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January 2010

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Nancy Da Silva San Jose State University, nancy.dasilva@sjsu.edu

M. D. Borlongan-Conway

H. Tokunaga

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Nancy Da Silva, M. D. Borlongan-Conway, and H. Tokunaga. "Employee Goal Orientation in Relation to Creative Performance" *Review of Management Innovation & Creativity* (2010): 94-102.

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## EMPLOYEE GOAL ORIENTATION IN RELATION TO CREATIVE PERFORMANCE

## Maria Diana Borlongan-Conway, Nancy Da Silva and Howard Tokunaga San Jose State University, USA

## ABSTRACT

The present study examined the relationship between employee goal orientation and creativity and whether openness to experience moderated these relations. Survey data (N=108) were collected from volunteers across three non-profit organizations. As hypothesized, it was found that learning goal orientation was positively related to creative performance, and avoiding goal orientation was negatively related to creativity. Furthermore, it was found that openness to experience moderated the relationship between proving goal orientation and creative performance.

Keywords: Creativity, Creative Performance, Goal Orientation, Openness to Experience, Volunteers

## INTRODUCTION

At present, innovation and ongoing successful change have become crucial for organizations to survive in the fast changing business environment (Amabile, 1988, George & Zhou, 2001). Moreover, to be effective and to be competitive, companies have to search for ways in which to maximize creativity in their work force (Tierny, Farmer, & Graen, 1999, George & Zhou, 2001). One way of identifying those with creative potential is to understand different characteristics related to creative performance. An important individual characteristic that has not received a great deal of attention in the creativity literature within the workplace is employee goal orientation. An employee's motivational predisposition may play an important predictive role in explaining why some employees are more creative than others. Thus, the purpose of the present study is to examine the relationship between goal orientation and creative performance and to investigate the moderating role of openness to experience.

## **DEFINITION OF CREATIVITY**

Research on creativity has resulted in a wide-range of definitions of the concept, from being a characteristic of a person, to being a process (Amabile, 1988, Oldham & Cummings, 1996). However, consistent with numerous organizational researchers, this study defines creative performance as the products, ideas, or procedures that employees generate that are both novel and potentially useful to an organization (Amabile, 1983; Oldham & Cummings, 1996).

## **Contextual and Individual Factors Related to Employee Creative Performance**

Due to the attention that is being given to creativity, numerous studies have been conducted to broaden an understanding of creativity (see Oldham 2002 for review). Most research has looked into factors that promote creative ideas within organizations. Studies have shown that there are contextual factors that impact employees' creative performance. For example, work and non-work creativity support have been found to have independent contributions to creative performance (Madjar, Oldham, & Pratt, 2002). Madjar, Oldham, and Pratt's (2002) findings were consistent with earlier research that work support is positively correlated to creative performance. Oldham and Cummings (1996) examined job characteristics in relation to creative performance. They found that employees who worked in complex, challenging jobs, and were given autonomy were found to produce more creative work than their colleagues.

Other studies have shown the relationship of individual characteristics, such as cognitive and personality variables, in predicting creative performance. In general, creative people have been generally described as "self-confident, independent, attracted to complexity, tolerant of ambiguity, persistent, and intuitive" (Osland, Kolb, Rubin, & Turner, 2007, p. 320). More specifically, cognitive abilities such as divergent thinking have been established predictors of creativity (McCrae, 1987; Scratchley & Hakstian, 2001). Also, personality traits, specifically the five factor model of personality, has been found to be linked to creativity (George & Zhou, 2001; McCrae, 1987; Scratchley & Hakstian, 2001). Kelley (2006) found extraversion and openness to experience to be positively related to creativity, whereas George and Zhou (2001) found that employees high on conscientiousness are low in creativity, specifically in situations where supervisors are engaged in close monitoring and coworkers are not supportive of creative behavior (George & Zhou, 2001).

Motivation is another individual difference construct that is considered relevant to creativity. While there have been studies that have examined intrinsic and extrinsic motivation in relation to creative performance (e.g., Cooper & Jayatilaka, 2006), we have not found any studies that have examined goal orientation, a motivational style, that we believe is an important determinant of creative performance.

## **DEFINITION OF GOAL ORIENTATION**

Carol Dweck is one of the pioneers in researching goal orientation. Her original studies were examining children in a school setting. Dweck began her work studying children's responses to failure and noting whether a child had a mastery-oriented or helpless response pattern (Deiner & Dweck, 1978). Deiner and Dweck observed that children with mastery-oriented response patterns responded to failure with solution-oriented self-instructions, maintained a positive affect, and their subsequent performance on the task improved. Conversely, children with a helpless response pattern credited their failure to their lack of ability, showed negative affect, and their subsequent performance deteriorated

Dweck interpreted her findings by theorizing that mastery-oriented and helpless children are driven or motivated by different goals. Dweck proposed that there are two types of goals that children adhere to in achievement situations: learning goals and performance goals. Children with learning goals focus on improving their abilities and are not upset with failing (a mastery-oriented approach), whereas children with performance goals place a high degree of importance in being successful and maintaining positive judgments of their abilities (Elliott & Dweck, 1988).

Vandewalle (1997) extended Dweck and her colleagues work by examining goal orientation in a work context. Vandewalle further distinguished performance goal orientation into two separate subdimensions – proving goal orientation and avoiding goal orientation.

Vandewalle (2001) suggested that employees with a learning goal orientation elicited adaptive behaviors during problem-solving tasks and preferred tasks that developed their abilities. Employees

with a learning goal orientation seek and accept challenging assignments, and are very much likely to engage in challenging goals (Vandewalle, Brown, Cron, & Slocum, 1999).

In contrast, employees who focus on demonstrating their abilities to gain positive feedback and favorable judgment are seen as having a proving goal orientation. And employees who focus on avoiding criticism of their abilities are seen as having an avoiding goal orientation.

## **GOAL ORIENTATION AS A PREDICTOR OF CREATIVITY**

Vandewalle and colleagues (2001) have shown that goal orientation is related to employee performance and that this relationship is mediated by effort, self-efficacy, and goal level. Learning goal orientation has a positive relationship with these mediators, such that, employees with a learning goal orientation are more likely to exert effort, have high self-efficacy, and set difficult goals. In contrast, employees with a proving goal orientation are less likely to exert effort, and their performance is not significantly related to self-efficacy and goal level. Furthermore, employees with an avoiding goal orientation will exert minimal effort, have low self-efficacy and set low goals for themselves.

According to Vandewalle et al. (2001), employees with a learning goal orientation are more likely to be proactive, develop skills in challenging task demands, have the ability to adapt to new environments, effectively process feedback, and be open to new ideas.

Since learning goal orientation has been found to be positively related to task performance (Vandewalle et al., 2001) and since employees with a learning goal orientation embrace challenges, are not afraid of failing, and are open to new ideas, all of which are behaviors that are positively related to creative performance, we hypothesize a positive relationship between learning goal orientation and creative performance.

#### Hypothesis 1: Learning goal orientation is positively related to creative performance.

Unfortunately, research examining the relationship between the two subdimensions of performance goal orientation and task performance has been inconsistent. Some studies have found the relationship to be negative (Vandewalle, et. al, 2001; Ford, Smith, Weissbein, Gully & Salas, 1998), others have found no relationship (Vandewalle, et. al, 2001; Vandewalle, Brown, Cron & Slocum, 1999) and still other studies have found positive relationships (Vandewalle, et. al, 2001; Hoover, Steele-Johnson, Beauregard, & Schidt, 1999).

In general, researchers such as Elliott and Dweck (1988) have established that learning goal orientation is negatively related to performance goal orientation (proving and avoiding), such that individuals who have a proving goal orientation will attempt to face obstacles if they perceive their abilities as high, but would avoid obstacles when they perceive there is an possibility for error or failure (Elliott & Dweck, 1988), while those with an avoiding goal orientation are more likely to give up attempts to find effective ways of overcoming mistakes since they perceive themselves as having a low ability (Elliott & Dweck, 1988). Based on Elliot and Dweck's (1988) findings, people with proving goal orientation on the other hand, will limit themselves to situations that assure success, thus, tempering creativity. People with avoiding goal orientation, on the other hand, may not explore situations and produce creative ideas if there is a possibility of receiving negative feedback. Thus, we propose the following:

Hypothesis 2: A proving goal orientation is negatively related to creative performance.

Hypothesis 3: An avoiding goal orientation is negatively related to creative performance.

## THE NATURE OF OPENNESS TO EXPERIENCE

Openness to experience has been defined as the "extent to which individuals are imaginative, sensitive to aesthetics, curious, independent, thinkers, and amenable to new ideas, experiences, and unconventional perspectives; it distinguishes between those amendable to variety, novelty, routine, and familiar" (George & Zhou, 2001, p. 514).

Openness to experience has been found to be consistently related to creativity (Scratchley & Hakstian, 2001). The relationship of openness to experience to creativity has been studied as a predictor and a moderator. Previous research has shown that openness to experience is positively correlated to creativity (Feist, 1998). Thus, people who have a high level of openness to experience are characterized as being imaginative, artistic, cultured, curious, original, broad-minded, and intelligent (Klein & Lee, 2006). They are also highly motivated and seek new and diverse experiences, and they engage themselves in unfamiliar situations rather than being passive (Costa & McCrae, 1992). George and Zhou (2001) investigated the moderating role of openness to experience in relation to creative performance. They found that creative performance is highest when employees have a high level of openness to experience, received positive feedback, and were presented with heuristic tasks.

Baer and Oldham (2001) found in their study that openness to experience moderated the effect of time pressure and creativity. Baer and Oldham (2001) proposed an inverted U-shaped relation between experienced time pressure and creativity, and openness to experience moderated this relationship. Thus, we hypothesize the following:

Hypothesis 4: Openness to experience moderates the relationship between goal orientation (learning, proving, and avoid) and creative performance.

## METHOD

#### **Participants**

Paper and pencil surveys were distributed to a sample of volunteers from three local not for profit organizations in San Jose, California. Surveys were collected from 108 volunteers across the three organizations: 39.8% (n=43) from the first organization, 13.9% (n=15) from the second organization, and 46.3% (n=50) from the third organization. Fifty nine percent of the participants were female, single (37%), and had finished middle school (25%) or high school (10.2%).

#### Measures

#### Goal Orientation

Goal orientation was measured with 13 items from a scale developed by Vandewalle (1997). All three dimensions (learning, prove, avoiding) were measured on a 5 point scale ranging from 1 = strongly disagree to 5 = strongly agree. Learning goal orientation was measured by five items such as "For me, development of my work ability is important enough to take risks" (Cronbach's alpha = .79). Proving goal orientation and avoiding goal orientation were measured with four items each. An example of a

proving goal orientation item is "I like to show that I can perform better than the other volunteers" (alpha = .76) while items such as "Avoiding a show of low ability is more important to me than learning a new skill" was used to measure avoiding goal orientation (alpha = .80).

#### **Openness to Experience**

Openness to experience was measured using a 10 item scaled developed by Goldberg (1999). The participants were asked if they agreed or disagreed on a 5 point scale with statements such as "I enjoy hearing new ideas." The reliability coefficient for the scale was .74.

#### Creativity

Creativity was assessed using a 13 item measure by Zhou and George (2001). Items such as "I suggest new ways to achieve the goals or objectives for this organization" were asked to be rated with a 5-point scale ranging from 1 = not at all characteristic to 5 = extremely characteristic (alpha = .96).

## RESULTS

The means, standard deviations, and zero-order correlations of the variables are shown in Table 1. Learning goal orientation was positively correlated to creative performance (r = .51, p < .01). Not surprisingly, proving goal orientation was positively correlated with avoiding goal orientation (r = .49, p < .01) but the magnitude of the correlation was moderate suggesting that the two constructs are in fact distinct, which is consistent with previous research (e.g., Vandewalle, 1997).

Variable	Mean	SD	1	2	3	4
Learning goal orientation	3.71	.66				
Proving goal orientation	2.51	.7 <del>9</del>	.06			
Avoiding goal orientation	2.38	.81	10	.49**		
Openness to experience	3.74	.52	.09	26**	14	
Creative performance	2.94	.97	.51**	.07	18	.04

**Table 1:** Descriptive statistics and bivariate correlations

\*\* p < .01, \* p < .05

A hierarchical multiple regression analysis was conducted to test our hypotheses. As seen in Table 1, learning goal orientation was significantly related to creative performance ( $\beta = .52$ , p < .01) in support of hypothesis 1 suggesting that employees with a high learning goal orientation had higher self-report ratings of creative performance than their counterparts. Proving goal orientation was not a significant predictor of creative performance, however, avoiding goal orientation was significant ( $\beta = .19$ , p < .05). Thus, hypothesis 2 was not supported but hypothesis 3 was supported. Hypothesis 4 predicted that openness to experience would moderate the relationship between the three goal orientation dimensions and creative performance. We found a significant two-way interaction between proving goal orientation and openness to experience ( $\beta = .21$ , p < .05), however, we did not find significant interactions with the other two goal orientation dimensions (learning and avoiding), thus hypothesis 4 was partially supported.

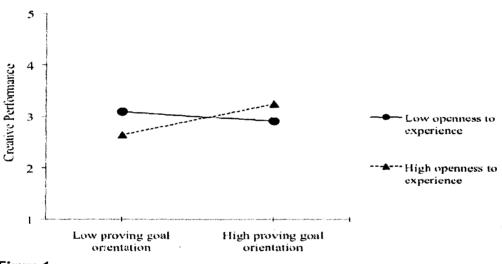
Step	Variable	β	$\Delta R^2$
1	Learning goal orientation	.52**	.29**
	Proving goal orientation	.11	
	Avoiding goal orientation	19*	
	Openness to experience	03	
2	Learning goal orientation x Openness to experience	03	.03
	Proving goal orientation x Openness to experience	.21*	
	Avoiding goal orientation x Openness to experience	13	

Table 2:	Hierarchica	l multiple reg	ression predic	ting creative	performance
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\* p < .05, \*\* p < .01

Note: Betas are reported at Step 2.

To understand the form of the significant interaction, we centered the predictor variables and graphed the interaction. Figure 1 is a depiction of the interaction. When openness to experience is low there is little difference in creative performance between employees low on proving goal orientation compared to those who are high on proving goal orientation. However, when openness to experience is high, creative performance is highest when employees have a high proving goal orientation. In other words, when openness to experience is high, creative performance increases as proving goal orientation increases.





## DISCUSSION

Creativity has been established as a necessity for companies to survive the fast changing business environment (Amabile, 1988, George & Zhou, 2001). In order to increase creativity in the work force, it is vital to understand the different factors that predict creative performance. The purpose of the present

study was to examine the relationship between the three goal orientation constructs (learning, proving, and avoiding) with creative performance.

As hypothesized, learning goal orientation was positively related to creative performance and avoiding goal orientation was negatively related to creative performance. Counter to our hypothesis, we did not find a direct effect of proving goal orientation in relation to creative performance.

We also hypothesized that openness to experience would moderate the relationship between the three goal orientation dimensions and creative performance. We did not find moderator effects for learning goal orientation and for avoiding goal orientation, but we did find that openness to experience was a significant moderator in the relationship between proving goal orientation and creative performance. Our findings suggest that individuals who have a learning goal orientation would seek out challenges given their interest in mastering new tasks, thus openness to experience may not be relevant for these individuals. Employees with an avoiding goal orientation, if given a choice, will choose to avoid any challenges and thus openness to experience is not a deciding factor. However, openness to experience may be an important factor of employees with a proving goal orientation. Individuals with this type of goal orientation may evaluate the task at hand and consider whether they should engage or withdraw from the challenge. Those high on openness to experience are curious (George & Zhou, 2001) and this curiosity may prompt these individuals to take on the challenges, thus giving them opportunities to be more creative.

From a practical standpoint, our findings suggest that goal orientation may be an important factor to consider when hiring employees, especially, employees who are in positions that require a high degree of creativity. Alternatively, there is some research by Dweck and her colleagues to suggest that goal orientations can be altered and individuals can actually learn to be more learning goal oriented. Thus, organizations could develop training programs to promote learning goal orientations.

This study also has implications in assessment and evaluation. As stated earlier, individuals with a learning goal orientation seek feedback in order to improve their skills in mastering a complex task, thus, management should have a constructive feedback system in place to further motivate learning goal oriented employees.

Some limitations of this study need to be mentioned. First, given that this survey data was collected at one time point, we cannot make causal inferences and future research examining the longitudinal nature of these constructs needs to be empirically examined. Furthermore, our measure of creative performance was a self-report measure. It would have been preferable if we had supervisory ratings of employee creative performance or some objective indicator of creative performance. However, while our self-report measure was not ideal, this is the first study to examine goal orientation in relation to creative performance within the work context. In addition, since our participants were volunteers, the need to respond in a socially desirable manner regarding their level of creative performance was reduced.

Since there has been little research in this area, there are numerous avenues for future research. It would be interesting to see whether other personality variables moderate the relationships examined. For instance, are employees who engage in proactive behaviors more likely to be creative when learning goal orientation is high compared to when it is low? Future studies could also examine the relationship between goal orientation and creative performance in nontraditional work arrangements

such as, among employees who telecommute, an increasingly common workplace practice. It would also be worthwhile to conduct experimental research in this area to assess whether an individual's goal orientation in the work context is actually malleable and under what conditions does an employee alter their goal orientation.

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# RELIGIOUS ACTIVITY AS A COPING MECHANISM AMONG HISPANIC EMERGENCY PERSONNEL

## Donna Y. Stringer and Olga Chapa University of Houston-Victoria, USA

## ABSTRACT

While many studies have been conducted about stress in a variety of disciplines, and there have been a number of studies about various aspects of religion, a notably smaller number have examined stress and religion. Even more scarce are the number of studies dedicated to examining the relationship between components of job stress and specific aspects of religious coping. The current study proposes to conduct a preliminary examination of the relationship between job stress and engagement in religious activities among Hispanics. Participants, emergency response personnel from firehouses in the Rio Grande Valley (Texas), were surveyed about their perceptions of job stress (using the 1983 Parker and DeCotiis scale) and about their participation in specific religious activities (attending church, visiting with a priest, visiting with a spiritual healer). Results indicate that attendance at a formally organized service is related to lower levels of perceived time stress. There was no significant relationship with other measures of religious coping mechanisms. The sample, predominantly male, Hispanic, and in highly-demanding jobs, provided a glimpse into the potential impact of religious coping on job-related stress. Limitations are briefly discussed and future research is solicited.

Keywords: Job Stress, Religion, Firefighters, Hispanic.

## RELIGIOUS ACTIVITY AS A COPING MECHANISM AMONG HISPANIC EMERGENCY PERSONNEL

Studies have been conducted about stress in a variety of disciplines, ranging from the broad sociology, psychology, medical, and business disciples, to those directed toward a specific group (e.g., law enforcement, military, and nurses) (Agüir & Pérez-Hoyos, 2007; Lazarus & Folkman, 1984; Lewis-Fernández et al., 2008; Parker & Decotiis, 1983; Regehr et al., 2007; Varvel et al., 2007; Walsh et al., 2009). In business, there is a focused concern on job stress, i.e., stress that is caused by elements of the job. While stress created by buying a house, attending school, and having trouble with your in-laws certainly interferes with your ability to cope, researchers and practitioners in business are more concerned with the ills wrought upon individuals because of occupational characteristics and with the coping mechanisms best suited for employee well being.

There have been many studies about various aspects of religion, with most of these occurring within the sociology and psychology disciplines. For example, a number of recent articles have been inspired by the tragedy of the 9/11 attack on the nation. Others focus on youths and adolescents in disadvantaged situations. Still more examine religion with respect to serious illness, and to bereavement. While there have been investigations into life stress and religion (e.g., Park, Cohen, & Herb, 1990; Powers, Cramer,