable with change, innovation, and new initiatives. Average scoring individuals (scores range from 36%− 64%) individuals are viewed as planners who are organized, and responsible. The assessment results indicate that the 2010 Executive Team average score is at the 53rd percentile. Three individuals' score lower than the team average and three other individuals score within the low range of the scale. The performance implications for average scores are being open to new experiences and looking beyond the standard procedures to solve problems while low scores are likely quick to act and make things happen. If the business requires flexibility, imagination, and the ability to adapt quickly to changing conditions—then lower prudence scores are desirable (Hogan et al., 2007).

Hogan (HDS) Development Report Results Individual and Group Levels

A score above the norm on the HDS scales (HDS) may indicate that this excess strong trait may lead to what Hogan refers to as derailment behaviors (see figure 3) as imaginative and risk-taking, team members' creativity and impulsivity may detract from the group's success. Members may overestimate the importance of their ideas and opinions while seeming unaware of how their actions affect others. These team members may be described as easily bored, distractible and possibility lacking in follow-through**.**
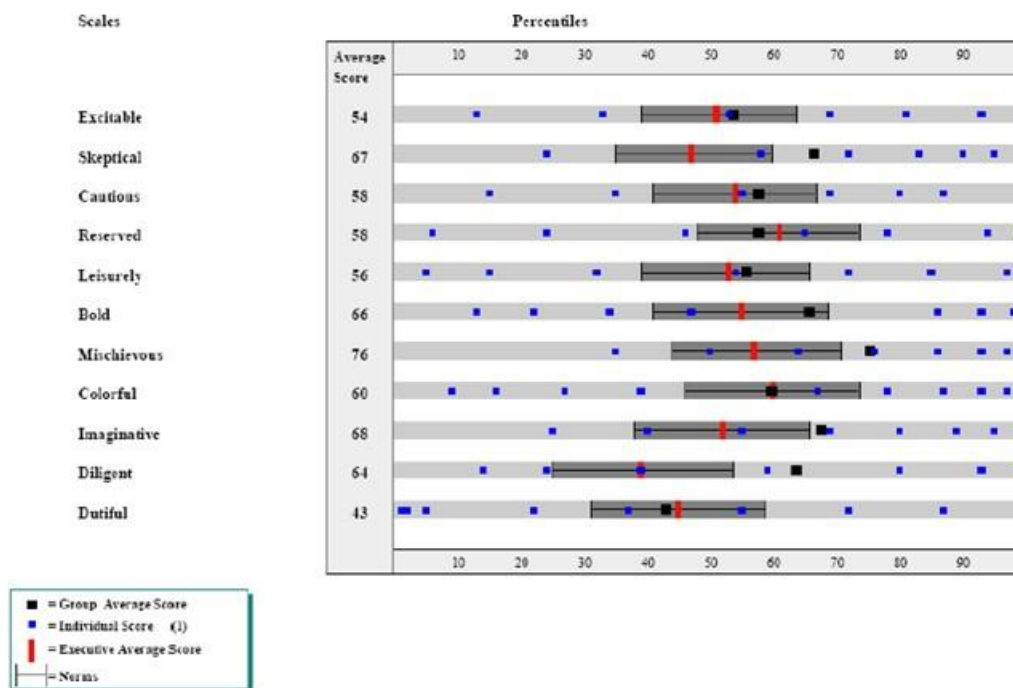
Figure 3. TMT Team & Individual level HDS Results

The team scored well above the norm on the Skeptical scale. This skepticism is likely exhibited in combination with the team's tendency for dramatic conversations especially during high-pressure situations. This is damaging if team members are argumentative, distrustful, and doubtful of fellow teammate's intentions. The team's focus on business success and results make for high standards to which everyone is held accountable. Under stress, the risk is becoming hyper-critical, meticulous and lost in the details. Team members who are less likely to get lost in the minutiae will provide balance with their strategic focus and approach.

Hogan (Mvpi) Motives, Values, Preferences, Interests Report Results Individual And Group Levels

Figure 4. TMT & individual level MVPI Results

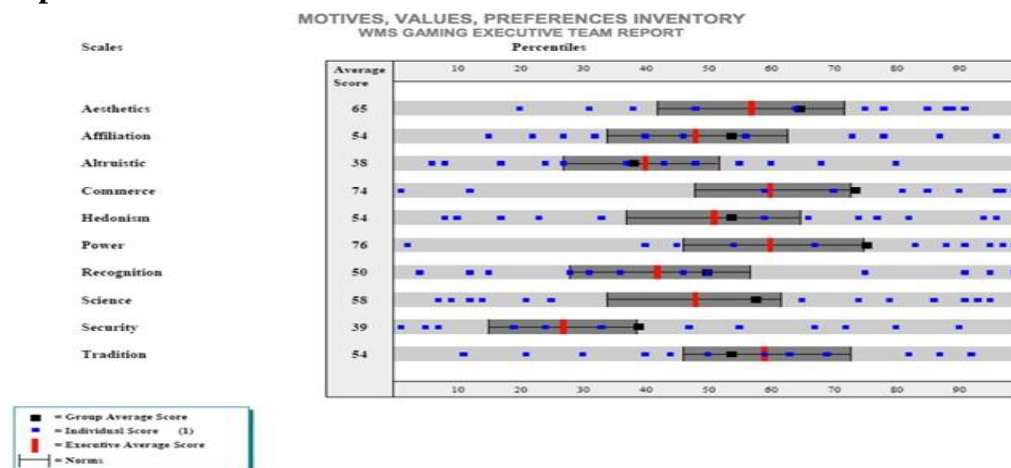The values of the TMT contribute to the organizational context. The organizational context closely reflects the average TMT scores indicating what is valued, what is not valued, and what is actively discouraged (Core values and motivators for leadership roles, 2009). The results are shown in Figure 4.

The TMT is highly motivated by profitability and financial success as indicated by the Commerce scale score at the 75th percentile. Thirteen individuals scored in the high range (65%-100%). The team is likely to reward those outcomes through salaries and bonuses. Stewards of those successful business practices are likely to be considered "heroes". Similarly, most team members are heavily motivated by Power with scores ranging from 65%-100%. Power is associated with an organizational climate geared around success as measured by innovation and the bottom-line (Hogan et al., 2007).

About half the TMT are highly collaborative and likely succeed in networking, developing relationships, and being accessible to others as indicated by the Affiliation scale. These members are more concerned with embracing "open door" policies, encouraging frequent face-to-face meetings and focusing on building extensive networks both within and outside of the organization.

DISCUSSION

Organizational creativity does empirically appear to be a function of the components in the Woodman et al.'s (1993) theoretical model tested in this study.

Research Questions One: The Individual

RQ 1: Among the members of the TMT what individual level leadership personality traits and behaviors foster creativity?

Woodman et al.'s (1993) interactionist model found that "individual creativity is a function of antecedent conditions, cognitive styles and abilities, personality, motivational factors, and knowledge" (p. 301). All individuals in this study did not have the same personality profile. What is needed is diversity to provide a balance as found by Woodman et al. (1993). For example for each highly creative individual we need a prudent, less risk adverse person to think through the pros and cons and ambitious person to follow through with the good ideas and not move on to the next new idea. Hiring can be done to maintain this diversity. In addition, individual team member's inquisitive scores suggest a balance between visionary and strategic leadership.

Research Question Two: The Group -Top Management Team

RQ 2: What qualities of the TMT enhance creativity at the group level?

According to Woodman et al. (1993) individual factors "both are influenced by and influence social and contextual factors. The group in which the individual creativity occurs establishes the immediate social influences on individual creativity" (p. 301).

The results indicate the empirical identification of individual and TMT creativity and that contributes to a work environment supportive of creativity (Woodman et al., 1993) using the scale level analyses. The TMT assessment results offer evidence of the roles and behaviors supportive of creativity displayed among the TMT.

The TMT personality characteristics described as confident, dynamic, and creative. The team drives results and success; pushing each other as well as the organization to produce cutting edge products. The TMT's gregariousness facilitates internal and external networking and collaboration. Their innovative vision, passion for the industry, and self-confidence is inspirational and positively impacts the team. Overall, the TMT is imaginative, innovative, and potentially unconventional. Paired with the team's mischievous tendency to test the limits, the team appears to be innovative, flexible and, at times, impulsive.

The TMT's high-average Learning Approach suggests a strong preference for knowledge and expertise within the industry and its application to the business. There is likely a motivation to learn new techniques that is balanced by a practical learning style in which the team implements these new opportunities when and where appropriate.

TMT is data-driven and innovative and has distinct differences in their approach to solving problems. Approximately half of the Team is more analytical in their approach to solving problems as indicated by the Science scale scores of 65% or greater. In contrast, the other half of them prefers a more innovative, intuitive, and creative vision over data. As a result, this group is more intuitive in making decisions. Therefore, the more cognitive and data driven style is a balance to a highly technical and innovative organization and industry. The TMT is composed of two types of problem-solvers: (1) the pragmatic, detail-oriented implementers and (2) the imaginative, strategic, big-picture thinkers. Although both types of problem solvers are quite valuable, the team has only a few representatives who lie somewhere in between these two groups. It is these in-between team members who are vital to their success; translating ideas into workable action plans.

The HPI specific results suggest action- and results- oriented behaviors commonly exhibited in motivated leaders and competitive industries. Ambition score was well above the Executive Norms Average instrument suggests an unwavering focus on solving problems, taking initiative, executing projects, and exceeding goals. Typically, this group is confident in its execution and will inspire and push both themselves and others (Hogan & Holland, 2005). The executives in this company practice versatile leadership which facilitates innovation. They have a high level of the ideal amount of balance between the forcefulness dimension that is required to move innovation forward, and the enabling dimension which allows creative ideas to flow so that both parts of the process are facilitated by this balance. This finding is further substantiated by the high level of overall leadership effectiveness which exceeds that of the norm group.

Research Question Three: Organizational Context

RQ 3: Does creativity at the individual and TMT level contribute to creative performance outcomes at the organizational level?

Woodman et al. (1993) stated "that organizational characteristic create the contextual influences that operate on both individuals and groups to influence their creativity" (p. 308). Organizational context is consistent with the description by Akkermans, Isaksen and Isaksen (2008) of leaders focused on creating a climate which encourages creativity and innovation. The openness, recognition, opportunities for organizational learning and good communications all contribute to the innovative culture of the organization. This type of context is also consistent with Sullivan (2011) perspective that to embrace complexity, management should look for cognitive diversity by purposefully bringing different points of view together and those holding these views should actively challenge one another. The rules of thumb for having the proper

mind-set to operate in a complex environment suggest that being exposed to a diverse set of points of view is very important and these diverse views should be actively sought (Sullivan, 2011). The TMT values high performance, productivity and achievement, is motivated by challenge, thrives in environments where they can make a difference, and produces results. They created a climate for the employees to positively facilitate creativity recognized by the best place to work awards. The gaming firm's executive team members exhibit personality characteristics, behavioral tendencies, and work-related values that contribute to their overall creativity, innovation, and operational leadership. These results generally support the inclusion of the individual and group levels as contributing to a creative work context.

The company culture fosters an innovative spirit through an intranet on which management posts challenges and encourages voting on solutions for mitigating or removing these challenges. More than 4,000 ideas have been submitted to this "electronic suggestion box" with several of the suggestions being implemented. This "conversation" is open to everyone with the goal of producing a broad perspective on the issues. These ideas are then voted on by the entire organization. The CEO is credited by some employees with creating an easy, open culture to foster innovation and collaboration.

A stated emphasis on innovation at the company can be found on the company website. They focus on frequent company-wide communication and have a newsletter, blogs, email communication and regular employee events. The CEO of the company holds breakfasts at which he personally solicits ideas from the employees. Examples of changes as a result of this process are documented. It has been published that "employees say the culture [at the company] fosters work-life balance and an open exchange of ideas". Also since this is a gaming company, working in the field and experiencing the gaming products with colleagues foster innovation and collaboration. This hand-on approach of being "users" of the products helps to encourage engagement and participatory decision-making. Support is present for the existence of work environment characteristics fostering a creative environment.

LIMITATIONS

This study was conducted in a single gaming company within the gaming industry. While this company and industry is focused on creativity, this restricts the generalizability of these findings. Limitations of this research include the fact that this study was conducted in one firm, and while all top leaders were included in this study, the number of respondents remains small. Further studies should replicate this study in multiple firms with larger numbers of subjects.

This study presents measurable data concerning the TMT and the organizational environment they provide in an award winning creative organization, however causal interpretations should not be drawn.

How much organizational creativity is required may depend on the environment in which the organization operates. This was a company that operated in a highly competitive environment but also in a creative one by the nature of its product – games for the globally competitive gaming industry. But studying the extreme is the best way to study creativity – where a high level is necessary.

FUTURE RESEARCH

A review of the current literature for other theoretical constructs related to identifying the creative personality in predicting creative performance is needed to establish a relationship between such predictors and the criterion. There are not enough empirical studies exploring the relationships discussed. The development of a specific measure for creative personality has several substantial organizational implications. Many organizations are working to improve their creative throughput (Amabile, 1996).

Based upon current models of creativity, organizations are working to restructure and make managerial changes in an effort to encourage creativity. But one of the most helpful ways to improve the creativity of an organization is likely via hiring of creative individuals. Many organizations would likely be reluctant to make hiring decisions based upon current measures of creative personality at the individual or group or organizational levels without further research in this area. Additional studies that examine the relationship between the individual characteristics and organizational context are needed.

IMPLICATIONS FOR PRACTICE AND CONCLUSIONS

This study addresses previous calls for research into the complex interaction of individual, group characteristics and organizational level creativity (Woodman et al., 1993). In particular the study focused on testing a theoretical model in a field study and added to a deeper understanding of personality, the TMT and organizational context as it relates to creativity. Although this study consisted of a single company it provides an in depth view of all members of the TMT and the social system they built. Creativity is critically important for organizations today as they compete in an ever changing global marketplace. This means that the identification of creative and innovative individuals with diverse thinking becomes increasingly important as creativity is becoming a strategic driver of organizational success. The TMT can be coached to raise awareness of and sensitivity and discernment to appreciate the individual personalities and diversity that is necessary for balanced interaction. The TMT also sets the culture of the organization through their values and leadership. They provide context and direction to the organization.

An important lesson for management from the results of this study is that context does make a difference in the level of organizational creativity. Leaders at all levels that wish to foster creativity and innovation within their organizations can do so by paying attention, not just to the personal characteristics and skills that early creativity research identified, but also to the environments they create for their potentially creative individuals. While the context is built by the top management as it was in this company all levels should reinforce and maintain this environment.

REFERENCES

Agars, M.D., Kaufman, J.C., Deane, A., & Smith, B. (2012). Fostering individual creativity through organizational context: A review of recent research and recommendations for organizational leadership. *Handbook of Organizational Creativity.* pp. 271-291. CA: Elsevier Inc. doi:10.1016/B978-0-12-374714-3.00012-4

Akkermans, H. J. L., Isaksen, S. G., & Isaksen, E. J. (2008). Leadership for innovation: A global climate survey - A CRU technical report. *The Creative Problem Solving Group Inc.* 1-26.

Amabile, T. M. (1983). Social psychology of creativity: A componential conceptualization. *Journal of Personality and Social Psychology, 45,* 357-377.

Amabile, T. M. (1988). A model of creativity and innovation in organizations. In B. M. Stew& L. L. Cummings (Eds.), *Research in Organizational* Behavior, 10, 123-167. Greenwich, CT: JAI Press

Amabile, T. M. (1996). *Creativity in context: Update to the social psychology of creativity.* Boulder, UK: Westview Press Inc.

Amabile, T. M., Conti, R., Coon, H., Lazenby, J., & Herron, M. (1996). Assessing the Work environment for creativity. *The Academy of Management Journal, 39*(5), 1154- 1184.

Amabile, T. M. (1997). Motivating creativity in organizations: In doing what you do and loving What you do. *California Management Review, 40*(1), 39-58.

Amabile, T. M., Schatzel. E. A., Moneta, G. B., & Kramer, S. J. (2004). Leader behaviors and the work environment for creativity: Perceived leader support, *The Leadership Quarterly*, *15*, 5-32.

Amabile, T. (2012, April 26). Componential theory of creativity: Working Paper, 12-096. *Harvard Business School.* 1-10.

Anderson, N., Potocnik, K., & Zhou, J. (2014). Innovation and creativity in organizations: A state-of-the-science review, prospective commentary, and guiding framework. *Journal of Management, 40*(5), 1297– 1333. doi: 10.1177/0149206314527128

Barron, F. (1965). The psychology of creativity. In new directions in Psychology II. New Your, NY: Holt, Reinhart, and Winston.

Barron, F., & Harrington, D.M. (1981). Creativity, intelligence, and personality. *Annual Review of Psychology, 32*, 439-476.

Choi, J. N. (2004). Individual and contextual predictors of creative performance: The mediating role of psychological processes. *Creativity Research Journal, 16*(2&3), 187-199. doi: 10.1080/10400419.2004.9651452

Damanpour, F. (1991). Organizational innovation: A meta-analysis of effects of determinants and moderators. *The Academy of Management Journal, 34*(3), 555-590.

Dyer, J. H, Gregersen, H., & Christensen, C. M. (2009, December). The innovator's DNA. *Harvard Business Review,* 60-68.

Ford, C. (1999, September). Interpretive style, motivation, ability and context as predictors of executives' creative performance. *Creativity, 8*(3), 188-196.

Furnham, A., Tricky, G., & Hyde, G. (2012). Bright aspects to dark side traits: Dark side traits associated with work success. *Personality and Individual Differences*, *52*(8), 908-913. doi:10.1016/j.paid.2012.01.025

Gallo, C. (2011). *The innovation secrets of Steve Jobs: Insanely different principles for Breakthrough success.* New York, NY: McGraw Hill.

Gates, B. (2010, January 29). The key to a bright future is innovation. *Financial Times.* Retrieved from http://www.ft.com/cms/s/0/a4810bb2-0c75-11df-a941-00144feabdc0.html#axzz3UkhULvAF

Guilford, J. P. (1967). *The nature of human intelligence.* McGraw-Hill: New York.

Gumusluoglu, L. & Ilsev, A, (2009). Transformational leadership, creativity and organizational innovation. *Journal of Business Research, 62*, 461- 473.

Hansen, M. T., & Birkinshaw, J. (2007, June). The innovation value chain. *Harvard Business Review*, 121-130.

Herrmann, D., & Felfe, J. (2014). Effects of leadership style, creativity technique and personal initiative on employee creativity. *British Journal of Management*, 25, 209-227. DOI: 10.1111/j. 1467-8551.2012.00849.

Hogan development survey: Interpretive report. (1999). Tulsa, Ok: Hogan Assessment Systems.

Hogan, J., Barrett, P., & Hogan, R. (2007). Personality measurement, faking and employment selection. *Journal of Applied Psychology, 92*(5)*,* 1270-1285. http://dx.doi.org/10.1037/0021-9010.92.5.1270

Hogan, J., & Holland, B. (2003). Using theory to evaluate personality and job-performance relations: A socioanalytic perspective. *Journal of Applied Psychology*, *88*(1), 100–112.

Hogan, R., & Hogan, J. (1992). *Hogan personality inventory manual*. Tulsa, OK: Hogan Assessment Systems.

Hogan, R., & Hogan, J. (1996). *Hogan motives, values, and preferences survey manual.* Tulsa, OK: Hogan Assessment Systems.

Hogan, R., & Hogan, J. (1997). *Hogan development survey manual.* Tulsa, OK: Hogan Assessment Systems.

Hogan, R., Hogan, J., & Warrenfeltz, R. (2007). *The Hogan guide: Interpretation and use of the Hogan Inventories*. www.hoganassessments.com

Hogan, R., & Shelton, D. (1998). A socioanalytic perspective on job performance. *Human Performance, 11*(2/3), 129.

Holland, J. L. (1985). *Making vocational choices: A theory of vocational personalities and work environments* (2nd ed.). Englewood Cliffs, NJ: Prentice-Hall.

Jaruzelski, B., & Holman, R. (2009). *Innovating through the downturn A memo to the chief innovation officer.* Booz & Company Inc.

McCrae, R. R. (1987). Creativity, divergent thinking, and openness to experience. *Journal of Personality and Social Psychology, 52*, 1258-1265.

Mumford, M. D., Zacarro, S. J., Harding, F. D., Jacobs, T. O., Fleishman, E. A. (2000). Leadership skills for a changing world: Solving complex social problems. *Leadership Quarterly, 11*(1), 11-35. doi:10.1016/S1048-9843(99)00041-7

Munroe, T. (Former economics professor of the University of the Pacific). Retrieved from http://www.innovation-creativity.com/innovation_quotes.html

Nancherla, A. (2010). Creative leadership for the win: Rising complexity leads CEOs from around the world to cite creativity as a way to capitalize on the future of business. *Association for Talent Development,* 64(9).

Perry-Smith, J. E., & Shalley, C. E. (2003). The social side of creativity: A static and dynamic social network perspective. *Academy of Management Review, 28*, 89-106.

Puccio, G., & Grivas, C. (2009) Examining the relationship between personality traits and creativity styles. *Creativity Management*, *18*(4), 247-255.

Shalley, C. E., Zhou, J., & Oldham, G. R. (2004). The effects of personal and contextual characteristics on creativity: Where should we go from here*? Journal of Management*, *30*(6) 933-958.

Shin, S. J., & Zhou, J. (2003). Transformational leadership, conservation and creativity: Evidence from Korea, *Academy of Management Journal*, *46*(6), 703-714.

Simmons, A. L., & Sower, V. E. (2012). Leadership sagacity and its relationship with individual creative performance . *European Journal of Innovation Management*, *15*(3), 298-309.

Sullivan, T. (2011). Embracing complexity. *Harvard Business Review.* Retrieved from https://hbr.org/2011/09/embracing-complexity

West, M. A, & Anderson, N. R. (1996). Innovation in top management teams. *Journal of Applied Psychology, 81*(6), 680-693.

Williams, S. D. (2004). Personality, attitude, and leader influences on divergent thinking and creativity in organizations. *European Journal of Innovation Management, 7(3),* 187-204.

Woodman, R. W., Sawyer, J. E. & Griffin, R. W. (1993). Toward A Theory of Organizational Creativity. *Academy of Management Review, 18,* 2, 293-321.

Zhang, X, & Bartol, K. M. (2010). Linking empowering leadership and employee creativity: The influence of psychological empowerment, intrinsic motivation, and creative process engagement. *Academy of Management Journal*, 53(3), 107-128.

Zhou, J., & George, J. M. (2003) Awakening employee creativity: The role of leader emotional Intelligence. *The Leadership Quarterly*, *14*, 545-568.

APPENDIX A
Hogan Leadership Series Scales Terminology
The HPI (Hogan Personality Inventory)

Measures personality along seven scales (Average to high scores are described as):
Adjustment: confidence, self-esteem, and composure under pressure
Ambition: initiative, competitiveness, and desire for leadership roles
Sociability: extraversion, gregarious, and need for social interaction
Interpersonal Sensitivity: tact, perceptiveness, and ability to maintain relationships
Prudence: self-discipline, responsibility, and thoroughness
Inquisitive: imagination, curiosity, and creative potential
Learning Approach: achievement orientation, valuing education

The HDS (Hogan Development Survey)
Measures dark side personality along 11 scales. (Moderate to high risk scores are described as):
Excitable: moody, hard to please, and emotionally volatile
Skeptical: suspicious, sensitive to criticism, and expecting betrayal
Cautious: risk averse, resistant to change, and slow to make decisions
Reserved: aloof, uncommunicative, and indifferent to the feelings of others
Leisurely: overtly cooperative, but privately irritable, stubborn, and uncooperative
Bold: overly self-confident, arrogant, and entitled
Mischievous: charming, risk-taking, and excitement-seeking
Colorful: dramatic, attention-seeking, and interruptive
Imaginative: creative, but thinking and acting in unusual or eccentric ways
Diligent: meticulous, precise, hard to please, and micromanaging
Dutiful: eager to please and reluctant to act independently or against popular opinion

The MVPI (Motives, Values, and Preferences Inventory)
Measures values along 10 primary scales (Average to high scores are described as):
Recognition: responsive to attention, approval, and praise
Power: desiring success, accomplishment, status, and control
Hedonism: orientated for fun, pleasure, and enjoyment
Altruistic: wanting to help others and contribute to society
Affiliation: enjoying and seeking out social interaction
Tradition: dedicated to strong personal beliefs
Security: needing predictability, structure, and order
Commerce: interested in money, profits, investment, and business opportunities
Aesthetics: needing self-expression, concerned over look, feel, and design of work products
Science: wanting knowledge, research, technology, and data

CULTURAL DIVERSITY AS A MECHANISM FOR INNOVATION: WORKPLACE DIVERSITY AND THE ABSORPTIVE CAPACITY FRAMEWORK

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ABSTRACT

Although prior research demonstrates a relationship between organizational diversity and firm performance, there lacks detailed explanation describing how and why organizational diversity impacts firm performance. This limited understanding of the diversity "black box" may explain why prior research has produced mixed results concerning the relationship between diversity and either group or firm outcomes. Culturally diverse firms experience improved performance when an innovation strategy is in place, and group diversity has been linked to creativity in prior research. This may mean that diversity-creativity linkages are variables responsible for firm performance outcomes. However, there is scant attention paid to how individual- and group- levels of creativity and innovation within the firm result in firm-level innovation. The author of this article explores how firms that value diversity become innovative through their ability to harness creativity and transform it into useful ideas, products, and services. Multi-level creativity is described by the author, and using the diversity perspectives and absorptive capacity framework, the paper discusses how diversity and the manner in which it is managed creates an environment ripe for firm-level innovation to flourish.

INTRODUCTION

Innovation cannot exist in the absence of creativity (Basset-Jones, 2005). Furthermore, creative behavior may be considered a subset of innovative behavior (Yuan & Woodman, 2010), as innovation involves both generating and implementing new ideas (Woodman, Sawyer, & Griffin, 1993). Although there is theoretical support (Cox & Blake, 1991; Jackson, 1992) and empirical evidence demonstrating that cultural diversity impacts organizational creativity (McLeod, Lobel, & Cox, 1996) and performance (Dezso & Ross, 2012; Richard, 2000; Richard, McMillan, Chadwick, & Dwyer, 2003), there are inconclusive results linking diversity with firm innovation (Horwitz & Horwitz, 2007). Knowing from prior research that diversity relates to creativity (McLeod et al., 1996; Watson, Kumar, & Michaelsen, 1993), a subset of innovation, it should logically follow that diversity plays a role in how firms become innovative. However, there is a dearth of empirical evidence and theoretical grounding to support this claim.

Although prior research demonstrates a relationship between organizational diversity and firm performance (Richard, 2000; Richard et al., 2003), there lacks a comprehensive framework that describes *how* and *why* organizational diversity impacts firm performance. In fact, the few empirical results investigating the relationship between diversity and organizational outcomes have only been significant when the firm engages in a growth (Richard, 2000) or innovation strategy (Richard et al., 2003). Additionally, other variables have been identified in past research that offer further explanation as to why many of the relationships between diversity and other outcomes exist (Lawrence, 1997). This limited understanding of the diversity "black box"

(Lawrence, 1997) may explain why prior research has produced mixed results concerning the relationship between diversity and either group (Horwitz & Horwitz, 2007; Knippenberg & Schippers, 2007) or firm outcomes.

A firm's perspective towards diversity can govern the ability of its employees to communicate effectively and reap sustained benefits from diversity. Ely and Thomas (2001) identified three perspectives under which cultural diversity could either improve or harm work group functioning. The fairness-and-discrimination perspective explains how organizations comply with the law, but do not necessarily benefit from diversity at work. The access-and-legitimacy perspective explains how racial minorities may benefit with access to the workforce, but the organization itself does not derive much benefit from its diversity practices. The integration-and-learning perspective suggests that organizations and its employees can benefit from a diverse workforce when it is managed properly. The authors suggest that these perspectives may influence the climate or culture of an organization. However, the relationship between these perspectives, diversity and innovation has not been examined.

Absorptive capacity (ACAP) of a firm is related to the effectiveness of its deployed innovation strategies. ACAP is defined as the ability of an organization to acquire, assimilate, and exploit information to commercial ends (Cohen & Levinthal, 1990). The innovative capability of an organization is a result of its level of absorptive capacity (ACAP) which has been linked to firm performance. There is limited research concerning how firm capabilities for innovation are derived from organizational learning and employees' knowledge. Prior research suggests that environmental conditions must be met in order for knowledge creation or transfer to occur (Cohen & Leventhal, 1990; Grant, 1996; Szulanski, 1996). The characteristics of the environment, as described among researchers (Cohen & Leventhal, 1990; Grant, 1996; Spender, 1996; Szulanski, 1996) both differ and overlap ranging from the responsibility of the firm to remove barriers to knowledge transfer (Szulanksi, 1996) to the amount of exposure, practice, and frequency that firms allow its employees to have with new information and knowledge (Cohen & Levinthal, 1990; Lindsay & Norman, 1977). However, there is no explicit mention of how cultural diversity ties into a framework for explaining how firms become innovative. Although the structure and policies of the firm play a role in producing innovation, it is important to recognize that firms can be conceptualized as being comprised of social actors, each with potentially strategic added value to the firm (Branco & Rodrigues, 2006). Organizational actors may include top management teams, the CEO, or even employees at the lower levels of the firm governed by control mechanisms which may include policies, procedures, and differing organizational climates. Individuals play a prominent role in knowledge creation (Grant, 1996; Nonaka, 1994) that affects firm innovation.

The primary purpose of this paper is to extend previous research on the impact of organizational diversity on firm outcomes by (1) conceptualizing how the diversity – creativity relationship can be used by firms to harness innovation, (2) examining the role that best management practices play regarding the diversity-creativity relationship to affect innovation, and (3) developing a comprehensive theoretical framework for future research that describes the relationship between diversity management practices and firm-level innovation. I propose that the implementation of programs and policy structures that support organizational diversity and organizational actors enhance the ACAP of firms allowing them to perform innovatively. Using a multi-level perspective, I propose a framework that integrates workplace diversity research from the individual-, group-, and firm- level regarding the relationship between diversity and creativity with the process of absorptive capacity and innovation. Using the three-perspective

diversity framework (Ely & Thomas, 2001), I propose that the governance and management of diversity policies and practices creates an environment where absorptive capacity may flourish to impact the effect of diversity-creativity linkages on firm innovation. Throughout the paper diversity is defined as being cultural, racial, or sex-based and distinctions between the different types are made for clarity when necessary.

THE CASE FOR THE DIVERSITY - CREATIVITY - INNOVATION RELATIONSHIP

Scholars have found that heterogeneity of teams leads to more effective outcomes given the broader knowledge scope (e.g., Cox & Blake, 1991; Eisenhardt & Schoonhoven, 1990; Keck, 1997). However, greater levels of skills and cognitive diversity do not always yield a positive influence on outcomes. For example, when examined at the team level Horwitz and Horwitz (2007) found no relationship between bio-demographic diversity and the quality of team performance. Others have found negative relationships between diversity and problem-solving processes (e.g., Tsui & O'Reilly, 1989). One explanation for the variation in results may be lack of consideration for the time a team of individuals spends together. Watson and colleagues (1993) found that over time, heterogeneous groups outperformed homogeneous groups while working on tasks. Time that employees spend with one another also allows for them to share more information, whereby their deep-level traits such as work attitudes become more important in their relationships than surface-level traits (Harrison, Price, & Bell, 1998). It is not uncommon for teams of employees in organizations to spend lots of time with one another on a task. Without considering the team or organizational influences, studies are limited in the ability to capture the motivations guiding the collaboration process. Organizations may be influenced by not only policies but also structure. Thus, diversity practices, policies, and the level within the organization where employee interactions occur, has a substantial relationship on firm outcomes such as innovation, yet has not been fully examined in extant literature.

THE INFLUENCE OF POLICY ON DIVERSITY OUTCOMES

Signaling theory (Spence, 1973) posits that when presented with incomplete information, individuals interpret the limited information that is known to them using it as a substitute and as a way to reduce uncertainty. They may rely on this limited information for making decisions for job related outcomes (Rynes, 1991). Similarly, policies or norms of an organization signal to employees how much they are valued by the company or how fair they perceive they will be treated irrespective of their race or gender, impacting the perceived climate of the organization.

Diversity Perspectives Effect on Innovation

Ely & Thomas (2001) proposed three perspectives that firms adopt when managing organizational diversity, the fairness-and-discrimination, access-and-legitimacy, and integration-and-learning perspective. A diversity perspective can either be explicit such as through the use of formal policies and guidelines, or implicit such as through leadership behaviors (Ely & Thomas, 2001). In their qualitative study, the three perspectives were identified among three professional service firms and related to their effect on group processes and outcomes. The integration-and-learning perspective was found to have the most positive impact on work outcomes. Firms that held this perspective incorporated policies and practices that directly tied

cultural diversity to work processes, thereby creating a high value for cultural identity as a resource for learning. As a result, a greater number of women and minorities were empowered to influence work outcomes. One of the main indicators for progress was the increase in leadership among minority employees and the result of both process and product innovation.

The access-and-legitimacy perspective resulted in an increase of minority employees too. However, policies were not promoted to be effective at empowering minority employees or supporting them in leadership roles of influence. The access-and-legitimacy climate embraced the perspectives of its minority employees, but only as a means to expand the firm's market share among previously untargeted racial and ethnic groups of consumers. The input from minority employees in the company was limited with no viable leadership opportunities aside from those that directly enabled to company to benefit from access to minority consumers.

The fairness-and-discrimination perspective is characterized as having a low value for cultural identity where the rational for diversifying was to be in compliance with the law and reduce liability against employment discrimination. This perspective views one dominant culture as effective with the expectation for all employees to assimilate into it.

Each perspective stems from the extent to which policies or practices are used to embrace employee diversity. In the study, firms that possessed a fairness-and-discrimination perspective resulted in having increased representation of women and minorities, but did not fully benefit due to norms that limited connections between employee diversity and work functioning. The integration-and-learning climate, the most attractive one by employees, was found to be the most effective at influencing work group functioning. Companies with an integration-and-learning perspective were high-functioning compared to the other perspectives.

LEVELS OF THE FIRM AND ITS RELATIONSHIP TO DIVERSITY AND INNOVATION

Individual- Level Relationship to Innovation

Innovation cannot occur within the organization without employees. Yuan and Woodman (2010) identified both individual and organizational factors that serve as antecedents to innovative behavior in the workplace. A primary individual factor was the creativity of individuals. But that is not enough. Although the antecedent to innovation stems from creativity within individuals or in teams (Basset-Jones, 2005), individual innovation is influenced by organizational culture and climate (Scott & Bruce, 1994), supervisor relationship quality and personal social image (Yuan & Woodman, 2010). People are motivated by expected consequences (Vroom, 1964; Yuan & Woodman, 2010). If individuals fear reprisal for taking risks, then they will not innovate (Yuan & Woodman, 2010). Similarly, a climate that is not supportive of diversity may create a culture perceived by employees to lack organizational support, cohesion, and identity resulting in interpersonal communication breakdowns which can hinder the elements needed for innovation to exist. Additionally, relationships between employees and supervisors may suffer (Ely & Thomas, 2001). On the other hand, an organization that celebrates diversity using the integration-and-learning perspective will provide a climate containing contextual factors that nurture innovative behavior. Employees often participate in the decisions made by the organization (Richard et al., 2003). When employees feel included they will be more apt to share their ideas and express their creativity. As a result, more innovative behavior among employees will lead to increased opportunities for innovation for the firm.

Group- Level Relationship to Innovation

Research investigating groups and teams has produced mixed results pertaining to the group performance of heterogeneous groups (Horwitz & Horwitz, 2007; Knippenberg & Schippers, 2007). This suggests that the mere presence of diversity is not sufficient to introduce creativity or innovation. There are two primary competing viewpoints on the relationship that diversity has on performance outcomes (Horwitz & Horwitz, 2007). The first is grounded in theories guided by cognitive diversity hypotheses that contend that heterogeneous environments produce creativity, innovation and better problem-solving (Horwitz & Horwitz, 2007; Cox & Blake, 1991). The information/ decision-making model stems from this viewpoint suggesting that diverse groups and organizations possess a wide range of perspectives and abilities from its members that can benefit organizations (Cox & Blake, 1991; Richard & Shelor, 2002). On the other hand, the similarity- attraction viewpoint contends that heterogeneity has an adverse impact on the performance of teams (Byrne, 1971; Horwitz & Horwitz, 2007; Tajfel & Turner, 1986). The similarity- attraction paradigm and social categorization theory stem from this viewpoint explaining how diversity negatively impacts organizations as members categorize themselves into social groups and may create conflict and prefer not to work with dissimilar others (Byrne,1971; Ely & Thomas, 2001; Jackson, 1992; Tajfel & Turner, 1986). There is empirical evidence supporting both claims, demonstrating that diverse groups have both positive (Watson et al.,1993) and negative (Tsui, Egan, & O'Reilly, 1992) outcomes relative to homogenous groups. However, the differences in values and attitudes towards dissimilar others within a work group fuel conflict and discussion which can also spark further innovative thinking among group members. In fact, some studies demonstrate that over time, diverse work groups are more creative than homogeneous groups, generate more solutions and perspectives when addressing problems (Watson et al., 1993), and introduce innovation in team settings (Albrecht & Hall,1991). The results from those studies reveal the impact that diversity has on groups and teams.

Drawing from the diversity perspectives towards diversity practices management, the integration-and-learning perspective was the most successful for the performance of groups with culturally diverse settings (Ely & Thomas, 2001). As individual groups and teams within an organization function successfully, a strong system of group performance emerges. A system of diverse groups has the potential to spawn creative ideas and solutions. Although a creative process can be produced by groups independently, organizations that apply the integration-and-learning perspective may motivate group members to intra-communicate thereby developing a collective of creativity. In other words, group creativity has the potential to aggregate to firm level creativity in preparation for innovation to flourish.

Firm- Level Relationship to Innovation

Based on anecdotal evidence, many business leaders will attest that diversity is linked to innovation and improved firm performance (Diversity Inc., 2011). However, inconclusive findings regarding the relationships with diversity outcomes could suggest that investigating main effects for diversity on firm outcomes is futile (Horwitz & Horwitz, 2007). Researchers have found mixed results demonstrating that diversity can be either beneficial (Cox & Blake,

1991; Hambrick, Cho, & Chen, 1996; Richard & Shelor, 2002) or detrimental (Jackson, 1992; Tajfel & Turner, 1986) to group and organizational outcomes. Other studies have concluded that there is no main effect of diversity on firm outcomes (Horowitz & Horowitz; 2007; Richard,2000; Richard et al., 2003). An explanation for this may be that other variables are not accounted for in prior research that impact the effect that diversity has on organizational outcomes (Lawrence, 1997). A focus on investigating variables that influence diversity may shed light on future research of diversity and firm outcomes (Lawrence, 1997; Richard et al., 2003).

Richard (2000) demonstrated that culturally diverse organizations possess rare, valuable, and inimitable resources (Barney, 1991) that positively impact market performance, return on equity, and productivity. Diversity of top management teams is also linked to firm performance as female representation brings informational and social diversity benefits (Dezso & Ross, 2012). Such representation may signal a climate of inclusiveness and value for employees. As a result, managers are more motivated which impacts managerial task performance and thus better firm performance. The resource-based view (RBV) of the firm suggests that a firm may achieve a competitive advantage when its resources are rare, valuable, inimitable, and non-substitutable (Barney, 1991), and employees are resources that can serve as a competitive advantage (Wright & McMahan, 1992) for an organization when managed properly. Using RBV and a contingency approach, Richard (2000) suggested that a growth strategy impacts the effect of diversity on performance because the characteristics of having a diverse firm benefit the firm by attracting a greater number of qualified employees. However, a growth strategy only addresses the firm's impact on the quantity of diverse employees but not necessarily the quality of its diversity climate. In fact, another study by Richard and colleagues (2003) demonstrated that diversity positively relates to firm performance when an innovation strategy is used by the firm.

As earlier noted, when conflict stemming from diversity is not managed properly it can negatively impact organizational outcomes. Negative outcomes can occur due to differences in conflicting attitudes, values, and beliefs of individuals (Byrne, 1971; Jackson, 1992; McGrath, Berdahl, & Arrow, 1995) or based on self-categorization between group members based on demographic characteristics (Tajfel & Turner, 1986). Human resource management strategies may aid in managing conflict (Basset-Jones, 2005). An effective human resources strategy also aids in employing an innovative competitive strategy (Richard et al., 2003). An integration – and – learning perspective towards organizational diversity may play a role in motivating employees to be more productive (Basset-Jones, 2005; McMahan, Bell & Virick, 1998), creative (Cox & Blake, 1991; McLeod et al., 1996) and allow the firm access to diverse markets (Cox & Blake,1991). As a result, the control mechanisms in place that effectively manage a diverse firm may offer some additional explanation as to how organizational diversity impacts innovation at the firm level.

THE FIT OF DIVERSITY IN THE STUDY OF INNOVATION

Although the link between diversity and creativity may occur at the individual - and group- level, it does not insure that firm innovation will occur. Multi-level creativity occurs when creative ideas exist at different levels within the firm. It is formulated knowledge that can serve as a prerequisite for firm innovation. However, in this state, the creativity residing in each level of the firm is at risk of existing in a silo, with each level functioning autonomously only benefitting itself without any means to share information. Multi-level creativity must undergo a transformation to become innovation at the firm level. Applying the integration-and-learning

perspective of managing diversity using policies and properly managed diversity practices may transform multi-level creativity into firm-level innovation.

Cox and Blake (1991) suggested that firms that value diversity will reap benefits of doing so by experiencing greater access to resources, lower costs of doing business, creativity, increased marketing opportunities, and system flexibility. McMahan and colleagues (1998) using the resource-based view of the firm (Barney, 1991) suggested that firms that were culturally diverse could gain a competitive advantage. Furthermore, Richard and colleagues (2003) demonstrated that firms can leverage cultural diversity to perform well using an innovative strategy. I posit that diversity management best practices reflecting the components of the integration- and- learning perspective (Ely & Thomas, 2001) serve as a medium through which an innovative strategy is made possible. This is because useful creativity, or knowledge, is more readily accessible as (1) individuals of the firm feel more open to express themselves, and (2) groups or departments within the firm are more willing to interact allowing multi-level creativity to aggregate to firm-level creativity, ready to be absorbed and transformed into innovative ideas, products, and services.

The Transformation of Multi-Level Creativity to Firm-Level Innovation

Absorptive capacity (ACAP) is linked to firm performance given that it supports the acquisition and integration of new knowledge (Zahra & George, 2002). ACAP includes two components: "potential" absorptive capacity (PACAP) and "realized" absorptive capacity (RACAP). PACAP is the process that makes the firm receptive to acquiring and assimilating new knowledge, and RACAP is a function of the knowledge exploitation process (Zahra & George, 2002). ACAP of firms is dependent upon four distinct dimensions or capabilities: acquisition, assimilation, transformation, and exploitation. Acquisition and assimilation are dimensions associated with PACAP while transformation and exploitation are dimensions of RACAP. Together they form ACAP into a dynamic capability to foster change (Zahra & George,2002). In order for innovation to occur, a firm must possess external knowledge sources, knowledge complementarity, and experience (Zahra & George, 2002). As discussed earlier, there is evidence to suggest that diversity can enhance creativity among groups and teams, and affect firm performance. Combining the ACAP model with research from workplace diversity literature may explain how diversity-creativity linkages serve as a precursor to innovation.

The Effect of Diversity on External Knowledge Sources and Complimentarity

External knowledge sources are antecedents to PACAP. It can vary in form including sources such as inter-organizational relationships, acquisitions, alliances, and joint ventures. The diversity of sources of knowledge to which a firm is exposed can affect the firm's acquisition and assimilation capabilities. Noting that an organization cannot exist without its "actors" (Branco & Rodrigues, 2006), the knowledge that an organization possesses is a direct result from what is known by its employees. The knowledge derived from external sources is transferred via individuals and groups as an organization's ACAP depends on the ACAP of its individual members (Cohen & Levinthal, 1990). From a cultural diversity perspective, a firm that values diversity will attract and retain a variety of employees who can offer knowledge regarding consumer behavior of different cultural groups (Cox & Blake, 1991). A homogeneous firm may lack the insightful knowledge regarding the world view of a given cultural group. As a result,

firms lacking in diversity may limit their external knowledge regarding this source of information which is valuable for marketing products and services (Cox & Blake, 1991). Considering that individual members of a firm possess innovative capital (Yuan & Woodman,2010), the likelihood for innovative knowledge to transfer to the firm increases when members of the firm are diverse.

A firm's knowledge complimentarity, the extent to which external knowledge is both similar and different from the knowledge they already can access, is equally important. When managed properly, a diverse organization may garner multiple perspectives from one idea, product, or service due to the varied perspectives that stem from a diverse workplace setting (Cox & Blake, 1991) and diverse teams working together (Albrecht & Hall, 1991; Watson et al., 1993).

The Link between Diversity and Experience

Prior knowledge, memory, and problem solving abilities are experiences needed on both the individual (Cohen & Levinthal, 1990) and organizational level (Zahra & George, 2002) in order for ACAP to occur. Diversity practices managed well enact employee diversity as a resource and allow the firm to have access to a broader array of knowledge stemming from the multiple experiences of its employees (Cox & Blake, 1991). When the firm demonstrates that it is supportive of diverse perspectives and opinions, employees will share ideas, and the foundation of innovation is established. Firms with exposure to diverse and complementary forms of knowledge are proposed to have enhanced levels of absorptive capacity (Zahra & George, 2002), which supports firm innovation. With a broader scope of knowledge, firms are better able to acquire and exploit new forms of knowledge, which supports innovation activities in the firm. Furthermore, the innovation capabilities of the firm are not specific to one, single individual (except in cases of a one-person firm), but rather the innovation resides in a network of individuals across the firm. Culturally diverse organizations experience increased system flexibility (Cox & Blake, 1991), whereby they are able to communicate, adapt to change, and confront challenges more readily.

A broad range of skills among employees creates an enhanced capacity for the exchange of knowledge, which supports problem solving and innovation. It is the dissimilarity in expertise and education that fosters a broader range of cognitive skills (Cohen & Levinthal, 1990). By initiating policies and activities that promote diversity, the firm is able to enhance innovation activity; therefore, I suggest that properly governed diversity practices are related to innovation activity in the firm. Organizations that value diversity also attract a wider variety of talent than other firms because they draw from a larger labor pool. This may create a competitive advantage in finding individuals with varied cognitive skills which supports problem-solving and innovation.

CONCLUSION

The current paper proposes that the implementation of programs and policy structures that support organizational diversity and organizational actors enhance the ACAP of firms allowing them to perform better. This is due in part because (1) the diversity-creativity linkage at each level of the organization contributes to its multi-level creativity, (2) the successful management of diversity-creativity linkages at each organizational level allows for more creative opportunities to be recognized by the firm, and (3) the successful management of diversity

within organizations utilizing the proper perspective allows for multi-level creativity to be transformed to firm-level innovation due to employees feeling less alienated in an inclusive work environment, and greater accessibility to useful knowledge resulting from diversity-linkages. In other words, to further the prior research investigating the effect of diversity on firm performance, the effective management of a diverse workforce is equally, if not more, important than the mere presence of diversity for innovation to flourish, because it creates an organic environment conducive for organizational learning and improved performance through which creativity and innovation can thrive. Managers can benefit from this understanding of how diversity affects firm-level innovation when attempting to adopt a strategy for creating new ideas, products, and services.

REFERENCES

Albercht, T. L., & Hall, E. (1991). Facilitating talk about new ideas: The role of personal relationships in organizational innovation. *Communication Monographs*, *58,* 273-288.

Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management, 17,* 99- 120.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology*,*51,* 1173-1182.

Basset-Jones, N. (2005). The paradox of diversity management, creativity, and innovation. *Creativity and Innovation Management, 14,* 169- 175.

Branco, M.C., & Rodrigues, L.L. (2006). Corporate social responsibility and resource-based perspectives. *Journal of Business Ethics, 69,* 111-132.

Byrne, D. (1971). *The attraction paradigm.* New York: Academic Press.

Cohen, W. M., & Levinthal, D. A. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly, 35(1)*, 128-152.

Cox, T., & Blake, S. (1991). Managing cultural diversity: Implications for organizational competitiveness. *Academy of Management Executive, 5(3),* 45-56.

Dezso, C.L., & Ross, D.G. (2012). Does female representation in top management improve firm performance? A panel data investigation. *Strategic Management Journal, 33,* 1072-1089.

Ely, R.J., & Thomas, D.A. (2001). Cultural diversity at work: The effects of diversity perspectives on work group processes and outcomes. *Administrative Science Quarterly, 46,* 229-273.

Eisenhardt, K. M., & Schoonhoven, C. B. (1990). Organizational growth: Linking founding team strategy, environment, and growth among U.S. semiconductor ventures, 1978-1988. *Administrative Science Quarterly, 35*, 504-529.

Grant, R. M. (1996). Toward a knowledge-based theory of the firm. *Strategic Management Journal, 17,* 109-122. Hambrick, D. C., Cho, T. S., & Chen, M. (1996). The influence of top management team heterogeneity on firms'competitive moves. *Administrative Science Quarterly, 4,* 659-684.

Harrison, D.A., Price, K.H., & Bell, M.P. (1998). Beyond relational demography: time and the effects of surface - and deep-level diversity on work group cohesion. *Academy of Management Journal*, *41*(1), 96-107.

Horwitz, S. K., & Horwitz, I. B. (2007). The effects of team diversity on team outcomes: A meta-analytic review of team demography. *Journal of Management, 33,* 987-1015.

Jackson, S. E. (1992). Team composition in organizational settings: Issues in managing an increasingly diverse workforce. In S. Worchel, W. Wood, & J. Simpson (Eds.), *Group process and productivity,* (pp. 138–173). Beverly Hills, CA: Sage.

Keck, S. L. (1997). Top management team structure: Differential effects by environmental context. *Organization Science, 8,* 143-156.

Knippenberg, D., & Schippers, M.C. (2007). Work group diversity. *Annual Review of Psychology, 58*, 515-541.

Lawrence, B.S. (1997). The black box of organizational demography. *Organization Science*, 8, 1-22.

Lindsay, P. H., & Norman, D. A. (1977). *Human Information Processing.* Orlando, FL: Academic Press.

McGrath, J. E., Berdahl, J.L., & Arrow, H. (1995). Traits, expectations, culture, and clout: The dynamics of diversity in work groups. In S.E. Jackson & M.N. Ruderman (Eds.), *Diversity in Work Teams,* (pp. 17-45). Washington, D.C.: American Psychological Association.

McLeod, P.L., Lobel, S.A., & Cox, T.H. (1996). Ethnic diversity and creativity in small groups. *Small Group Research*, *27,* 248-264.

McMahan, G.C., Bell, M.P., & Virick, M. (1998). Strategic human resource management: Employee involvement, diversity, and international issues. *Human Resource Management Review, 8,* 193-214.

Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. *Organization Science, 5(1),* 14 – 37. Richard, O.C. (2000). Racial diversity, business strategy, and firm performance: A resource-based view. *Academy of Management Journal, 43,* 164-177.

Richard, O., McMillan, A., Chadwick, K., & Dwyer, S. (2003). Employing an innovation strategy in racially diverse workforces: Effects on firm performance. *Group & Organization Management, 28,* 107-126.

Richard, O.C., & Shelor, M. (2002) Linking top management team heterogeneity to firm performance: Juxtaposing two mid-range theories. *International Journal of Human Resource Management, 13*, 958–974.

Rynes, S.L. (1991). Recruitment, job choice, and post-hire consequences: A call for new research directions. In

Dunnette MD, Hough LM (Eds.), *Handbook of industrial and organizational psychology* (Vol. 2, pp. 399-444). Palo Alto, CA: Consulting Psychologists Press.

Scott, S. G., & Bruce, R. A. (1994). Determinants of innovative behavior: A path model of individual innovation in the workplace. *Academy of Management Journal*, *37,* 580–607.

Spence M. (1973). Job market signaling. *Quarterly Journal of Economics, 87*, 355–374.

Szulanski, G. (1996) Exploring internal stickiness: Impediments to the transfer of best practice within the firm. *Strategic Management Journal, 17*, 27 – 43.

Tajfel, H., & Turner, J.C. (1986). The social identity theory of intergroup behavior. In S. Worchel, & W. Austin (Eds.), *Psychology of intergroup relations*, (pp. 7–24). Chicago, IL: Nelson-Hall.

Tsui, A.S., Egan, T.D., O'Reilly, C.A. (1992). Being different: Relational demography and organizational attachment. *Administrative Science Quarterly, 37*, 549–79.

Tsui, A. S., & O'Reilly, C. A. (1989). Beyond simple demographic effects: The importance of relational demography in superior-subordinate dyads. *Academy of Management Journal, 32,* 402-423.

Vroom, V.H. (1964). *Work and motivation.* New York: Wiley.

Watson, W.E., Kumar, K., & Michaelsen, L.K. (1993). Cultural diversity's impact on interaction process and performance: Comparing homogeneous and diverse task groups. *Academy of Management Journal, 36*, 590-602.

Woodman, R. W., Sawyer, J. E., & Griffin, R. W. (1993). Toward a theory of organizational creativity. *Academy of Management Review, 18*, 293–321.

Wright, P. M., & McMahan, G. C. (1992). Theoretical perspectives for strategic human resource management. *Journal of Management, 18,* 295-320.

Yuan, F, & Woodman, R.W. (2010). Innovative behavior in the workplace: The role of performance and image outcome expectations. *Academy of Management Journal, 53,* 323-342.

Zahra, S. A., & George, G. (2002). Absorptive capacity: A review, reconceptualization, and extension. *Academy ofManagement Review, 27,* 185-203.

PSYCHOLOGICAL COLLECTIVISM AND TEAM EFFECTIVENESS: MODERATING EFFECTS OF TRUST AND PSYCHOLOGICAL SAFETY

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ABSTRACT

The importance of emergent states and their influence on team functioning has become a focus for understanding various team outcomes. Using hierarchical linear, modeling we examine the moderating effects of two emergent states, team trust and psychological safety, on the relationship between psychological collectivism and team outcomes. Psychological collectivism is the internal orientation of an individual toward group goals, concern for group well-being, acceptance of group norms and a tendency toward cooperation in group contexts. Results from multilevel analysis of 58 teams of students (N=260) show that psychological collectivism is strongly related to team member evaluations of team satisfaction, team identity, and willingness to work with team members. Team trust and psychological safety moderated the relationship such that the effects of psychological collectivism were constrained in conditions of high trust and high safety. Implications for research and practice are discussed.

INTRODUCTION

Psychological collectivism (PC) is a value that refers to a person's general orientation toward others when working in groups (Jackson, Colquitt, Wesson, & Zapata-Phelan, 2006). The collectivist favors group affiliation and the collective effort of the group over independent and autonomous effort. Individuals high in PC readily adopt group goals, are concerned about the well-being of the group and its members, accept group norms, and are likely to sacrifice their personal interests for the sake of the group (Jackson et al., 2006; Triandis, 1995; J. A. Wagner, 1995; J. A. Wagner, III & Moch, 1986). PC has been shown to predict certain individual behaviors critical for effective team functioning. For example, high PC team members are more likely to share emotional and informational support (Drach-Zahavy, 2004; Randall, Resick, & DeChurch, 2011), display cooperative behaviors (Eby & Dobbins, 1997), engage in helpful citizenship and impression management behaviors (Jackson et al., 2006; Kim & Lee, 2012; Moorman & Blakely,1995; Shao, Resick, & Hargis, 2011) and avoid counterproductive and/or withdrawal behaviors (Jackson et al., 2006). Additionally, PC increases the propensity for taking charge (Love & Dustin, 2014), enhances members' perceptions of the team's capabilities (Turel & Connelly, 2012), and promotes team member performance (Bell, 2007; Dierdorff, Bell, & Belohlav, 2011; Jackson et al., 2006).

Noting the positive influence of PC in group environments, and the critical importance of effective teamwork in both business and higher education, more research is needed to better understand the nomological network (Cronbach & Meehl, 1955) of this important team-relevant

construct (Dierdorff et al., 2011; Gundlach, Zivnuska, & Stoner, 2006; Jackson et al., 2006; Love & Dustin, 2014). In response to this call the present research has two purposes. First, we extend the nomological network of PC by testing its effects on three attitudinal indicators of team effectiveness: team satisfaction, team identification, and a willingness to work with teammates. Second, we seek to further understand the impact of PC by examining the potential moderating effects of two emergent states, trust and psychological safety.

Psychological Collectivism and Team Effectiveness

A team is effective to the extent it provides benefit to both its members and the organization (Hackman, Wageman, Ruddy, & Ray, 2000). Teamwork requires members to interact interdependently to be successful and much of the existing PC literature focuses on the relationship between collectivism and behaviors that promote goal accomplishment through team member interaction (e.g., knowledge, skills, and information sharing, cooperative behaviors, and citizenship behaviors). These interactive behaviors fall under "team processes" in the input-process-output model (Marks, Mathieu, & Zaccaro, 2001) and reflect the interdependent actions of team members necessary to organize work and achieve common goals.   In addition to performance-based outcomes, team effectiveness includes the cognitive and affective reactions that arise through these team member interactions and processes (Mathieu, Maynard, Rapp, & Gilson, 2008).   To broaden our understanding of PC, we review literature that supports a relationship between PC and these cognitive and affective outcomes.

The satisfaction of team members has long been identified as an important attitudinal measure of team effectiveness (Cohen & Bailey, 1997; Gladstein, 1984; Hackman, 1987). Conceptually, collectivistic-oriented individuals who favor group affiliations will be more satisfied in a group environment, and at least two studies provide empirical support for a positive relationship between PC and team member satisfaction (Shaw, Duffy, & Stark, 2000; Stark & Bierly, 2009). Team member satisfaction is associated with positive emergent states such as altruism, trust, and team cohesion (Costa, 2003; Nguyen, Seers, & Hartman, 2008; Quigley, Tekleab, & Tesluk, 2007).

Another indicator of team effectiveness is team identification (Dokko, Kane, & Tortoriello, 2014; Henttonen, Johanson, & Janhonen, 2014). Prior research has found that team identification is predictive of helpful citizenship behaviors (Bergami & Bagozzi, 2000; Gerben S. Van Der Vegt, Van De Vliert, & Oosterhof, 2003), cooperative behaviors (Fiol & O'Connor, 2005; Riketta & Van Dick, 2005; Tyler & Blader, 2001), and team member performance (G.S. Van der Vegt & Bunderson, 2005). Social identity theory provides a general explanation for individuals' cognitive and emotional attachment to a group (Ashforth & Mael, 1989; Hogg & Terry, 2000). In an organizational environment, team identification is described as a team member's sense of oneness with the team that facilitates the adoption of the team's goals as his or her own (Hogg & Mullin, 1999; Mael & Ashforth, 1992). Like those with a collectivistic orientation, team members who identify with their team exert greater effort toward team goals and are more likely to form cognitions or attitudes and display behaviors that ensure the continued welfare of the team (Brickson, 2000; Han & Harms, 2010). For example, team identification has been shown to be related to increased trust and reduced relationship and task conflict within a team (Fiol & O'Connor, 2005; Goh & Wasko, 2012; Han & Harms, 2010).

Team effectiveness is also reflected in the willingness of team members to continue working together, or to work again with one another (Hackman & Morris, 1975; Sundstrom, de Meuse, & Futrell, 1990). A team member's willingness to work with the team (sometimes labeled

intent to remain with the team) has been shown to be related to team processes and outcomes, including information and knowledge sharing (Staples & Webster, 2008) and team performance (Bayazit & Mannix, 2003). Willingness to work with the team has been included in other broad variables of interest in team research, including team viability and team commitment, and have been found to be positively associated with team performance (Aubé & Rousseau, 2011; Marrone, Tesluk, & Carson, 2007) and cooperative behaviors among team members (Costa & Anderson, 2011).

PC is a personal value that emphasizes an orientation toward the goals, success, and continued well-being of the group. Thus, in our first hypothesis we confirm that PC is linked to our three indicators of team effectiveness.

Hypothesis 1: Psychological collectivism will be positively related to (a) team satisfaction, (b) team identification, and (c) willingness to work with teammates.

The Moderating Effects of Two Emergent States: Trust and Psychological Safety

The ability of the team to function effectively is greatly impacted by "emergent states" which reflect the attitudes, values, cognitions, and emotions held by members about the group (Ilgen, Hollenbeck, Johnson, & Jundt, 2005; Mathieu et al., 2008). Emergent states develop over time and are the products of both interactive team processes and team member experiences (Marks et al., 2001). Trust and psychological safety are two emergent states that impact team functioning and team effectiveness (DeChurch & Mesmer-Magnus, 2010; Marks et al., 2001; Mathieu et al., 2008) by shaping the psycho-social climate of a team. Given the pivotal role that trust and psychological safety have in influencing these relational processes, we propose that trust and psychological safety moderate the relationship between PC and team outcomes, particularly those cognitive and affective outcomes that are relational in nature such as team satisfaction, team identification and a willingness to work with teammates.

Team trust

Golembiewski and McConkie (1975) noted, "perhaps there is no single variable which so thoroughly influences interpersonal and group behavior as does trust" (p. 131). Trust, as an emergent state, emphasizes the willingness to accept vulnerability based on positive expectations regarding the actions or intent of another person or entity (Rousseau, Sitkin, Burt, & Camerer, 1998). More simply, trust is the expectation that others will behave as expected and not take advantage or be opportunistic (Jarvenpaa, Knoll, & Leidner, 1998). Due to the inherent interdependence of teamwork, it is generally accepted that trust between team members is needed for effective team processes and performance (De Jong & Elfring, 2010; Fiore, Salas, & Cannon-Bowers, 2001; Kiffin-Petersen, 2004; Kirkman, Jones, & Shapiro, 2000; LaFasto & Larson, 2001; Whitener, Bordt, Korsgaard, & Werner, 1998; Wilson, Strauss, & McEvily, 2006). Trust between team members impacts their ability and willingness to work together toward a common goal, thereby positively influencing team effectiveness (DeOrtentiis, Summers, Ammeter, Douglas, & Ferris, 2013).

"Team trust" or "intrateam trust" as explicated by De Jong and Elfring (2010) denotes the "shared generalized perceptions of trust that team members have in their fellow teammates" (p. 536). In contrast to interpersonal trust, trust at the team-level is derived from the overall quality of individual-level perceptions of trust between team members; these perceptions reflect a shared climate that evolves from the social exchanges involved in ongoing interactions and

interdependent tasks (Anderson & West, 1998; Costa & Anderson, 2011; West, 2001). The evidence supports that team trust is associated with a range of collaborative team processes and outcomes. For example, team trust promotes knowledge and information sharing among teammates, coordination and cooperative behaviors, and greater communication (Costa, Roe, & Taillieu, 2001; Peñarroja, Orengo, Zornoza, & Hernández, 2013; Staples & Webster, 2008), as well as overall team performance (Davis, Schoorman, Mayer, & Tan, 2000; De Jong & Elfring,2010; Dirks, 2000; Palanski, Kahai, & Yammarino, 2011). Team trust has also been found to be related to greater satisfaction with the team (Costa, 2003; DeOrtentiis et al., 2013; Schiller, Mennecke, Nah, & Luse, 2014), identification with the team (Goh & Wasko, 2012; Han & Harms,2010) and team commitment (Costa & Anderson, 2011).

Evidence also suggests trust is an important moderator that can have a strong impact in team settings. Dirks and Ferrin (2001) argued that, as opposed to directly impacting outcomes, as a contextual variable trust "provides the conditions under which cooperation, higher performance, and more positive attitudes and perceptions are likely to occur" (p. 455). Given the effects of trust in a team setting, we adopt the strong situation hypothesis (Mischel, 1977) to explain the role of trust as a moderator. The strong situation hypothesis suggests that strong situational factors can constrain personality-behavior relations, whereas in weak situations behavior is more likely to reflect relevant personality traits (Mischel, 1977). We suggest that high-trust in a team will constrain the influence of PC, reducing its effect on team outcomes such as team satisfaction, team identification and willingness to work with teammates. While individuals high in PC are more likely to experience positive outcomes in a group setting, as suggested in our first hypothesis, under the favorable conditions of high team trust the effects of PC will be less apparent. That is, the influence of one's collectivistic orientation is diminished when team members have a strong trust in one another. Under conditions of relatively low team trust, PC is still expected to influence ratings of team satisfaction, team identification and willingness to work with one another. The hypothesized impact of trust on the relationship between PC and the perceptions, attitudes, and behaviors of teammates is stated as follows:

> *Hypothesis 3: Team trust will moderate the relationship between psychological collectivism and (a) team satisfaction, (b) team identification, and (c) willingness to work with teammates such that the effects of psychological collectivism will be weakened under conditions of high team trust.*

Psychological safety

Psychologically safe team environments encourage authenticity and risk-taking among team members because there is no fear of reprisal, punishment, harassment, or ridicule from others (A. Edmondson, 1999). Team members feel free to be honest and open as they contribute their ideas, opinions and perspectives during team discussions. Psychological safety as an emergent team state reflects the shared experiences and perceptions of team members. Similar to team trust, psychological safety is also thought to be an important moderator of other relevant team variables (A. C. Edmondson & Lei, 2014; Nembhard & Edmondson, 2012). Bradley, Postlethwaite, Klotz, Hamdani, and Brown (2012) showed that a climate of psychological safety allows a team to better utilize task conflict to improve team performance. Martins, Schilpzand, Kirkman, Ivanaj, and Ivanaj (2013) found that psychological safety moderated the effects of a team's expertise diversity and expertness diversity on team performance. Caruso and Wooley (2008) found a psychologically safe team climate promotes interdependence within the team, resulting in greater collaboration and performance. In a trusting and psychologically safe team environment, members are less concerned about the appearance of risky interpersonal exchanges

and more likely to engage in positive processes that enhance team learning and performance.

Based upon the strong situation hypothesis, we propose the level of team psychological safety will moderate the relationships between PC and these emergent team states in the same way as team trust. Under conditions of high team psychological safety team members, irrespective of their predisposed PC, experience the type of social and collaborative interactions that promote team satisfaction and team identification. These optimal facilitating conditions will minimize the effects of PC. In cases where there is low team psychological safety, the perceived uncertainty and vulnerability in dealing with others on the team will allow for the relationship between PC and these outcomes to surface. The impact of psychological safety on the perceptions, attitudes, and behaviors of teammates is as follows:

> *Hypothesis 4: Team psychological safety will moderate the relationship between psychological collectivism and (a) team satisfaction, (b) team identification, and (c) willingness to work with teammates such that the effects of psychological collectivism will be weakened under conditions of high team psychological safety.*

METHOD

Sample and Data Collection Procedure

The sample for this study consisted of graduate and upper-division undergraduate students enrolled in business and education courses in a large southern-central university. All courses from which the sample was drawn utilized team-based activities to facilitate the learning process. The team-based activities used in the courses ranged from a major collaborative semester project to multiple smaller projects completed over the course of the semester with the same team. Most respondents were between the age of 21 and 30 (77%), with less than 2% being younger than 20. Fifty-five percent of the respondents were female, 32% were married, 69% worked at least half-time. Fifty-three percent of respondents indicated they had one to six years of work experience with 21% reporting ten or more years. Seventy-six percent listed the United States of America as their primary place of residence, with Vietnam representing 8%, India 7%, Taiwan 3%, and the remaining 6% from other countries. Seventy-two percent of respondents had worked in at least three student teams, 35% worked in one to three teams, and 1% indicated this was their first experience working in a student team.

The questionnaire was administered in each of the courses toward the end of the semester. Students were informed that the study was not directly associated with the course that they were in and their decision to participate was entirely voluntary. Students were instructed to think about their current team in this class as they completed the survey. Of the 273 surveys collected, 13 incomplete ones were eliminated leaving 260 for the analysis. Students were instructed to include their team number on the surveys so that we could identify which students belonged to which teams. There were a total of 59 teams, but one team was eliminated because only one team-member was present to complete the survey leaving a total of 58 teams for the analyses.

Measures

Psychological collectivism.

To measure PC we used the scale developed by Jackson et al. (2006). This scale consists of five subscales including collectivistic preference, reliance, concern, normative acceptance and

goals. A sample item from each of the respective subscales include "I preferred to work in those groups rather than working alone," I felt comfortable counting on group members to do their part," "the health of those groups was important to me," "I followed the norms of those groups" and "I cared more about the goals of those groups than my own goals." Coefficient alpha for each of the subscales range from .81 to .91. Consistent with prior research and to retain sufficient power for the multilevel analyses, we combined these five subscales into one PC scale. A confirmatory factor analysis supported that a measurement model consisting of a higher-order PC factor with five first-order factors fit the data well (χ^2 = 207.14, df = 85, p < .001; CFI = .95; TLI = .92; RMSEA = .07).

Team satisfaction

Team satisfaction was measured using Tesluk and Matthieu's (1999) 4-item team satisfaction scale. We replaced the word *crew* from each item in the original scale with *team* and changed the verb tense to the present, since surveys were collected while the semester was in session and students were still assigned and working in their respective teams. Sample items include "I really enjoy being part of this team," and "I get along with the people on this team." Each item asked the team member for his or her individual satisfaction with the team and team satisfaction was analyzed at the individual-level. Each item was anchored to a five-point scale (1 = Strongly Disagree, 2 = Moderately Disagree, 3 = Neither Agree nor Disagree, 4 = Moderately Agree, 5 = Strongly Agree). Coefficient alpha for the scale was .94.

Team identity

To measure team identity, we used a four-item scale adopted by Gerben S. Van Der Vegt et al. (2003). Sample items include "I strongly identify with other members of my work team," and "I would like to continue working with my team." One item that was negatively framed in the original measure, "I dislike being a member of this team" was restated in the positive, "I like being a member of this team." Each item was anchored to a five-point scale (1 = Strongly Disagree, 2 = Moderately Disagree, 3 = Neither Agree nor Disagree, 4 = Moderately Agree, 5 = Strongly Agree). Coefficient alpha for the scale was .92.

Willingness to work with team members

A willingness to continue working with team members is an indication of team effectiveness (Sundstrom et al., 1990). Our willingness to work with team members measure was adopted from Bayazit and Mannix's (2003) 3-item intent to remain in the team scale. We modified the items to be fitting for a student team in which the students do not have the option to leave. The items included "I wouldn't hesitate to participate on another team with the same team members," "Even if I could have left this team and worked with another team, I would not have left," and "If given the choice, I would prefer to work with this team rather than another one." The coefficient alpha for the scale was .94.

Intrateam trust

Intrateam trust refers to the shared generalized perceptions of trust that teammates have in their fellow teammates and was measured using a five item scale developed by De Jong and Elfring (2010). Each item was anchored to a five-point scale (1=Completely Disagree,

2=Somewhat   Disagree,   3=Neither   Agree   nor   Disagree,   4=Somewhat   Agree,
5=Completely Agree). Sample items include, "I am able to count on my team members for help
if I have difficulties with my job," and "I am confident that my team members will take my
interests into account when making work-related decisions." Coefficient alpha for the scale was
.94.

Psychological safety

Psychological safety was measured using the Edmondson's (1999) seven-item scale and
refers to the shared belief held by team members that the team is safe for interpersonal risk
taking. Sample items include "People on this team do not reject others for being different," and "If
you make a mistake on this team, it is not held against you." Each item was anchored to a seven
point scale (1 = Very Inaccurate, 2 = Moderately Inaccurate, 3 = Somewhat Inaccurate, 4 =
Neither Inaccurate nor Accurate, 5 = Somewhat Accurate, 6 = Moderately Accurate, 7 = Very
Accurate). Three negatively worded items were rephrased in positive form. For example, the
negatively worded item "It is difficult to ask other members of this team for help" was rephrased as "It
is easy to ask other members of this team for help." Coefficient Alpha for the scale was .85.

Control variables

We included age and past experience with working in teams as control variables.   To
encourage response, age was assessed as a categorical variable with eight age groupings (1 = less
than 20, 2 = 21 to 25, 3 = 26 to 30, 4 = 31 to 35, 5 = 36 to 40, 6 = 41 to 45, 7
= 46 to 55, 8 = 56 or more). Experience with teams was determined by asking the students the
question, "How many student teams have you been in." The available responses included four
choices (1 = 0 teams, 2 = 1 to 3 teams, 3 = 4 to 6 teams, 4 = more than 6 teams).

Data Analysis

Prior to testing our hypotheses, we examined whether the data empirically justified
aggregation of our group-level variables. According to one-way analysis of variance, both
intrateam trust (F[57, 201] = 4.38, $p < .01$) and team psychological safety (F[57, 201] = 6.26, $p <$
.01) differed significantly between teams. The intraclass correlation coefficients for team trust
(ICC1 = .30, ICC2 = .75) and team psychological safety (ICC1 = .41, ICC2 = .83) were comparable
to aggregate constructs reported in the literature.   Further, a mean $r_{wg(j)}$ of .79 for team trust and
.85 for team psychological safety, calculated using a normal distribution, suggested adequate
within-team agreement (James, Demaree, & Wolf, 1984).   These results showed that aggregation
of team trust and team psychological safety was justified.

RESULTS

Table 1 displays correlations among variables. Individual-level variables are below and
aggregated variables above the diagonal. We are interested in the variance in three individual-level
attitudinal outcomes (team satisfaction, team identification, and willingness to work with team
members) explained by both individual-level (Hypothesis 1) and group-level predictors, and their
cross-level interactions (Hypothesis 2, 3, and 4). We used hierarchical linear modeling (HLM) to
test these hypotheses. Group-mean-centering of the individual-level variables was used since we

are interested in both individual-level and group-level predictors and group-mean centering is preferable for examining cross-level interactions (Enders & Tofighi, 2007).

Table 1
MEANS, STANDARD DEVIATIONS, AND CORRELATIONS[a]

Variable	Mean	s.d.	1	2	3	4	5	6	7	8	9
1. Age	2.90	1.21		.30*	.18	.29*	.35**	.14	.19	.25	.19
2. Past experience with working in teams	2.94	0.85	.06		.17	.39**	.41**	.28*	.26*	.32*	.36**
3. Psychological collectivism	3.73	0.62	.08	.05	(.88)	.57**	.34**	.29*	.60**	.54**	.44**
4. Task interdependence	3.18	1.11	.01	.16**	.14*	(.90)	.78**	.36**	.91**	.90**	.88**
5. Intrateam trust	4.29	0.82	.18**	.12	.39**	.23**	(.94)	.43**	.71**	.67**	.70**
6. Psychological safety	5.63	1.17	.18**	.18**	.24**	.25**	.67**	(.85)	.37**	.25	.25
7. Team satisfaction	4.23	0.98	.18**	.11	.51**	.23**	.79**	.59**	(.94)	.93**	.90**
	3.97	1.01	.18**	.12	.47**	.22**	.77**	.57**	.87**	(.92)	.92**
	4.12	1.11	.14*	.11	.39**	.18**	.75**	.58**	.83**	.83**	(.94)

[a] Values below the diagonal result from individual-level analyses; those above the diagonal result from group-level analyses.
n = 58 teams comprising 260 students. Internal consistency reliabilities are in parentheses.
* $p < .05$
** $p < .01$

The results of our hierarchical linear modeling analyses are shown in Table 2. First, we tested a null model in which no predictors were entered. Next, we introduced the individual-level variables (step 1), the group-level variables (step 2), and the cross-level interactions (step 3) into the multilevel model. The null model allowed us to test the significance of the between-team variance in team satisfaction, team identification, and willingness to work with team members by examining the level 2 residual variance of the intercept (τ_{00}) and ICC1. ICC1 represents the proportion of variance in the outcome variable that resided between groups (Liao & Rupp, 2005).

The analyses revealed that 45 percent ($\tau_{00} = .43$, $p < .001$, ICC1 = .45) of the variance in team satisfaction resided between teams (to be explained by level 2 variables). Between-group variance in team identification and willingness to work with team members accounted for 42 percent ($\tau_{00} = .43$, $p < .001$, ICC1 = .42) and 38 percent ($\tau_{00} = .47$, $p < .001$, ICC1 = .38) of the total variance in each variable respectively

.

	Team satisfaction		Team identity		Willingness to work with team members	
Variables	Coefficient	s.e.	Coefficient	s.e.	Coefficient	s.e.
Null model						
Intercept	4.22***	0.10	3.96***	0.10	4.12***	0.11
Level 1 variables						
Age	0.08*	0.04	0.08	0.04	0.07	0.06
Past experience with working in teams	0.04	0.06	0.04	0.06	0.03	0.07
Psychological collectivism	0.56***	0.10	0.54***	0.10	0.51***	0.11
Level 2 variables						
Intrateam trust	1.04***	0.07	1.04***	0.07	1.11***	0.09
Psychological safety	0.47***	0.07	0.46***	0.08	0.54***	0.08
Cross-level interactions						
Psychological collectivism x intrateam trust	***	0.15	**	0.16	**	0.17
Psychological collectivism x psychological safety	-0.52***	0.09	-0.46**	0.10	-0.52**	0.11

**Table 2
RESULTS OF HIERARCHICAL LINEAR MODELING[a]**

Among our control variables (i.e., age, experience with teams), only age ($\gamma = .08$, $p < .05$) was a significant predictor of team satisfaction as shown in Table 2 (see Level 1 variables). Hypothesis 1 predicted that PC would be positively related to team satisfaction (Hypothesis 1a), team identification (Hypothesis 1b), and willingness to work with team members (Hypothesis 1c). Supporting Hypothesis 1a, 1b and 1c, PC had a significant, positive relationship with team satisfaction ($\gamma = .56$, $p < .001$), team identification ($\gamma = .54$, $p < .001$), and willingness to work with team members ($\gamma = .51$, $p < .001$).

As a requisite to our examination of cross-level interactions we estimated intercepts as outcomes models in HLM to assess the effect of level 2 predictors (i.e., intrateam trust, psychological safety) on the three individual outcomes. The results of this analysis are presented in the section of Table 2 titled "Level 2 variables." Intrateam trust was significantly and positively related to all three outcomes: team satisfaction ($\gamma = 1.04$, $p < .001$), team identification ($\gamma = 1.04$, $p < .001$), and willingness to work with team members ($\gamma = 1.11$, $p < .001$). Psychological safety also had a significant, positive relationship with team satisfaction ($\gamma = .47$, $p < .001$), team
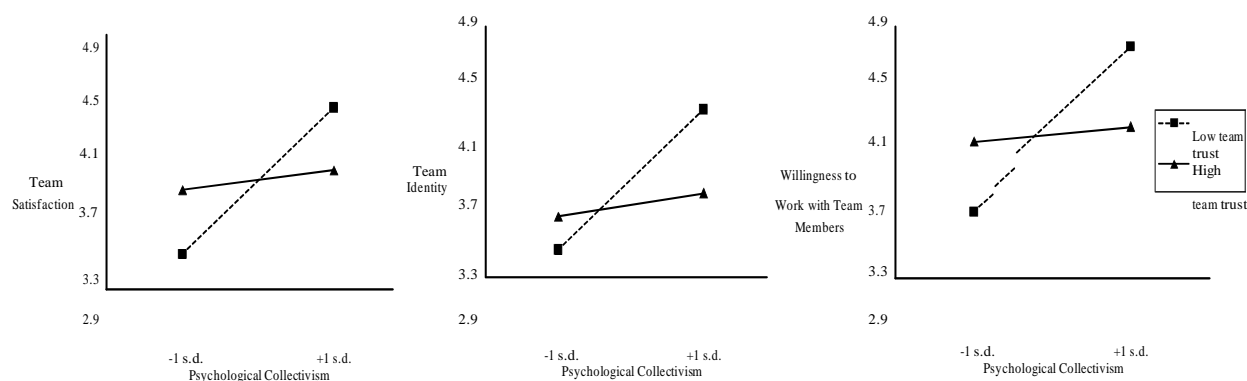
Figure 1. Interaction between psychological collectivism and intrateam trust predicting attitudinal outcomes.

The pattern of the significant moderating effect of psychological safety also shows a similar trend. Figure 2 depicts the interaction. When a team had a low level of psychological safety, individual-level PC was positively and significantly related to individual team member's scores on the three outcomes: team satisfaction ($\gamma = 1.01$, $t = 7.44$, $p < .001$), team identification ($\gamma = .90$, $t = 5.66$, $p < .001$), and willingness to work with team members ($\gamma = .93$, $t = 5.62$, $p < .001$). However, PC was not related to the outcomes in teams with a high level of psychological safety ($\gamma = .16$, $t = 1.26$, $p = .21$ for team satisfaction; $\gamma = .20$, $t = 1.33$, $p = .19$ for team identification; $\gamma = .12$, $t = .81$, $p = .42$ for team identification). Figure 2 also suggests that the relationship between PC and individual outcomes is contingent on psychological safety.
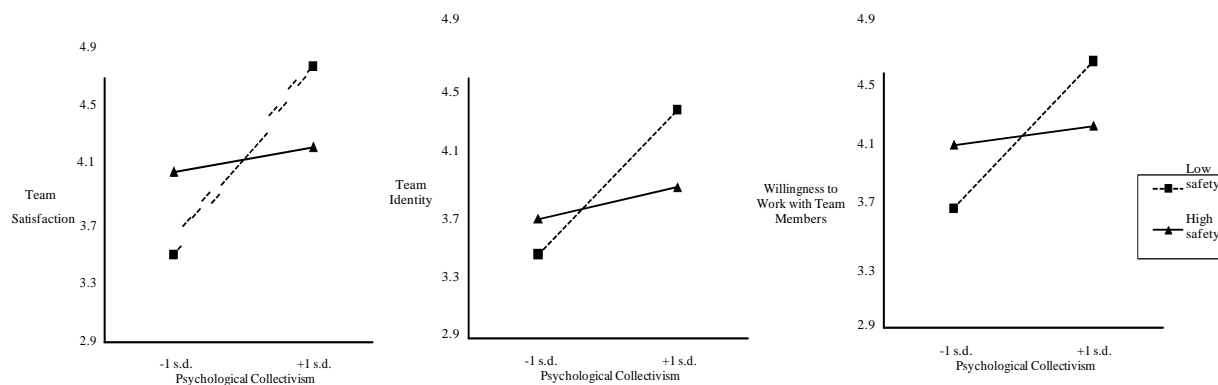

Figure 2. Interaction between psychological collectivism and psychological safety predicting attitudinal outcomes.

DISCUSSION

The appreciable role that psychological collectivism (PC) has on various aspects of team functioning and team effectiveness has been evidenced in prior research. However, our findings suggest that while the positive impact of PC is strong and significant under certain team conditions, it can be quite modest or nonexistent under others.   Using multilevel methods we found that PC has a positive influence on three important measures of team effectiveness. However, team trust and team psychological safety play a significant role in determining the impact of PC. As shown

in Figure 1 and Figure 2, under conditions of high team trust or high safety respectively, the impact of psychological collectivism on team satisfaction, team identity, and willingness to work with team members becomes nonsignificant. In other words, in the absence of trust and feelings of safety in the team, an individual's collectivistic orientation does predict his or her attitudinal reactions toward teamwork. Specifically, a highly collectivistic individual will experience greater satisfaction working in a team, more identity toward the team, and an increased willingness to work with the team members again. However, in teams with high-trust and psychological safety the importance of having a collectivistic predisposition wanes and positive reactions are possible for both individuals who are high or low in PC. Given the prominence of teams in today's world and business environments, these findings offer significant implications for both research and practice as outlined below.

Implications for Research

Our study extends existing research on PC in three important ways. First, we show that in addition to team satisfaction, PC is related to other team-related outcomes, specifically team identification and a willingness to work with teammates. Although it has been suggested that individuals with higher collectivistic orientations have an inclination toward group-level identification (Jackson et al., 2006), the inclusion of team identity and PC within a single study has been conspicuously absent from the literature. The results of our study provide initial evidence of an association between PC and team identification. The formation of team identity has been shown to be related to team effectiveness (Somech, Desivilya, & Lidogoster, 2009) and not all teams develop to the point where team members feel identified with the team.

Second, we developed and examined a moderated model using Mischel's (1977) strong situation hypothesis in which the effects of PC on team outcomes vary by levels of intrateam trust and team psychological safety. Our analyses strongly suggest that in teams that have a low level of trust or psychological safety, the effects of PC on team effectiveness is more pronounced. Conversely, the effects of PC is diminished in teams in which a great deal of trust and feelings of safety exist. Trust and safety as emergent states are an important element for team functioning and once established, an individual's collectivistic tendencies may become incidental insofar as their impact on attitudinal outcomes such as team satisfaction, team identification, and willingness to work with teammates again. In teams with low trust and safety, there is a lack of favorable group-level influences to drive positive affective reactions, thus individual factors like PC remain a significant factor.

Third, our study took a multi-level approach to the data. Specifically, we evaluate the two emergent states, team trust and psychological safety, as group-level phenomena and PC at the individual-level. Multilevel analysis is appropriate when the data being analyzed contains nested data structures (Snijders & Bosker, 1999), which is the case in team research. In taking a multilevel approach, we were able to isolate the affective climate of the team at the group-level and examine this in conjunction with each team member's tendency toward collectivism, which is measured at the individual-level. Using a multilevel approach allows us to control for the common variance associated with team members belonging to the same group.

Implications for Practice

From a business practitioner's perspective, the present research suggests managers should invest time and energy on fostering a climate of trust and safety within work teams.

Organizational climate is largely shaped by the expressed values and observed actions of the leadership team (Koene, Vogelaar, & Soeters, 2002). Taking measures to demonstrate the values of trust and safety in the higher ranks of the organization through exhibiting transparency, communicating with employees, and involving and engaging employees in decision-making may facilitate the promulgation of similar values to the work teams that are used throughout the organization. This basis of trust and safety will then lead to healthy team norms and promote effective teamwork practices. Team members will be then more inclined to engage in cooperative behaviors and expressing themselves more freely, while also being more open to healthy functional conflict.

Second, with an understanding of the effects of team trust and psychological safety, the process of selecting employees when forming work teams might be improved upon. When faced with the challenge of assigning resources to a project that requires teamwork, managers may either consciously or unwittingly screen potential staff for high PC prior to making assignments to projects requiring teamwork. The tendency may be to try to preemptively identify employees that like working in teams and "play nice" with one another in order to minimize the amount of time spent managing the interactions and internal dynamics of the team. Spending time to foster a climate of trust and safety rather than attempting to identify and select only collectivistic employees for projects requiring teamwork would allow for fuller utilization of existing human resources and perhaps lend itself to using more diverse groups of individuals for team projects that require creativity.

Third, the favorable team evaluations in our study of highly collectivistic respondents irrespective of team conditions suggest that in the absence of team trust and safety an employee's tendency toward collectivism may provide some form of resilience that buttresses against suboptimal team conditions. Employees with a collectivistic preference may choose to selectively overlook factors that are inconsistent with collectivistic values in order to confirm their particular view that group approaches toward work are better than individual ones. Another possibility is that employees with a collectivistic preference may be considering other types of needs (e.g., need for affiliation, social or relatedness needs) in their evaluation of team effectiveness that employees with an individualistic preference are not. This could result in more favorable evaluations of team effectiveness outcomes by collectivistic employees. Further research is needed to determine why team trust and psychological safety moderate the relationship between PC and team effectiveness.

Limitations and Future Directions

While the findings in the present research suggest that fostering a favorable team climate that consists of both trust and safety is an important influence on the affective evaluations of teammates there are some limitations to the study. First, the sample consisted of students enrolled in business courses in a large university, which limits the generalizability of the findings. For example, employees with many years of work experience may exhibit greater self-reliance and perceive teamwork quite differently. We believe that our findings do offer some potential value to understanding work teams in a business context, since many of the students were employed at the time of the study and the others will inevitably bring their existing attitude toward teams and teamwork into the workplace; however, the small convenience sample of students and their relative young age does limit generalizability. We also measured our variables of interest at a single point in time, toward the end of the semester. Although measuring at the end of the semester captures

those sentiments and attitudes that existed at the end of the teams' time working together, it is only representative of a single point in time. Emergent states like trust change over time and may be colored by one's current affective state or mood (Jones & George, 1998). As such, future research should consider measuring the emergent states multiple times throughout a team's time together to capture the evolution of said states.

A final limitation of the present research is that we measured trust as an aggregated variable, which was necessary for the purpose of using it as a measure of the team's climate. However, recent trust research has begun using new methods to examine the dyadic effects of trust within group settings (De Jong & Dirks, 2012) in which case the individual relationships that a team member has with every other team member would need to be considered to understand the trust dynamics within a team. While measuring trust at the dyadic level was not within the scope of this study, future research may want to examine how varied dyadic trust relationships within a team impacts the attitude and affective reactions of teammates toward teamwork.

REFERENCES

Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA, US: Sage Publications, Inc.

Anderson, N., & West, M. A. (1998). Measuring climate for work group innovation: Development and validation of the team climate inventory. *Journal of Organizational Behavior, 19*, 235-258.

Ashforth, B. E., & Mael, F. (1989). Social identity theory and the organization. *Academy of Management Review, 14*, 20-39.

Aubé, C., & Rousseau, V. (2011). Interpersonal aggression and team effectiveness: The mediating role of team goal commitment. *Journal of Occupational and Organizational Psychology, 84*(3), 565-580.

Bayazit, M., & Mannix, E. A. (2003). Should i stay or should i go? Predicting team members' intent to remain in the team. *Small Group Research, 34*(3), 290-321. doi: 10.1177/1046496403034003002

Bell, S. T. (2007). Deep-level composition variables as predictors of team performance: A meta-analysis. *Journal of Applied Psychology, 92*(3), 595-615.

Bergami, M., & Bagozzi, R. P. (2000). Self-categorization, affective commitment, and group self-esteem as distinct aspects of social identity in the organization. *British Journal of Social Psychology, 39*, 555-577.

Bradley, B. H., Postlethwaite, B. E., Klotz, A. C., Hamdani, M. R., & Brown, K. G. (2012). Reaping the benefits of task conflict in teams: The critical role of team psychological safety climate. *Journal of Applied Psychology, 97*(1), 151-158. doi: 10.1037/a0024200

Brickson, S. (2000). The imapct of identity orientation on individual and organizational outcomes in demographically diverse settings. *Academy of Management Review, 25*, 82-101.

Caruso, H. M., & Wooley, A. W. (2008). Harnessing thr power of emergent interdependence to promote diverse team collaboration. In K. W. Phillips (Ed.), *Research on managing groups and teams* (Vol. 11: Diversity and groups, pp. 245-266). Bingley, UK: Emerald.

Cohen, S. G., & Bailey, D. E. (1997). What makes teams work: Group effectiveness research from the shop floor to the executive suite. *Journal of Management, 23*(3), 239.

Costa, A. C. (2003). Work team trust and effectiveness. *Personnel Review, 32*(5), 605-622. doi: 10.1108/00483480310488360

Costa, A. C., & Anderson, N. (2011). Measuring trust in teams: Development and validation of a multifaceted measure of formative and reflective indicators of team trust. *European Journal of Work and Organizational Psychology, 20*(1), 119-154.

Costa, A. C., Roe, R. A., & Taillieu, T. (2001). Trust within teams: The relation with performance effectiveness. *European Journal of Work and Organizational Psychology, 10*(3), 225-244. doi: 10.1080/13594320143000654

Cronbach, L. J., & Meehl, P. E. (1955). Construct validity in psychological tests. *Psychological Bulletin, 52*, 281-302. doi: 10.1037/h0040957

Davis, J., Schoorman, F. D., Mayer, R. C., & Tan, H. (2000). Trusted unti manager and business unit performance: Empirical evidence of a competitive advantage. *Strategic Management Journal, 21*, 563-576.

De Jong, B. A., & Dirks, K. T. (2012). Beyond shared perceptions of trust and monitoring in teams: Implications of asymmetry and dissensus. *Journal of Applied Psychology, 97*(2), 391-406. doi: 10.1037/a0026483

De Jong, B. A., & Elfring, T. O. M. (2010). How does trust affect the performance of ongoing teams? The mediating role of reflexivity, monitoring, and effort. *Academy of Management Journal, 53*(3), 535-549. doi: 10.5465/amj.2010.51468649

DeChurch, L. A., & Mesmer-Magnus, J. R. (2010). The cognitive underpinnings of effective teamwork: A meta-analysis. *Journal of Applied Psychology, 95*(1), 32-53. doi: 10.1037/a0017328

DeOrtentiis, P. S., Summers, J. K., Ammeter, A. P., Douglas, C., & Ferris, G. R. (2013). Cohesion and satisfaction as mediators of the team trust—team effectiveness relationship: An interdependence theory perspective. *The Career Development International, 18*(5), 521-543.

Dierdorff, E. C., Bell, S. T., & Belohlav, J. A. (2011). The power of "we": Effects of psychological collectivism on team performance over time. *Journal of Applied Psychology, 96*(2), 247-262.

Dirks, K. T. (2000). Trust in leadership and team performance: Evidence from ncaa basketball. [report]. *Journal of Applied Psychology, 85*(6), 1004-1012.

Dirks, K. T., & Ferrin, D. L. (2001). The role of trust in organizational settings. *Organization Science, 12*(4), 450-467. doi: 10.1287/orsc.12.4.450.10640

Dokko, G., Kane, A. A., & Tortoriello, M. (2014). One of us or one of my friends: How social identity and tie strength shape the creative generativity of boundary-spanning ties. *Organization Studies (01708406), 35*(5), 703-726. doi: 10.1177/0170840613508397

Drach-Zahavy, A. (2004). Exploring team support: The role of team's designs, values, and leader's support. *Group Dynamics: Theory, Research, and Practice, 8*, 235-252. doi: 10.1037/1089-2699.8.4.235

Eby, L. T., & Dobbins, G. H. (1997). Collectivistic orientation in teams: An individual and group-level analysis. *Journal of Organizational Behavior, 18*, 275-295. doi: 10.1002/(SICI1099-1379(199705)18:3<275::AIDJOB796>3.0CO;2-C

Edmondson, A. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly, 44*(2), 350-383.

Edmondson, A. C., & Lei, Z. K. (2014). Psychological safety: The history, renaissance, and future of an interpersonal construct. *Annual Review of Organizational Psychology and Organizational Behavior, Vol 1, 1*, 23-43. doi: 10.1146/annurev-orgpsych-031413-091305

Enders, C. K., & Tofighi, D. (2007). Centering predictor variables in cross-sectional multilevel models: A new look at an old issue. *Psychological Methods, 12*(2), 121-138. doi: 10.1037/1082-989X.12.2.121 and 10.1037/1082-989X.12.2.121.supp (Supplemental)

Fiol, C. M., & O'Connor, E. J. (2005). Identification in face-to-face, hybrid, and pure virtual teams: Untangling the contradictions. *Organization Science, 16*(1), 19-32. doi: doi:10.1287/orsc.1040.0101

Fiore, S. M., Salas, E., & Cannon-Bowers, J. A. (2001). Group dynamics and shared mental model development. In M. London (Ed.), *How people evaluate others in organizations* (pp. 309-336). Mahwah, NJ: Erlbaum.

Gladstein, D. L. (1984). Groups in context: A model of task group effectiveness. *Administrative Science Quarterly, 29*, 499-517.

Goh, S., & Wasko, M. (2012). The effects of leader-member exchange on member performance in virtual world teams. *Journal of the Association for Information Systems, 13*(10), 861-885.

Golembiewski, R. T., & McConkie, M. (1975). The centrality of interpersonal trust in group processes. In C. L. Cooper (Ed.), *Theories of group processes*. New York, NY: Wiley.

Gundlach, M., Zivnuska, S., & Stoner, J. (2006). Understanding the relationship between individualism-collectivism and team performance through an integration of social identity theory and the social relations model. *Human Relations, 59*(12), 1603-1632.

Hackman, J. R. (1987). The design of work teams. In J. W. Lorsch (Ed.), *Handbook of organizational behavior*. Englewood Cliffs, NJ: Prentice-Hall.

Hackman, J. R., & Morris, C. C. (1975). Group tasks, group interaction process, and group performance effectiveness: A review and proposed integration. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (pp. 45-99). New York, NY: Academic Press.

Hackman, J. R., Wageman, R., Ruddy, T. M., & Ray, C. L. (2000). Team effectiveness in theory and in practice. In C. L. Cooper & E. A. Locke (Eds.), *Industrial and organizational psychology: Linking theory with practice* (pp. 109-129). Oxford, UK: Blackwell.

Han, G., & Harms, P. D. (2010). Team identification, trust and conflict: A mediation model. *International Journal of Conflict Management (Emerald), 21*(1), 20-43. doi: 10.1108/10444061011016614

Henttonen, K., Johanson, J.-E., & Janhonen, M. (2014). Work-team bonding and bridging social networks, team identity and performance effectiveness. *Personnel Review, 43*(3), 330-349. doi: 10.1108/PR-12-2011-0187

Hogg, M. A., & Mullin, B. A. (1999). Joining groups to reduce uncertainty: Subjective uncertainty reduction and group identification. In D. Abrams & M. A. Hogg (Eds.), *Social identity and social cognition* (pp. 249-279). Oxford, UK: Blackwell.

Hogg, M. A., & Terry, D. J. (2000). Social identity and self-categorization processes in organizational contexts. *Academy of Management Review, 25*, 121-140.

Ilgen, D. R., Hollenbeck, J. R., Johnson, M., & Jundt, D. (2005). Teams in organizations: From input-process-output models to imoi models. *Annual Review of Psychology, 56*(1), 517-543. doi: 10.1146/annurev.psych.56.091103.070250

Jackson, C. L., Colquitt, J. A., Wesson, M. J., & Zapata-Phelan, C. P. (2006). Psychological collectivism: A measurement validation and linkage to group member performance. *Journal of Applied Psychology, 91*(4), 884-899.

James, L. R., Demaree, R. G., & Wolf, G. (1984). Estimating within-group interrater reliability with and without response bias. *Journal of Applied Psychology, 69*(1), 85-98.

Jarvenpaa, S., Knoll, K., & Leidner, D. (1998). Is anybody out there? Antecedents of trust in global virtual teams. *Journal of Management Information Systems, 14*, 29-64.

Jones, G. R., & George, J. M. (1998). The experience and evolution of trust: Implications for cooperation and teamwork. *Academy of Management Review, 23*(3), 531-546. doi: 10.5465/AMR.1998.926625

Kiffin-Petersen, S. (2004). Trust: A neglected variable in team effectiveness research. *Journal of the Australian and New Zealand Academy of Management, 10*(1), 38-53.

Kim, P., & Lee, J. (2012). The influence of collectivism and rater error on organizationsl citizenship and impression management behaviors. *Social Behavior & Personality, 40*(4), 545-556.

Kirkman, B. L., Jones, R. G., & Shapiro, D. L. (2000). Why do employees resist teams? Examining the 'resistance barrier' to weak team effectiveness. *International Journal of Conflict Managment, 11*, 74-92.

Koene, B. A. S., Vogelaar, A. L. W., & Soeters, J. L. (2002). Leadership effects on organizational climate and financial performance: Local leadership effect in chain organizations. *The Leadership Quarterly, 13*(3), 193-215. doi: 10.1016/S1048-9843(02)00103-0

LaFasto, F. M., & Larson, C. E. (2001). *When teams work best*. Newberry Park, CA: Sage Publications.

Liao, H., & Rupp, D. E. (2005). The impact of justice climate and justice orientation on work outcomes: A cross-level multifoci framework. *Journal of Applied Psychology, 90*(2), 242-256.

Love, M. S., & Dustin, S. L. (2014). An investigation of coworker relationships and psychological collectivism on employee propensity to take charge. *International Journal of Human Resource Management, 25*(9), 1208-1226. doi: 10.1080/09585192.2013.826712

Mael, F., & Ashforth, B. E. (1992). Alumni and their alma mater: A partial test of the reformulated model of organizational identification. *Journal of Organizational Behavior, 13*(2), 103-123.

Marks, M. A., Mathieu, J. E., & Zaccaro, S. J. (2001). A temporally based framework and taxonomy of team processes. *Academy of Management Review, 26*(3), 356-376. doi: 10.5465/AMR.2001.4845785

Marrone, J. A., Tesluk, P. E., & Carson, J. B. (2007). A multilevel investigation of antecedents and consequences of team member boundary-spanning behavior. *Academy of Management Journal, 50*(6), 1423-1439.

Martins, L. L., Schilpzand, M. C., Kirkman, B. L., Ivanaj, S., & Ivanaj, V. (2013). A contingency view of the effects of cognitive diversity on team performance: The moderating roles of team psychological safety and relationship conflict. *Small Group Research, 44*(2), 96-126. doi: 10.1177/1046496412466921

Mathieu, J., Maynard, M. T., Rapp, T., & Gilson, L. (2008). Team effectiveness 1997-2007: A review of recent advancements and a glimpse into the future. *Journal of Management, 34*(3), 410-476.

Moorman, R. H., & Blakely, G. L. (1995). Individualism-collectivism as an individual difference predictor of organizational citizenship behavior. *Journal of Organizational Behavior, 16*, 127-142.

Nembhard, I. M., & Edmondson, A. C. (2012). Psychological safety: A foundation for speaking up, collaboration, and experimentation in organizations. In K. S. Cameron & G. M. Spreitzer (Eds.), *The oxford handbook of positive organizational scholarship.* (pp. 490-503). New York, NY, US: Oxford University Press.

Nguyen, N. T., Seers, A., & Hartman, N. S. (2008). Putting a good face on impression management: Team citizenship and team satisfaction. *Journal of Behavioral and Applied Management, 9*(2), 148-168.

Palanski, M. m. s. r. e., Kahai, S., & Yammarino, F. (2011). Team virtues and performance: An examination of transparency, behavioral integrity, and trust. *Journal of Business Ethics, 99*(2), 201-216. doi: 10.1007/s10551-010-0650-7

Peñarroja, V., Orengo, V., Zornoza, A., & Hernández, A. (2013). The effects of virtuality level on task-related collaborative behaviors: The mediating role of team trust. *Computers in Human Behavior, 29*(3), 967-974.

Preacher, K. J., Curran, P. J., & Bauer, D. J. (2006). Computational tools for probing interactions in multiple linear regression, multilevel modeling, and latent curve analysis. *Journal of Educational and Behavioral Statistics, 31*(4), 437-448. doi: 10.3102/10769986031004437

Quigley, N. R., Tekleab, A. G., & Tesluk, P. E. (2007). Comparing consensus- and aggregation-based methods of measuring team-level variables: The role of relationship conflict and conflict management processes. *Organizational Research Methods, 10*(4), 589-608.

Randall, K. R., Resick, C. J., & DeChurch, L. A. (2011). Building team adaptive capacity: The roles of sensegiving and team composition. *Journal of Applied Psychology, 96*(3), 525-540.

Riketta, M., & Van Dick, R. (2005). Foci of attachment in organizations: A meta-analytic comparison of the strength and correlates of workgroup versus organizational identification and commitment. *Journal of Vocational Behavior, 67*(3), 490-510.

Rousseau, D. S., Sitkin, S., Burt, R., & Camerer, C. (1998). Not so different after all: A cross-discipline view of trust. *Academy of Management Review, 23*, 387-393.

Schiller, S. Z., Mennecke, B. E., Nah, F. F.-H., & Luse, A. (2014). Institutional boundaries and trust of virtual teams in collaborative design: An experimental study in a virtual world environment. *Computers in Human Behavior, 35*, 565-577.

Shao, P., Resick, C. J., & Hargis, M. B. (2011). Helping and harming others in the workplace: The roles of personal values and abusive supervision. *Human Relations, 64*(8), 1051-1078.

Shaw, J. D., Duffy, M. K., & Stark, E. M. (2000). Interdeoendence and preference for group work: Main and congruence effects on the satisfaction and performance of group members. *Journal of Management, 26*(2), 259-279.

Snijders, T. A. B., & Bosker, R. J. (1999). *Multilevel-analysis: An introduction to basic and advanced multilevel modeling.* London: Sage.

Somech, A., Desivilya, H. S., & Lidogoster, H. (2009). Team conflict management and team effectiveness: The effects of task interdependence and team identification. *Journal of Organizational Behavior, 30*(3), 359-378.

Staples, D. S., & Webster, J. (2008). Exploring the effects of trust, task interdependence and virtualness on knowledge sharing in teams. *Information Systems Journal, 18*(6), 617-640.

Stark, E. M., & Bierly, P. E. (2009). An analysis of predictors of team satisfaction in product development teams with differing levels of virtualness. *R & D Management, 39*(5), 461-472.

Sundstrom, E., de Meuse, K. P., & Futrell, D. (1990). Work teams: Applications and effectiveness. *American Psychologist, 45*(2), 120-133.

Tesluk, P. E., & Mathieu, J. E. (1999). Overcoming roadblocks to effectiveness: Incorporating management of performance barriers into models of work group effectiveness. *Journal of Applied Psychology, 84*(2), 200-217.

Triandis, H. C. (1995). *Individualism and collectivism.* Boulder, CO.: Westview.

Turel, O., & Connelly, C. E. (2012). Team spirit: The influence of psychological collectivism on the usage of e-collaboration tools. *Group Decision and Negotiation, 21*(5), 703-725.

Tyler, T. R., & Blader, S. L. (2001). Identity and cooperative behavior in groups. *Group Processes & Intergroup Relations, 4*(3), 207-226.

Van der Vegt, G. S., & Bunderson, J. S. (2005). Learning and performance in multidisciplinary teams: The importance of collective team identification. *Academy of Management Journal, 48*(3), 532-547.

Van Der Vegt, G. S., Van De Vliert, E., & Oosterhof, A. A. D. (2003). Informational dissimilarity and organizational citizenship behavior: The role of intrateam interdependence and team identification. *Academy of Management Journal, 46*(6), 715-727. doi: 10.2307/30040663

Wagner, J. A. (1995). Studies of individualism-collectivism: Effects on cooperation in groups. *Academy of Management Journal, 38*, 152-172. doi: 10.2307/256731

Wagner, J. A., III, & Moch, M. K. (1986). Individualism-collectivism: Concept and measure. *Group & Organization Studies, 11*(3), 280-304.

West, M. A. (2001). The human team: Basic motivations and innovations. In N. Anderson, D. S. Ones, H. K. Sinangil & C. Viswesvaran (Eds.), *Handbook of industrial, work, and organizational psychology* (pp. 270-288). London: Sage Publications.

Whitener, E., Bordt, S., Korsgaard, M. A., & Werner, J. (1998). Managers as initiators of trust: An exchange relationship framework for understanding managerial trustworthy behavior. *Academy of Management Review, 23*, 513-530.

Wilson, J. M., Strauss, S. G., & McEvily, B. (2006). All in due time: The development of trust in computer-mediated and face-to-face teams. *Organizational Behavior and Human Decision Processes, 99*, 16-33.

THE ROLE OF MINDFULNESS IN CONFLICT COMMUNICATION STYLES ACCORDING TO INDIVIDUAL LOCUS OF CONTROL ORIENTATIONS

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ABSTRACT

This study aims to understand the role of mindfulness according to locus of control orientations in conflict communication styles. As there is no single study that tried to look at the possible relationship between all of the listed variables, the authors proposed that increasing mindfulness may lead to healthier conflict communication styles with the moderating effect of external or internal locus of control.

We used survey methodology with a two-week time interval for collecting the data. The participants were 651 university students. To test the hypothesized relations structural equation modeling was employed and moderating effects were analyzed with t test.

The results revealed significant positive relationships between increased mindfulness and healthy conflict communication styles as confrontation, public behavior, self-disclosure and emotional expression. Meanwhile, locus of control played as a significant moderator role in the relationship between mindfulness and confrontation, private/public behavior and self-disclosure. The current study might help to further understand the role of individual variables in the better management of interpersonal conflict which is very important when we consider personal, social and political arenas.

Keywords: *Mindfulness, Locus of control, Conflict communication styles*

INTRODUCTION

As a term, conflict has been discussed to be both an intra and interpersonal phenomenon, mainly having a perceptive base (Godse and Thingujam, 2010). Conflict is said to result from misunderstandings, conflicted interests, beliefs, values, and especially needs which are unmet and that conflict can be both destructive and constructive (Besic & Stanisavljevic, 2014) depending on how the parties handle it. If they are able to take it functional and use it to their best interests, the conflict process might in fact result in very creative types of solutions.

Interpersonal exchanges, be it a communication, a negotiation, a trade or any other form of interaction, require responsibility of both parties for attaining meaningful and fruitful results. Although individual responsibility in interactions might seem like a straightforward concept, its expression stems from many individual factors, including personality, attitudes and behaviors. Exchange in general, communication in particular consists of many verbal and non-verbal messages all very much related to individual's cognitive make-up therefore state of mind (Burgoon, Berger, Waldron, 2000). In terms of the relationship between mind and social interaction, Burgoon et al. (2000) proposed that a person's communication pattern might reflect how mindful he or she is at a given point in time. In terms of conflict management, the authors mention previous literature demonstrating mindlessness to be a possible cause of dysfunctional conflict.

Another individual factor, locus of control (Rotter, 1966) has also been listed as an influential variable in understanding conflict strategies (Taylor, 2010). Being internally oriented was reported to be important in communicating competently (Taylor, 2010), also in using solution oriented conflict management strategies (Dijkstra, Beersma and Evers, 2011).

In short, by its very nature, conflict is both inter and intra-individual process as the person is said to interact also with his or her own self (Rahim, 2002). In terms of both communication and conflict management strategies, the role of individual factors has been widely discussed, albeit their theoretical base is often being questioned especially regarding trait-like dimensions (Taylor, 2010). In fact, a very early study by Bloomfield and Blick (1975) had failed to find any influence of personality on verbal conflict resolution while the role of situational factors was more favorably argued by the authors.

Up to date, there is no single study that tried to explore combined roles of mindfulness and locus of control in understanding conflict management and related outcomes. The current study aims to explore the roles of each in conflict communication styles.

Conflict Communication Styles

The importance of conflict management has been stressed many times in terms of both healthy individual as well as organizational outcomes (Yürür, 2009; Ann & Yang, 2012; Besic & Stanisavljevic, 2014). Rahim's (1992) classification on organizational conflict management has been widely used especially by the researchers working in the organizational conflict domain. Mainly, he classified and defined an individual's approach to conflict in two dimensions: Concern for one's own self, and concern for the others (Antonioni, 1998). As a result of the combination of these two dimensions, five individual approaches to conflict emerged: Obliging, avoiding, integrating, dominating and compromising. Individuals who use an integrating or collaborating style in conflict resolution try to approach the issue so that both sides of the conflict gain something from it. The important thing in terms of communication is that there is an assertiveness dimension to it. Those who hold obliging or accounting approach ignore their own needs and instead focus on the needs of the corresponding party. The dominating or competing style held by one party aims toward winning the argument so there is one winner and one loser. Avoiding persons in conflict withdraw from the conflict situation completely where no one is able to satisfy his or her needs. And compromising style prevents the satisfaction of all needs in concern and both parties need to give something up (Antonioni, 1998).

In parallel, Goldstein (1999) later on argued strongly that conflict as a process is in fact a communicative one and that if we'd like to manage conflict effectively, we actually need to focus on the communication process itself (Basım, Çetin, & Meydan, 2009).

Based on Goldstein (1999)'s classification, there are five dimensions that reflect a person's style in communicating conflict. *Confrontation:* Usually referring to a constructive side of conflict management style, confrontation requires face to face interaction to resolve the issue (Şahin, Basım, and Çetin, 2008). *Public/Private Behavior:* Persons behaving public are comfortable in expressing themselves as they are, whereas those behaving private can only do so in certain circumstances or might not express themselves at all if the situation is not right for them (Goldstein, 1999). *Emotional Expression:* Feeling comfortable to express emotions for the purpose of effective conflict management (Goldstein, 1999; Şahin et al., 2008). *Conflict Approach/Avoidance:* Individual's tendency to avoid or approach conflict during interpersonal conflict situations. *Self-Disclosure:* Individual's degree of self-disclosure regarding the nature of conflict, one's role in it, and one's needs and desires.

Goldstein (1999) devised a scale based on these five dimensions. One of the major

aims for the scale was using it on an individual level. Especially for individuals to better understand their own styles of conflict communication and how these influence the way they are relating to others.

Another scale that was devised to measure conflict related factors in communication is by Christensen and Sullaway (1984) and is called The Communication Patterns Questionnaire (CPQ: as cited in Heene, Buysse, and Van Oost, 2005). That measure is comprised of items that reflect patterns in communication such as mutual constructive communication, mutual avoidance, and demand-withdraw. However, this scale was devised solely targeting couple samples concerning experienced conflict in their relationships.

Individual Factors in Conflict and the Lens of Consciousness

Kaushal and Kwantes (2006) stressed that individual difference variables are important in how we all respond to conflict. It makes a difference whether we are assertive, self-conscious, and empathetic or not. In their study that looked at the roles of emotion management and perspective taking in individual's conflict management styles, Rizkalla, Wertheim, and Hodgson (2008) found that individual's disposition to forgive is influential in active conflict management. In addition, general ability to repair one's emotions helped the individual to see the other's perspective and greater perspective taking predicted more yielding style and a lower fighting style. The authors concluded that different conflict approaches might be associated with different individual abilities and motivations. As an example, more fruitful conflict management style such as problem solving involved combined effects of empathizing and positive emotion management. The results of this study led the authors to suggest that therapeutic and educational interventions should aim not only the individual abilities in interpersonal communication, but also using of the methods for transforming negative emotions to positive ones (as an example, through mindfulness practices).

In terms of the role of emotions, Bodtker and Jameson (2001) offered that being in conflict results in being emotionally loaded, and that is where the individual restlessness lies. According to authors, the behavioral element of emotion is emotional expression which might occur nonverbally or verbally through conversations. In addition, physiological component of emotion might follow as bodily experiences and cognitive components as thoughts, attitudes…etc.

In another study, emotional intelligence as a predictive variable (Godse & Thingujam, 2010) was found to have a significant correlation with especially the integrating style of conflict resolution. In other words, employees who were emotionally intelligent were found to use integrating style more. In addition, there was no significant relationship found between the dominating style and emotional intelligence. The same held true for both obliging and compromising styles. Finally, avoiding style was found to correlate negatively with emotional intelligence.

The role of personality variables on conflict resolution has been studied extensively and there is research evidence concerning different cultures. An earlier study by Jones (1982) demonstrated the influence of nine personality variables (achievement, dominance, aggression, affiliation, deference, succorance, nurturance, dogmatism, and Machiavellianism) on smoothing, forcing and confronting. There was a positive correlation found between certain variables except for achievement-confronting, dominance-forcing and aggression-forcing. Similar results were replicated (Jones & White, 1985) this time for MBA students.

In a study carried out with police officers in Norway (Abrahamsen & Strype, 2010), personality was found to have a weak relationship with conflict resolution tactics. However,

two studies both involving Turkish manager samples have found significant relationships between the five-factor personality traits and conflict management styles (Yürür, 2009; Tozkoporan, 2013). Similarly, a positive relationship between integrating style and interaction involvement (a communication competence factor) was found among a Serbian combined sample of students and managers (Besic and Stanisavljevic, 2014).

In Yürür (2009) study, there was a significant positive relationship found between the integrating style and extraversion, openness, and conscientiousness. There was a positive relationship between emotional instability, agreeableness and avoiding style. Those who were found as open and agreeable did not adopt a dominating style. Finally, compromising style was not in significant relationship with any of the personality factors. The results are discussed by especially stressing the important role that personality plays on conflict management styles over situational factors.

The most recent study concerning non-Western working population sample is by Canaan Messarra, Karkoulian, and El-Kassar (2016). The researchers wanted to explore the role of personality traits on conflict handling styles moderated by generations X and Y. It was significantly found that the generations had moderating impact on the relationships between specific personality traits and especially the integrating, avoiding, and compromising styles.

Regarding American samples, Wood and Bell (2008) have examined the role of big five personality factors in understanding conflict resolution styles. Among the personality factors, agreeableness and extraversion were significant predictors of all four styles. Similarly, Forrester and Tashchian (2013) found that, except neuroticism, all big five personality dimensions had significant relations with conflict resolution styles. As an example, agreeableness was related to all conflict resolution types except dominating style. Openness was positively related with compromising style. And extroverted individuals were more inclined to choose dominating style in conflict resolution. Similar results had also been obtained by Antonioni (1998) in a combined sample of students and managers.

Usually, general conflict management styles were put into investigation concerning the role of individual variables having a predictive power. One study which tried to shed light on conflict especially as a communication process was by Heene, Buysse, and Van Oost (2005). In a sample of Belgian couples, the researchers investigated the role of conflict communication styles on certain individual outcomes such as depressive symptoms. Self-reported demand-withdrawal and avoidance were found to mediate depressive symptoms and marital adjustment especially for women. And self-reported constructive communication was a significant mediator of both especially for men.

Apart from personality influences, the influential role of other individual variables such as that of consciousness was also considered albeit in a more theoretical way. In terms of the role of consciousness in conflict resolution, Nan (2011) provides an extensive theoretical overview by focusing on five dimensions that involve awareness, consciousness shifts, transitional space, embodied engagement and improvement of the conflict resolution practice. According to Nan (2011), at the core of conflict resolution lies the process of increased awareness where both parties heighten awareness of their own and others' needs and ways of meeting everybody's needs. In addition, when they act on this type of awareness, they come to develop consciousness of needs being met. In contrast, conflict decreases awareness through increased strain, and conflict resolution practice acts to increase awareness of all. Here mindfulness practices are offered to increase awareness by decreasing emotional strain and increasing the ability to empathize with the other. Thus, mindfulness provides a non-judgmental approach to one's inner states and enables accepting of emotions which leads to emotional awareness and effective emotion management therefore management of the conflict. With increasing awareness, not only our emotions but

also our thoughts, sensations, and memories can become objects not functions that rule our whole selves. In a similar vein, awareness also helps to look at discourse objectively and therefore allows us to be able to restructure it. In conclusion, Nan (2011) offers that conflict resolution practice can serve as a tool to increase awareness through practices like mindfulness learned or directly applied.

Understanding the Role of Mindfulness in Conflict Related Processes

For a long time, research in mindfulness was mostly concentrated on mindfulness training and less on the meaning and expression of mindfulness (Brown, Ryan, and Creswell, 2007). According to Brown and Ryan (2003), mindfulness has generally been discussed as an attribute of consciousness and has been defined as being aware and attentive to whatever it is in the present moment. Defined as a state of consciousness, the nature of that state is usually non-judgmental (Khong and Mruk, 2009) and its functioning is perceptional, and operates on the thoughts and feelings rather than operating within them (Brown and Ryan, 2003). Related to its pre-reflexive definition, awareness and attention both serve as observers which facilitate a self-regulatory mechanism that derives conscious actions (Brown, et al., 2007). Related to difficulties in its formal definition and conceptualization (Baer, Walsh, and Lykins, 2009), mindfulness being a state or a trait alternated related to the different measures being used.

Regarding social interactions, mindfulness has been listed as the newest areas of exploration (Brown, et al., 2007). In general, mindfulness represents a positive attribute that leads an individual to respond more effectively to demands of the environment (Valentine, Godkin, and Varca, 2010). Presenting a picture of mindfulness in a social context, Langer and Moldoveanu (2000) state that mindfulness can be defined as a process of drawing novel distinctions which is said to lead to: 1. Increased sensitivity to one's environment, 2. Openness to new information, 3. Creation of new perceptional structures, 4. Increased awareness of multiple perspectives. The authors strongly assert that mindfulness is not solely a cognitive phenomenon; it is a process in which the whole individual is involved. In other words, while mindfulness might lead an individual to be more connected with his or her environment, mindlessness can be a possible cause of prejudice and stereotyping (Langer and Moldoveanu, 2000). Cavill (2010) names it the focus of Interbeing which means that if we are peaceful through mindfulness, then we can create peace around us. Similarly, especially concerning organizational contexts, employees who are mindful are better able to manage stress because they are good at self-regulation, self-control, and self-awareness (Valentine et al., 2010) which all said to result in organizational interconnectedness.

In a study examining the role of mindfulness on certain positive organizational outcomes such as conflict management, customer orientation and satisfaction in a Malaysian healthcare sector, Ndubisi (2012) found significant effects concerning conflict handling, and customer orientation with customer loyalty.

Accordingly, Ghorbani, Watson and Weathington (2009) conducted a cross-cultural study to compare mindfulness construct between Iranian and American university students. As a result of their comparative study, they have come to a conclusion that mindfulness has the potential to serve as a resource for creating common grounds. This meant that mindfulness can be important in resolving intercultural conflicts.

In terms of understanding the direct relationships between mindfulness and conflict, Horton-Deutsch and Horton (2003), in their study conducted with grounded theory methods, have found several positive outcomes. As an example, developing mindfulness enabled individuals to deal with strong emotions and to resolve interpersonal conflicts. They started

to be aware of themselves and their roles in a conflict situation. They also were able to be more present with others, and be more objective. The authors contended that as conflict leads to an incredible loss of time and energy, it is important to find alternative ideas and solutions for effective conflict resolution techniques. Otherwise, unless new ways of handling conflict are found, conflict will escalate and can create dire consequences such as all sorts of aggression, violence and even loss of lives.

In a study that examined the role of mindfulness and self-control in a familial context, Tarantino, Lamis, Ballard, Masuda, and Dvorak (2015) have demonstrated that parent-child conflict was related to low mindfulness especially when the self-control was low, and low mindfulness was related to high drug-related problems. In another study that tried to look at links between attachment and relationship quality, Saavedra, Chapman and Rogge (2010) came up with the findings that hostile conflict might lead to relationship deterioration by attachment system activation which might worsen the effects of attachment insecurity. And although partially influential, mindfulness was found to help relationships by preventing the activation of the attachment system. Similarly, in a sample of adult heterosexual couples, mindfulness during conflict predicted well-being of partners through increased positive affect (Laurent, Laurent, Lightcap, and Nelson, 2016). In relation, mindfulness has also been negatively associated with inner conflict issues especially when combined with self-control (Grund, Grunschel, Bruhn, and Fries, 2015).

One extensive review of mindfulness in the context of interpersonal relationships was by Burgoon et al. in 2000. Especially related to social interactions which are purposeful and goal-related, Burgoon et al. (2000) argued that the whole process becomes complicated especially during conflict related sessions. As an example, there are primary and secondary goals which need to be accomplished such as understanding and reflecting on feedback, listening actively, attending to one's own emotional states, at the same time trying to maintain a flowing conversation between the two parties. For a clear definition of communication which is mindful, they have listed certain characteristics such as being planful, creative, flexible, based on rationality not emotions; as opposed to mindless communication which is rigid, reactive, and routine. Especially in terms of dysfunctional conflict, they summarized previous research that talked about mindless cycles of blaming, parties only focusing on the faults of the other, listening ineffectively, and not being able to see their own contributions to the issue that created conflict at the first place. In contrast, tactics that were full of mindful behaviors of conflict which involved clear articulation of positions, arguments which were adapted to the partner, and certain assumptions disclosed were said to create the competency in conflict management. After making clear distinctions between mindful and mindless communication styles, Burgoon et al. (2000) have concluded that both message creators and message recipients need to apply mindfulness strategies correctly. As easy as it may sound, the application part would not be that easy while it was stressed firmly that without flexible and novel thought processes that lead to creative action, and without certain communication skills, mindfulness may not always result in successful communication processes. So, within this theoretical perspective, it can be hypothesized that when individuals are high in mindfulness they show healthier conflict communication styles.

Hypothesis   *Increased mindfulness will predict healthy conflict communication styles such as increased confrontation, public behavior, emotional expression, conflict approach and self-disclosure.*

As for the previous research findings and related discussions, one might infer that the relationship between mindfulness and conflict related communications may not be a straight road. Here it seems that certain individual processes like emotions, thoughts, and

also personality in general might also be having influential roles although their degrees might vary. As for the current research focus, we have tried to understand whether an individual variable such as locus of control might be playing some role in terms of mindfulness and its consequences in communication. There is some research that looked at the relationship between locus of control and conflict related issues. We will start by summarizing those and then continue with our research focus.

The Role of Locus of Control

Usually categorized as a dispositional variable (Dijkstra, Beersma, and Evers, 2011), locus of control refers to an individual belief about controlling rewards and outcomes (Rotter, 1966) in life and in one's surroundings. Rooted in social learning perspective, locus of control reflects a long term approach towards life and what it brings. Although how and exactly when it becomes established in one's personality is not yet clear, locus of control is said to be a consequence of one's previous experiences in different life domains which might have been positive or negative. Generally, when somebody's efforts are rewarded consistently, this leads to a development of internal locus of control, in contrast, individuals who cannot reach success despite their efforts become oriented externally (Twenge, Zhang, and Im, 2004). While internally oriented individuals believe that they have their lives under their personal control, externally oriented individuals do believe the opposite (Taylor, 2010).

There were some related studies carried out regarding locus of control and problem or conflict related outcomes. As an example, in one study carried out by Miller, Lefcourt, Holmes, Ware, and Saleh (1986), it was found that internally oriented individuals were more effective communicators and were more actively engaged in discussions in marital conflicts. The more they perceived themselves responsible for marriage related outcomes, the more likely they were to confront issues directly and openly and to state their own views more clearly. Also, they were more effective in problem solving. Compared to externally oriented individuals, they were happier and were more satisfied in a marriage relationship. Similarly, Canary, Cunningham, and Cody (1988) study found positive associations between internal conflict locus of control and integrative tactics and negative relations concerning external conflict locus of control and avoidance and sarcasm strategies.

Similarly, in a study that was carried out with Dutch healthcare workers, Dijkstra et al. (2011) came up with the finding that employees having high levels of internal locus of control suffered less from interpersonal conflict in terms of psychological strain, and were more likely to use a problem-solving conflict management strategy in the workplace.

Locus of control was again found to be influential in conflict strategies in a study by Taylor (2010) with a sample of undergraduate students. Specifically, external orientation was a predictor of using non-confrontational strategies and less use of solution-oriented strategies while the opposite was true for the internals. In addition, internally oriented individuals were more able to see multiple perspectives in a conflict, thus they were more able to offer creative solutions. Regarding facing conflict with superiors, externals were more likely to stay silent, and seemed to reduce the importance of their disagreements with superiors.

Basım, Çetin, and Meydan (2009), in their study with Turkish university students, found important influential roles by locus of control styles over conflict communication styles. As an example, those who held internal locus of control orientation were more likely to hold confrontation styles, as compared to external controls holding avoidance style in communication. Internal controls were more likely to hold public behaviors, whereas externals held more private behaviors. And more self-disclosure and emotional expression were true for internals compared to externals. Another study carried out with a Turkish

population (Basım and Şeşen, 2006) looked at the influential role that locus of control might play in employees' courtesy and altruistic behaviors as part of their organizational citizenship behavior tendencies. In a group of employees working in governmental institutions, it was found that those employees who were more internally oriented were more inclined to demonstrate altruistic behaviors and courtesy. The results were discussed in terms of the positive outcomes of internal orientation in locus of control such as well-being, success, work satisfaction and active coping skills.

In another study carried out with Turkish student population, Hamarta, Özyeşil, Deniz and Dilmaç (2013) have looked at the prediction level of both mindfulness and locus of control on subjective well-being scores. Separately, both constructs were significant predictors. Externally controlled students' subjective well-being scores were low and mindfulness significantly predicted subjective well-being scores. Unfortunately, there was no relationship being reported regarding combined effects of mindfulness and locus of control.

In a cross-cultural study involving Iranian and American undergraduate students, Ghorbani, Watson, Krauss, Davison, and Bing (2004) tried to look at the differences in private self-consciousness factors, its relationship with need for cognition, locus of control and obsessive thinking. The results of the analyses especially related to locus of control revealed that there was a positive correlation between internal control and internal self-awareness, and the opposite was true for external control. The results of this study might lead us to think that a possible correlation might exist between being aware and being internally controlled. In a similar vein, St. Charles (2010), in his study exploring the relationships between mindfulness, self-compassion, self-efficacy, and locus of control, came up with the finding that trait mindfulness and internal locus of control had a medium-sized correlation. Based on this result, St. Charles (2010) questioned the relationship between each variable from both ends, either being mindful as a person leading to spending effort on areas where he or she has some level of control, or, being internally oriented as a person feeling more control over their thoughts or emotions, therefore he or she is not being carried away by them.

Mindfulness, Locus of Control and Conflict Communication Styles

Up to date, there is no single study that tried to look at the possible relationship between all of the listed variables. Previous research showed separate relationships, between mindfulness and conflict communication and locus of control and conflict resolution styles. Such studies are reported and it looks like a combination of mindfulness and locus of control as constructs might yield significant results in terms of conflict communication styles. As previously mentioned, mindfulness as defined by Brown and Ryan (2003) represents a state of being, while locus of control represents a trait-because of its dispositional make-up. Not only because of its origination, but also because of the time in which locus of control is said to form as part of one's personality we believe might create a difference. Locus of control has origins in the past events, relationships, cause and effect relations that were all previously formed. Mindfulness, on the other hand, represents a capacity that acts out in the present although the dispositional aspect to it is also strongly discussed (Brown et al., 2007; Levesque and Brown, 2007).

There is one study that might be related to a further understanding of the possible roles that mindfulness and locus of control might play especially in behavioral outcomes. In their study where they explored the roles of mindfulness and behavioral motivation on day-to-day behavior, Levesque and Brown (2007) had approached their study from a self-determination theory (Deci and Ryan, 1985) perspective. The theory posited that

autonomous behavior has roots in one's personal choices, in other words, internal locus of control, and heteronomous behavior is said to result from external forces, as in external locus of control. Although Levesque and Brown (2007) treated mindfulness as a dispositional therefore a moderating variable in their research, their findings are important for the following: They have found that increased mindfulness was mostly beneficial for those individuals with lower levels of implicit autonomy orientation. Given these findings from a different culture and a different sample, we've become curious to know how mindfulness and locus of control might interplay on another behavioral outcome such as a conflict communication style.

Based on the questionable nature of the relationship and the determinative status of the related constructs, we thought it might be more valuable to present the following research question in our current study:

Research Question	*Does locus of control act as a moderator in the relationship between mindfulness and conflict resolution styles such as confrontation, private/public behavior, emotional expression, conflict approach and self-disclosure?*

METHOD

Participants and Procedure

The participants of this study consisted of university students from a private university in Turkey. Firstly, we briefly explained the aim and scope of the study and got permissions from the administration. Volunteered participants completed two different paper questionnaires in a two-week interval. Using a coding system with school numbers, we collected the measure of dependant variable (conflict resolution approaches scale) for the first application, and the measure of dependant variables (locus of control and mindfulness scales) in the second application for the purpose of reducing the common method bias factor (Spector, 2006). Although 850 students responded the self-report survey, only 680 forms could be matched (rate of return is 80 %). After analyzing the data for the outliers the actual sample consisted of 651 students (66 % female) ranging in age from 18 to 26 ($M = 22.67$, $SD = 4.82$). The distributions of the years in college for the participants were 46.7 % freshmen, 19.7 % sophomore, 18.8 % junior and 14.8 % senior.

Assessments and Measures

Conflict Resolution Approaches Scale. To assess the participants' conflict resolution approaches we used 75-item Conflict Communication Scale (Goldstein, 1999). The scale consisting of five sub dimensions as co*nfrontation, public/private behavior, approach/avoidance, self-disclosure,* and *emotional expression* rated on a 7-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree). High scores indicated placing more emphasis on confrontation, public behavior (private behavior in this study), approaching to conflict, disclosing the self, and displaying emotional expressions in the conflict situations. The scale's reliability and validity study for Turkish culture were established in many studies (Arslan, 2005; Çetin, 2008; Şahin, Basım and Çetin, 2009; Basım, Çetin and Tabak, 2009; Aşkun Çelik and Çetin, 2014; Çetin, Aşkun Çelik and Basım, 2015). In the present study the Cronbach's alpha reliability coefficient ranged between .76 and .83 for the subscales.

Mindfulness Scale. To assess mindfulness, we used Mindful Attention Awareness Scale (Brown and Ryan, 2003) that consisted of 15 items. The scale was rated on a 6-point

Likert-type scale ranging from 1 (almost always) to 6 (almost never). High scores indicated higher mindfulness (higher scores demonstrated lower mindfulness in the current study). The scale's reliability and validity study for Turkish culture were established in some studies (Özyeşil, Arslan, Kesici, and Deniz, 2011; Aşkun Çelik and Çetin, 2014). Cronbach's alpha reliability was found .79 for this study.

Locus of Control Scale. Participants' locus of control was measured with Rotter's (1966) Internal-External Locus of Control Scale. The scale consisted of 29 item-pair (58 individual items) choice response format. Dağ (2002) translated and modified the scale into Turkish culture with 47 individual items with five sub dimensions entitled as *personal control*, *belief in chance, meaninglessness of the effortfulness*, *belief in fate* and *belief in an unjust world*. Some studies confirmed the reliability and validity of the scale (Aşkun Çelik et al., 2015; Çetin et al., 2015). The scale measured generalized control expectations on internality and externality dimensions. High scores indicated external locus of control, low scores indicated internal locus of control. The scale's alpha reliability coefficient in the current study was .85.

Analytic Procedure

We used structural equation modeling (SEM) by using AMOS v22.0 using maximum likelihood (ML) estimation method. To avoid the skewness, justidentified or underidentified problems we transformed the items into the z values. SEM requires a priori specification of both measurement and structural models. We conducted confirmatory factor analysis (CFA) for determining the factor structure of our variables for our measurement model. To examine the model fit, indices of chi square-degree of freedom ratio (χ^2/df), comparative fit index (*CFI*), Tucker-Lewis index (*TLI*), and the root mean square error of approximation (*RMSEA*) were used for the assessment (Hair, Black, Babin, Anderson, and Tatham, 2006). For our structural model we firstly used item parceling method to optimize the measurement structure of constructs in SEM procedures and to reduce the number of items in the model (included total of 137 items for the SEM). We used Item-to-Construct Balance method by using the loadings as a guide (Little, Cunningham, and Shahar, 2002). We constructed three balanced parcels for all variables considering the relative balance between the discrimination (i.e., its loadings) parameters of the items and their difficulty (i.e., its intercepts) parameters. After the sample was divided into two groups via median split-divide for determining moderator role of locus of control, we examined the significant differences between high and low groups with *t* test.

Results

Table-1 shows the results of the confirmative factor analysis indicating factor structure of the research instruments which do fit well for our measurement model. We confirmed five-factor structure of conflict resolution approaches scale (with sub-dimensions as confrontation, public/private behavior, approach/avoidance, self-disclosure, and emotional expression), one-factor structure of mindfulness scale and five-factor (sub-dimensions are personal control, belief in chance, meaninglessness of the effortfulness, belief in fate and belief in an unjust world) and higher order one-factor structures of the locus of control scale.

Table 1
THE FIT INDICES OF CONFIRMATIVE FACTOR ANALYSIS OF INSTRUMENTS

Instruments	χ^2	df	RMSEA	TLI	CFI
1.Conflict Resolution Approaches (43* items, five factors)	2658.45	850	0.077	0.91	0.93
2.Mindfulness (15 items, one factor)	267.13	90	0.058	0.95	0.95
3.Locus of control (32* items, five factors)	1258.45	454	0.069	0.90	0.92
4.Locus of control (32* items, higher order one factor)	1317.58	459	0.078	0.89	.090
* We confirmed the five factor dimensions with 43 items for Conflict Resolution Scale and 32 items for Locus of Control Scales, χ^2 = Chi square, df= degrees of freedom, RMSEA= Root mean square error of approximation, TLI= Tucker-Lewis index, CFI= Comparative fit index					

Table 2 displays the means, coefficient alphas and intercorrelations (*Pearson's r*) of the variables. Means indicated that participants scored low in mindfulness meaning that they are high in mindfulness; high in all conflict resolution approaches meaning that they hold more confrontation, public behavior, approach, self-disclosure, emotional expression behaviors in conflict situations; high scores in locus of control meant that they were mostly externally controlled. The relations demonstrated that mindfulness correlated negatively with confrontation (r= -.118, $p < .01$), self-disclosure (r= -.272, $p <.01$), emotional expression (r= -.107, $p <.01$), positively with private/public behavior (r= .187, $p <.01$) and locus of control (r=.187, $p < .01$). Moreover, locus of control correlated negatively with confrontation (r= -.318, $p < .01$), self-disclosure (r= -.239, $p <.01$), emotional expression (r= -.290, $p <.01$), and positively with private/public behavior (r= .194, $p <.01$).

Table 2
DESCRIPTIVE STATISTICS, RELIABILITIES AND ZERO-ORDER CORRELATIONS AMONG VARIABLES

	Mean	SD	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.Mindfulness	1.53	.49	(.79)						
2.Confrontation	4.35	.77	-.118**	(.76)					
3.Approach/ avoidance	3.09	.70	-.036	-.013	(.79)				
4. Private/public behavior	3.01	.87	.187**	-.112**	.181**	(.83)			
5.Self disclosure	4.05	.66	-.272**	.267**	.215**	-.121**	(.74)		
6.Emotional expression	4.29	.80	-.107**	.411**	-.051	-.050	.227**	(.78)	
7.Locus of control	3.08	.51	.187**	-.318**	-.072	.194**	-.239**	-.290**	(.85)
Numbers in the parentheses show the Cronbach' Alpha (α) coefficients of the variables, * p<0.05, ** p<0.01 (two-tailed)									

To test our hypothesis regarding the effects of predictor (mindfulness) variable on the criterion (conflict resolution approaches) variable, we have conducted SEM by using AMOS program (see Figure 1). The fit indices of the structural model demonstrated that current model fit the data very well ($\chi^2/df = 2.46$, RMSEA= .041, TLI= .91, CFI= .94). The standardized estimates indicated that mindfulness has negative effect on confrontation (β= -.28, $p < .01$), self-disclosure (β= -.52, $p < .01$), emotional expression (β= -.28, $p < .01$), and positive effects on private/public behavior (β= .32, $p < .01$). Considering the hypothesis, individuals high in mindfulness may adapt more confrontation, self-disclosure, emotional expression and public behavior approaches in conflict situations.

Figure 1
RESULTS OF THE STRUCTURAL MODEL
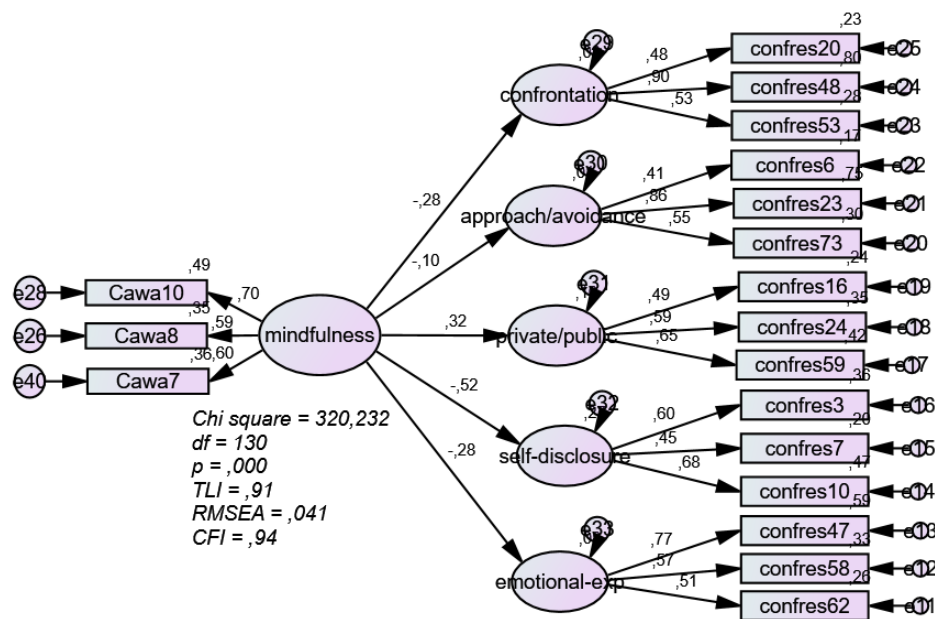
To find an answer to the research question about the moderating role of locus of control in the relations between mindfulness and conflict resolution approaches, we used a multiple group technique with dividing the moderator variable into high and low scores via median split-divide. We examined the significant differences between the high and low groups with *t* test. After dividing the sample in high (externally controlled) and low (internally controlled), SEM estimates and fit statistics were calculated for both groups. The fit statistics for the moderated model indicated that the model fit data well (χ^2/df=2.98, *RMSEA*= .057, *TLI*= .89, *CFI*= .90). For the group differences between externally controlled and internally controlled ones, we examined the significance (z-scores) of the relations using matrix of critical ratios. Critical ratios larger than the value of 1.96 indicated a significant difference between groups. The results for the differences between paths for each locus of control group were presented in Table 3.

Table 3 MULTI GROUP COMPARISON BETWEEN MINDFULNESS AND CONFLICT RESOLUTION APPROACHES						
			External locus of control		Internal locus of control		*z-score*
Relations			*Estimate*	*P*	*Estimate*	*P*	
Confrontation	←	Mindfulness	-.142	.011	-.475	***	-2.769***
Approach/ avoidance	←	Mindfulness	-.098	.051	-.012	.883	.887
Private/public behavior	←	Mindfulness	.282	.003	.822	***	3.261***
Self-disclosure	←	Mindfulness	-.323	***	-.973	***	-4.201***
Emotional expression	←	Mindfulness	-.26	***	-.086	.216	1.838*
* p<.05 ** p<.01 *** p<.001							

Our results demonstrated that there were significant differences between individuals who were externally controlled and internally controlled regarding the relation of mindfulness and confrontation (β=-.142, *p* < .05 for individuals with externally controlled, β=-.475, *p* < .01 for individuals with internally controlled, *z* =-2.769, *p* <.001), mindfulness and private/public behavior (β=.282, *p* < .01 for individuals with externally controlled,

β=.822, p < .01 for individuals with internally controlled , z =3.261, p <.001), and mindfulness and self disclosure (β=-.323, p < .001 for individuals with externally controlled, β=-.973, p < .001 for individuals with internally controlled, z =-4.201, p <.001). These findings meant that external locus of control impaired while internal locus of control strengthened the relations between mindfulness and conflict resolution approaches of confrontation, private/public behavior and self disclosure (see the moderating role of locus of control in Figure 2).

Figure 2
Moderating Role of Locus of Control
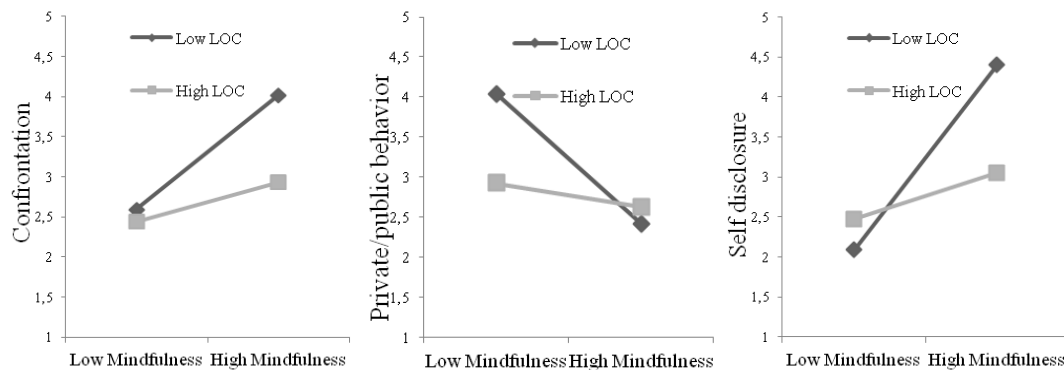
Mindfulness scores reversed for indicating individuals in high/low mindfulness, Low LOC = Internally control, *High LOC = Externally control*
.

DISCUSSION

The results in general revealed important findings related to the predictor value of each variable including the moderating role of locus of control. First of all, mindfulness predicted almost all conflict communication styles in the healthy domain. As mindfulness increased the individuals' confrontation style in communication increased. This means that as the individual became more aware and attentive to what is present in the moment, and approached what was out there in a non-judgmental manner; he or she was more likely to use a face-to-face interaction in conflict situations. Related to that, public behavior was carried out by individuals who were high in mindfulness. This means that mindful individuals were more comfortable in expression of themselves as they are; in other words, they were not trying to show themselves as a different person according to a conflict situation. Mindful individuals were more likely to show emotional expression and had higher degrees of self-disclosure. Similar to showing public behavior, these individuals were more comfortable in expression of felt emotions for enabling effective conflict management and were more able to disclose their views on the nature of conflict, and his or her role in it including personal needs, goals and desires.

These results are very much in line with previous research findings and discussions. Horton-Deutsch and Horton (2003), in their study on mindfulness and overcoming intractable conflict, had found that developing mindfulness resulted in healthy conflict resolution outcomes. The participants, with increased awareness, were more able to understand their roles in conflict which involved the process of looking at each side of conflict until being able to perceive the conflict situation differently. Increased self-awareness led participants to be more aware of their weaknesses, strong points and especially their blind spots. The authors strongly noted that self-awareness is a must before

awareness of others and enables individuals to find new ways to relate to the other person via being more present, becoming more objective and less self-blaming. In short, they concluded that mindfulness basically involved learning to stand back and be able to see a problem non-reactively thus bringing a compassionate awareness to a problem or a difficulty at hand. Here our results regarding mindfulness and self-disclosure might lead us to think that with increased mindfulness, the person became more aware of his or her own self and surroundings thus it might have become more obvious to understand the nature of conflict, one's individual role in it, and one's personal needs, goals and desires. In a similar vein, Childs (2006) discussed that mindfulness forms a strong foundation for the individual action and decisions to which people attend. These types of practices, with awareness, enable us to relate to the world differently. And, as in Buddhism and other types of traditions, these are said to result in many personal and social benefits.

In their theoretical paper on the mechanisms of mindfulness, Shapiro, Carlson, Astin and Freedman (2006) named the process of viewing the present moment experience as *reperceiving*. Involving a fundamental shift in perspective, this process helped with more objective and clear perception of the present reality. The theoreticians connoted this process as developmental in nature which required a former awareness formation that led to the perception of the other person as a separate entity with his or her own needs and desires. This represents a shift in perspective, a change in one's relationship to one's internal and external experience. Related with our findings, mindful individuals might be seeing more to it than sole conflict so that being able to apply healthy communication practices of conflict resolution might have been easier to apply. Exactly related to that, Shapiro and colleagues further stressed that, with the help of reperceiving, additional mechanisms that relate to certain positive outcomes might have also created self-related processes such as self-regulation (see also Ghorbani, Cunningham, and Watson, 2010), self-management, emotional, cognitive and behavioral flexibility. Similarly, in their empirical study on the role of emotion management and perspective taking in conflict management styles in a sample of adult population, Rizkalla, Wertheim, and Hodgson (2008) found that more productive conflict management styles involved both an empathic ability and also management of one's emotions in a positive manner.

Related to our findings on mindfulness and emotional expression, it might be useful to mention why emotion might be so central to conflict in relationships. Bodtker and Jameson (2001), in their thorough analysis of emotion in conflict formation, offered that being in conflict is to be charged emotionally and that this relates to why conflict feels so uncomfortable for many individuals. They defined expression of emotions as the way emotional experience is channeled, being verbal or nonverbal we communicate with or without intent. Especially related to mind's role in emotion, Bodtker and Jameson (2001) cite appraisal theories of emotion which do suggest that an experience of emotion happens as a consequence of assessing a situation in a certain way. Here, coming back to our mindful individuals in our sample, they were probably more comfortable in expressing their emotions in a conflict situation because they were more able to assess the conflict in a non-judgmental way, in short, as it is, without any emotional judgment attached to it. Regarding emotions in conflict, Bodtker and Jameson (2001) outline five principles of conflict and emotion we believe might be useful to further understand our related findings: 1. Conflict is emotionally defined, 2. Conflict is emotionally valenced (meaning that intensity of our emotions may vary for each side of the conflict issue which might further reflect the individual meaning of conflict for each party), 3. Conflict reflects a moral position meaning that the experience of emotion is evaluative, we decide momentarily such as whether a certain approach is better or more useful to resolve the conflict, 4. Conflict is identity based, meaning that something that threats who we are as an individual has more potential to

charge us emotionally, and 5. Conflict is relational such that the relationship between the two has the power to frame the meaning of emotional communication which further leads to definition of the relationship. With so much role that emotions might play in conflictual issues, a mindful self might be said to gain a higher advantage in terms of both expression and managing of emotions as there is a potential for higher self-regulation enabled through an observing and non-evaluative state of being.

Finally, related to approach/avoidance dimension, mindfulness was not found to have any predictive relationship. This finding might suggest that mindfulness might be having more to do with the process of conflict itself, rather than conflict as a variable perceived from outside.

Findings on the Moderating Role of Locus of Control

Our study revealed important findings in terms of the moderating role of locus of control as for the predicting power of mindfulness over certain conflict communication style approaches. First of all, mindfulness had a significantly higher positive predictive power over confrontation style especially for internally controlled individuals. This was also the same for the public behavior and self-disclosure styles. In other words, internally controlled individuals benefited more from mindfulness to express themselves in face-to-face interactions as freely and honestly, without feeling any social restriction in a conflict situation. For externally controlled individuals, mindfulness did not have such a strong predictive power.

As for the relevance of our findings with the previous research, Miller et al. (1986) had also found that internal locus of control held by spouses in a marriage was related to holding healthier approach to problem solving such as direct confrontation, openness by clearly expressing their views which in turn might have led to higher marital satisfaction of all. The authors explained this as an increased responsibility felt for possible marital outcomes and also perceiving certain marital interactions under their individual control. Similarly, in our study, internals with mindfulness might have felt more responsible for the outcomes of the conflict communication, therefore might have expressed themselves more openly and behaved according to that which might create healthy conflict resolution, rather than hiding themselves or keeping away from the issue by not confronting. Mindfulness, beyond being an individual practice of managing thoughts, feelings and behaviors, is also helpful for individuals to feel themselves as part of their surroundings, seeing everything around them as part of a big whole. This is said to result in an appreciation of interrelatedness and non-self (Percy, 2008). This way, feeling responsible for certain outcomes becomes very important especially in relationship issues as they do not see their own selves as separate from the other person or from the outcomes which they both co-create.

Dijkstra, et al. (2011), in their study where they have come up with a related finding by using locus of control as a moderating variable, had discussed that internally oriented individuals probably suffered less psychological strain in cases of conflict. Similarly, in our study, internals, with increased levels of mindfulness, might have felt less strain in the face of conflict situations therefore they might have found it easier to confront, to use public behavior and to disclose themselves openly. As we have previously mentioned, mindfulness helps individuals deal with strong feelings (see also Coholic, 2011), thus become better able to resolve conflicts especially at the interpersonal level (Horton-Deutsch and Horton, 2003).

Coming to the weaker relationship found between mindfulness and related conflict communication styles for externally oriented individuals, the results are not surprising when we look at the previous literature in terms of the definition and the empirical findings related

to external locus of control. By definition, externally oriented individuals believe that whatever happens, including the results of their behaviors, happen because of external forces, such as faith, luck, and others. This leads to a belief and expectancy that life is not under their control, therefore there is little that they can do to change the situations around them. In our study, externals have not increased their active resolution styles in communication even though they had increased mindfulness. Here one might re-evaluate this finding as related to the definition of mindfulness which includes being attentive and aware regarding what is present in the moment. This might mean that, even though an externally oriented individual increases his or her awareness and attention to what is available in the present moment, because he or she perceives the situation out of his or her control anyway, this type of awareness somehow is not able to determine a change in behavior, especially regarding conflict situations in our case.

Regarding Levesque and Brown (2007) study findings, our results seem to be on the contrary, where increased mindfulness helped more to those with internal control orientation. This type of difference might be because of the different samples and cultures (Turkish vs. American), being used, usage of different constructs, and may be because of the research design differences or all of the above. Whatever the reason(s), it would be valuable to look at the relationships with different designs and samples in future studies.

Finally, related to emotional expression, being internally or externally controlled did not reflect any difference in our study. This might be because of the fact that emotions, by definition, have their own merit when it comes to conflict situations, influenced by mindfulness, but do not differ according to being internal or externally controlled. This might be also demonstrating the power of mindfulness over emotional regulation therefore expression for all kinds of individuals involved in a conflict related situation.

Implications

Our study results imply the importance of certain personality related variables for creating positive individual, relational and finally, organizational outcomes on a day to day basis. As valuable as it may sound, mindfulness as a practice becomes significantly meaningful only depending on the personality traits that an individual possesses especially in a relational and a communicational context. Specifically, our results related to the locus of control orientation as a personality variable made a difference in how an individual responded to conflict in terms of increased mindfulness. In other words, although the role of consciousness in both the process and the outcomes of conflict situations are deemed as very important (Nan, 2011), our study findings implied that there must be more to it than a bare application of mindfulness for everyone involved, as feeling responsible for our actions might require a learning therefore a transforming process at deeper and a very long-term level.

These results have some practical implications for organizations. Specifically, the findings indicated that internal locus of control and mindfulness are positively associated with constructive interpersonal conflict resolution approaches, all of which have a significant influence on healthy relations in the workplace from an individualistic view.

When we approach our study from a broader context concerning cultures and generations, it was previously put forward that the personal tendencies of the younger generations became more external over the decades since 1960 (Twenge et al. 2004). It was further argued that increased individualism led to a greater alienation which resulted in beliefs that individual actions having almost no meaning (Twenge et al. 2004). As external control implies "feeling no sense of control over certain life outcomes", this becomes especially important as it seems evident that individuals increasingly believe there is not

much they can do to change the world around them which unfortunately, is full of turbulent environments.

Given the current situation of the world, where disputes and grievances are still trying to be solved through violence and aggression, feeling less responsible for the related outcomes might create more dramatic outcomes in the following days and years. Therefore it becomes a critical job of researchers and practitioners to think about the ways in which this "externalizing cycle" can be turned around so that the new generation feels more responsible and eventually does something about finding new ways of handling conflict.

Conclusion

We believe our study has been valuable for several reasons. As we already mentioned, there was no previous study that looked at the combined relationship of these variables for understanding conflict communication styles. Therefore, we have tried to benefit from previous research on these variables although their roles were assigned differently in the related study. As Taylor (2010) argued, how an individual sees and understands conflict can be influenced by contextual and also by personality traits. In the current study, we have treated locus of control as a trait and mindfulness as a state variable. As our original aim was to further understand how an increasingly influential personal practice such as mindfulness would be affecting a very common relational, communicational and organizational outcome such as conflict communication, locus of control served our exploratory research purposes as an important personality trait.

Our results tried to shed light also on the nature and the process of the conflict communication styles. As discussed, not all communication styles are influenced similarly by the combination of mindfulness and locus of control. Although all of them were influenced positively by mindfulness alone, when locus of control orientation was entered into the equation as a moderator, there was no straightforward effect. Different conflict communication outcomes appeared especially concerning confrontation, private/public behavior and self-disclosure styles. As can obviously be seen, these are more related to the communication behavior itself rather than communicational approach. This means that mindfulness combined with locus of control is creating a difference in terms of responding to, rather than approaching to the conflict communication situation. That is probably why we do not see any interaction concerning approach/avoidance outcome.

In terms of emotional expression, we still do not see any significant difference, which might partly be due to the single nature of emotional expression as a construct having its own dynamic.

In sum, we believe our study helped with further understanding of conflict communication in terms of its possible personal antecedents.

Limitations and Suggestions for Future Research

Generally, our study has some limitations that are useful to mention. First of all, the design is semi-cross-sectional in nature and it is not possible to draw cause and effect relationships directly. Since the constructs are having both state and trait like quality, they are more sensitive to timing and participant characteristics. Secondly, the study uses a Turkish sample therefore it is not possible to generalize our findings to other cultures. Since Turkey has been said to hold a collectivistic culture previously (Hofstede, 1980), our results should be approached in this cultural context only and we should refrain from generalizing to other cultures like those of individualistic. Finally, the use of self-report measures prevents us from making firm conclusions as there is always the possibility of social desirability and voluntary response issues. On a more specific level, it is better to keep in

mind the possibility of different results by using different measures of mindfulness. As previously discussed, the mindfulness being a trait or a state is still being discussed and different measures are being used depending on the theoretical approach (Baer, Walsh, and Lykins, 2009) being adopted.

Future research might yield more promising results if multi-source data are used, with different sample groups from different cultures, and by using both qualitative and quantitative research methods that includes different measures of the suggested constructs to be able to attain richer and deeper information from the participants involved. Finally, inclusion of other major personality variables such as big-five personality factors, emotional intelligence and self-consciousness could also be considered for future exploration of the differential effects combined with current study variables.

REFERENCES

Ann, B. Y., & Yang, C.C. (2012). The moderating role of personality traits on emotional intelligence and conflict management styles. *Psychological Reports, 110*(3), 1021-1025.

Antonioni, D. (1998). Relationship between the big five personality factors and conflict management styles. *International Journal of Conflict Management, 9*(4), 336-355.

Arslan, C. (2005). *Kişilerarası çatışma çözme ve problem çözme yaklaşımlarının yükleme karmaşıklığı açısından incelenmesi* [*Investigating interpersonal conflict solving and problem solving approaches according to attribution complexity*]. Unpublished doctoral dissertation, Selçuk University, Turkey.

Aşkun Çelik, D. & Çetin, F. (2014). The role mindfulness and self-consciousness on interpersonal conflict resolution approaches. *Research Journal of Business and Management, 1*(1), 29-38.

Baer, R.A., Walsch, E., & Lykins, E.L.B. (2009). Assessment of Mindfulness. In F. Didonna (Ed.), *Clinical Handbook of Mindfulness (*pp. 153-168*)*, Springer, New York.

Basım, H. N., & Şeşen, H. (2006). Kontrol odağının çalışanların nezaket ve yardım etme davranışlarına etkisi: kamu sektöründe bir araştırma [The influences of locus of control on employees' helping and courtesy behaviors]. *Selçuk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 16, 159-168.

Basım, H. N., Çetin, F., & Meydan, C. H. (2009). Kişilerarası çatışma çözme yaklaşımlarında kontrol odağının rolü [The role of locus of control in interpersonal conflict resolution approaches]. *Selçuk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 21,* 57-69.

Basım, H.N., Çetin, F. & Tabak, A. (2009). The relationship between big five personality characteristics and conflict resolution approaches. *Turkish Journal of Psychology*, *24*(63), 20-34.

Besic, C., & Stanisavljevic, M. (2014). Relation between managers' communication competence and conflict management styles. *7th International Conference of the School of Economics and Business: Conference Proceedings,* p71. Sarajevo, Bosnia, and Herzegovina

Bloomfield, D. R., & Kenneth, A. B. (1975). Personality correlates of verbal conflict resolution. *The Journal of Psychology, 90,* 45-49.

Bodtker, A. M. & Jameson, J. K. (2001). Emotion in conflict formation and its transformation: application to organizational conflict management. *The International Journal of Conflict Management*, *12*(3), 259-275.

Brown, K. W. & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, *84*(4), 822-848.

Brown, K. W., Ryan, R. M., & Creswell, J. D. (2007). Mindfulness: Theoretical Foundations and Evidence for its Salutary Effects. *Psychological Inquiry*, *18*(4), 211-237.

Burgoon, J. K., Berger, C. R., & Waldron, V. R. (2000). Mindfulness and interpersonal communication. *Journal of Social Issues*, *56*(1), 105-127.

Canaan Messarra, Karkoulian, & El-Kassar (2016). Conflict resolution styles and personality. *International Journal of Productivity & Performance Management, 65*(6), 792-810.

Canary, D. J., Cunningham, E. M., & Cody, M. J. (1988). Goal types, gender, and locus of control in managing interpersonal conflict. *Communication Research, 15*(4), 426-447.

Çetin, F. (2008). *Kişilerarası ilişkilerde kendilik algısı, kontrol odağı ve kişilik yapısının çatışma çözme yaklaşımları üzerine etkileri: uygulamalı bir araştırma* [*The effects of self-concept, locus of control and personality on conflict resolution approaches in interpersonal relations: an applied research*]. Unpublished master dissertation, Turkish Military Academy Defense Sciences Institute, Turkey.

Çetin, F., Aşkun Çelik, D., & Basım, H.N. (May, 2015). Çatışma Çözme Süreçlerinin Kontrol Odağı İnanışları Açısından Farklılaşması: Yapısal Eşitlik Modellerinde (Yem) Ölçme Eşdeğerliliği Testi [Differentiating conflict resolution styles according to locus of control beliefs: Measurement invariance in SEM], Presented to 1*4th National Business Administration Congress, Aksaray, Turkey*.

Childs, D. (2007). Mindfulness and the psychology of presence. *Psychology and Psychotherapy: Theory, Research and Practice*, *80*, 367-376.

Coholic, D. A. (2011). Exploring the feasibility and benefits of arts-based mindfulness-based practices with young people in need: Aiming to improve aspects of self-awareness and resilience. *Child Youth Care Forum*, *40*(4), 303-317.

Dağ, İ. (2002). Kontrol Odağı Ölçeği (KOÖ): Ölçek geliştirme, güvenirlik ve geçerlik çalışması [Locus of control scale: Scale development, reliability and validity study]. *Turkish Journal of Psychology*, *17*(49), 77-90.

Deci, E. L., & Ryan, R. M. (1985). The general causality orientations scale: Self-determination in personality. *Journal of research in personality*, *19*(2), 109-134.

Dijkstra, M. T. M., Beersm, B., & Evers, A. (2011). Reducing conflict-related employee strain: the benefits of an internal locus of control and a problem solving conflict management strategy. *Work & Stress*, *25*(2), 167-184.

Forrester, W. R. & Taschian, A. (2013). Effects of personality on conflict resolution in student teams: A structural equation modeling approach. *Journal of College Teaching* & Learning, *10*(1), 39-46.

Ghorbani, N., Cunningham, C. J. L., & Watson, P. J. (2010). Comparative analysis of integrative self-knowledge, mindfulness, and private self-consciousness in predicting responses to stress in Iran. *International Journal of Psychology*, *45*(2), 147-154.

Ghorbani, N., Watson, P. J., & Weathington, B. L. (2009). Mindfulness in Iran and the United States: Cross-Cultural Structural Complexity and Parallel Relationships with Psychological Adjustment. *Current Psychology*, *28*, 211-224.

Ghorbani, N., Watson, P. J., Krauss, S. W., Davison, H. K., & Bing, M. N. (2004). Private self-consciousness factors: relationships with need for cognition, locus of control, and obsessive thinking in Iran and the United States. *The Journal of Social Psychology*, *44*(4), 59-372.

Godse, A. S., & Thingujam, N. S. (2010). Perceived emotional intelligence and conflict resolution styles among information technology professionals: Testing the mediating role of personality. *Singapore Management Review, 32*(1), 69-83.

Goldstein, S.B. (1999). Construction and validation of a conflict communication scale. *Journal of Applied Social Psychology, 29*(9), 1803-1832.

Grund, A., Grunschel, C., & Bruhn, D. (2015). Torn between want and should: An experience-sampling study on motivational conflict, well-being, self-control, and mindfulness. *Motivation and Emotion, 39,* 506-520.

Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E., & Tatham, R.L. (2006). *Multivariate data analysis* (6th ed.). Upper Saddle River, NJ: Pearson Education Inc.

Hamarta, E., Ozyesil, Z., Deniz, M., & Dilmac, B. (2013). The prediction level of mindfulness and locus of control on subjective well-being. *International Journal of Academic Research*, *5*(2), 145-150.

Heene, E. L. D., Buysse, A., & Van Oost, P. (2005). Indirect pathways between depressive symptoms and marital distress: The role of conflict communication, attributions, and attachment style. *Family Process, 44*(4), 413-440.

Hofstede, G. (1980). Culture's consequences: National differences in thinking and organizing. Beverly Hills, Calif.: Sage.

Horton-Deutsch, S. L. And Horton, J. M. (2003). Mindfulness: Overcoming intractable conflict. *Archives of Psychiatry Nursing*, *18*(4), 186-193.

Kaushal, R. & Kwantes, C. T. (2006). The role of culture and personality in choice of conflict management strategy. *International Journal of Intercultural Relations*, *30*, 579-603.

Khong, B. S. L. & Mruk, C. J. (2009). Editors' introduction to special issue on mindfulness in psychology. *The Humanistic Psychologist*, *37*, 109-116.

Langer, E. J. & Moldoveanu M. (2000). The construct of Mindfulness. *Journal of Social Issues. 56*(1), 1-9.

Laurent, H. K., Laurent, S. M., Lightcap, A., & Nelson, B. W. (2016). How situational mindfulness during conflict stress relates to well-being. *Mindfulness, 7*(4), 909-915.

Levesque, C. & Brown, K. W. (2007). Mindfulness as a moderator of the effect of implicit motivational self-concept on day-to-day behavioral motivation. *Motivation and Emotion*, *31*, 284-299.

Little, T.D., Cunningham, W.A., & Shahar, G. (2002). To parcel or not to parcel: Exploring the question, weighing the merits. *Structural equation modeling*, *9*(2), 151-173.

Miller, P. C., Lefcourt, H. M., Holmes, J. G., Ware, E. E., & Sale, W. E. (1986). Marital locus of control and marital problem solving. *Journal of Personality and Social Psychology*, *51*(1), 161-169.

Nan, S. A. (2011). Consciousness in Culture-Based Conflict and Conflict Resolution. *Conflict Resolution Quarterly*, *28*(3), 239-262.

Ndubisi, N. O. (2012). Mindfulness, reliability, pre-emptive conflict handling, customer orientation and outcomes in Malaysia's healthcare sector. *Journal of Business Research, 65*(4), 537-546.

Özyeşil, Z., Arslan, C., Kesici, Ş., & Deniz, M.E. (2011). Adaptation of mindful attention and awareness scale into Turkish. *Education and Science*, *36*(160), 224-235.

Percy, I. (2008). Awareness and authoring: the idea of self in mindfulness and narrative therapy. *European Journal of Psychotherapy and Counseling*, *10*(4), 355-367.

Rahim, M. A. (2002). Toward a theory of managing organizational conflict. *The International Journal of Conflict Management*, *13*(3), 206-235.

Ramirez, A. R. (2010). Impact of cultural intelligence level on conflict resolution ability: A conceptual model and research proposal. *Emerging Leadership Journeys*, *3*(1), 42-56.

Rizkalla, L., Wertheim, E. H., & Hodgson, L. K. (2008). The roles of emotion management and perspective taking in individuals' conflict management styles and disposition to forgive. *Journal of Research in Personality*, *42*, 1594-1601.

Rotter, J.B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs: General & Applied, 80*(1), 1-28.

Ryan, R. M. & Brown, K. W. (2003). Why we don't need self-esteem: On fundamental needs, contingent love, and mindfulness. *Psychological Inquiry*, *14*(1), 71-76.

Saavedra, M. C., Chapman, K. E., & Rogge, R. D. (2010). Clarifying links between attachment and relationship quality: Hostile conflict and mindfulness as moderators. *Journal of Family Psychology*, *24*(4), 380-390.

Şahin, N.H., Basım, H.N., & Çetin, F. (2009). Locus of control and self-concept in interpersonal conflict resolution approaches. *Turkish Journal of Psychiatry*, *20*(2), 153-163.

Shapiro, S. L., Carlson, L. E., Astin, J. A., & Freedman, B. (2006). Mechanisms of Mindfulness. *Journal of Clinical Psychology*, *62*(3), 373-386.

Spector, P.E. (2006). Method variance in organizational research: Truth or urban legend? *Organizational Research Methods*, *9*, 221-232.

St. Charles, L. (2010). *Mindfulness, Self-Compassion, Self-Efficacy, and Locus of Control: Examining Relationships between Four Distinct but Theoretically Related Concepts*. Unpublished master dissertation, Pacific University.

Tarantino, N., Lamis, D. A., Ballard, E. D., Masuda, A., & Dvorak, R. D. (2015). Parent-child conflict and drug use in college women: A moderated mediation model of self-control and mindfulness. *Journal of Counseling Psychology, 62*(2), 303-313.

Taylor, M. (2010). Does locus of control predict young adult conflict strategies with superiors? An examination of control orientation and the organizational communication conflict instrument. *North American Journal of Psychology*, *12*(3), 445-458.

Tozkoporan, G. (2013). Beş faktör kişilik özelliklerinin çatışma yönetim tarzlarına etkisi: Yöneticiler üzerinde bir araştırma [The effect of the five-factor personality traits on the conflict management styles: A study of managers]. *International Journal of Economic & Social Research, 9*(2), 189-231.

Twenge, J. M., Zhang, L., & Im, C. (2004). It's beyond my control: a cross-temporal meta-analysis of increasing externality in locus of control, 1960-2002. *Personality and Social Psychology Review*, *8*(3), 308-319.

Valentine, S., Godkin, L., & Varca, P. E. (2010). Role conflict, mindfulness, and organizational ethics in an education-based healthcare institution. *Journal of Business Ethics, 94,* 455-469.

Yürür, Ş. (2009). Yöneticilerin çatışma yönetim tarzları ve kişilik özellikleri arasındaki ilişkinin analizine yönelik bir araştırma [A study of analyzing the relationship between personality traits and conflict management styles of managers]. *C. Ü. İktisadi ve İdari Bilimler Dergisi, 10*(1), 23-42.