SYMBOLIC IMMORTALITY AT WORK: UNDERSTANDING THE ANTECEDENTS OF
GENERATIVE JOB PERFORMANCE

by

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(Under the Direction of Lillian Eby)

ABSTRACT

Meaningfulness in the workplace is a well-known topic in organizational science, but understanding how meaningfulness is related to mortality awareness, as suggested by existentialist philosophers, remains unexamined. The current study examined the impact that mortality awareness may have on work behaviors in a death salient occupation (i.e., substance-abuse counseling). The effects of death reflection, calling work orientation, and mentoring were explored using hierarchical multiple regression analyses. Results found a significant three-way interaction effect of death reflection, calling, and mentoring on task performance. Simple slopes analyses showed the relationship between death reflection and task performance was positive when calling and mentoring were high and negative when calling was high but mentoring was low. Several theoretical implications and directions for future research are discussed.

INDEX WORDS: Mortality awareness, Generativity, Meaningful work, Generative work behaviors, Calling, Mentoring
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by

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For my family: Nathanial, Teresa, Michael, Stella, Martha, Wes, Henry, and Red. Thank you for always supporting and believing in me.
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CHAPTER 1

INTRODUCTION

Symbolic immortality has been described as a goal that centers on making a lasting and meaningful contribution to the world and the lives of others; and that when achieved, allows individuals to transcend their own existence (Wade-Benzoni, 2006). Understanding how people construct “meaning” and the processes through which behaviors are used to symbolically articulate personal meaning have been a long-held topic of interest for scholars across numerous disciplines (e.g., Philosophy, Psychology, and Sociology). More recently, organizational researchers have shifted the exploration of meaningfulness to the context of work (Berg, Grant, & Johnson, 2010; Dobrow & Tosti-Kharas, 2011; Fried & Ferris, 1987; Grant, 2007; Hackman & Oldham, 1976; Weick & Roberts, 1993; Wrzesniewski, McCauley, Rozin, & Schwartz, 1997). Meaningful work has been conceptualized as work that is perceived by the employee to be valuable, socially impactful, and an integral part of the individual’s sense of self (Bunderson & Thompson, 2009; Duffy & Sedalacek; Grant, 2007; Pratt & Ashforth, 2003). Meaningful work can also be thought of as arising from characteristics of the work (e.g., skill variety, task identity, and task significance) that allows the employee to view their work as valuable, important, and worthwhile (Fried & Ferris, 1987; Hackman & Oldham, 1975).

Existentialism scholars have often discussed death and awareness of one’s own mortality as important factors in the perception of meaningfulness. Traditional existentialists perceived death as undermining the meaningfulness of life. Contrary to this position, some existentialists (e.g., Heidegger and Kierkegaard) believed that death and mortality awareness, if successfully
confronted, facilitated the perceived meaning in life by allowing individuals to discover what was truly meaningful to them (e.g., connecting with others) and by instilling a sense of control over their own lives. For these scholars, truly acknowledging one’s mortality meant understanding that dying was a distinctly singular experience (i.e., no one else can die your death for you). This realization was posited to have an individuating effect that inspired people to take charge of their lives. Taking steps to positively affect the lives of other people was considered one mechanism for gaining control and fully engaging in one’s life. Organizational scholars have begun to expand on this literature by discussing the workplace effects of death and mortality awareness on personal and workplace meaningfulness (Grant & Wade-Benzoni, 2009; Reedy & Learmonth, 2011; Wrzesniewski, 2002).

Several studies have examined the link between death, mortality awareness and work-related outcomes. Chisolm, Kasl, and Eskenazi (1983) found that employee presence during a potentially lethal workplace crisis (i.e., the Three Mile Island nuclear accident) predicted greater job tension compared to employees working at an alternate job site. By contrast, an exploration of police officers’ reactions to dangerous work found that perceptions of hazardous and potentially lethal work predicted greater task significance, variety, and feedback (Jermier, Gaines, & McIntosh, 1989). However, Jermier et al. (1989) found that perceptions of dangerous work had detrimental effects on employee emotional exhaustion, organizational commitment, and pay satisfaction, after controlling for task motivation factors. Finally, Elder and Clipp (1988) found that combat exposure among military soldiers predicted increased bonding and prosocial behaviors between coworkers. However, there are several limitations in the contribution of these studies to understanding the effects of death and mortality awareness within organizations. First, none of these studies explicitly measure death or mortality awareness. Second, these
studies have suggested that death and mortality awareness are related to both beneficial and detrimental workplace outcomes, yet it is not clear how or why.

In an effort to integrate existing literature into a conceptual model, Grant and Wade-Benzoni (2009) proposed a contingency model for understanding the differential effects of death and mortality awareness on work outcomes. While this model is suggestive of a positive association between mortality awareness orientation and generative work behaviors, it has never been empirically tested. The present research adds to the literature in three primary ways. First, this study provides the first empirical test of a core aspect of the conceptual model proposed by Grant and Wade-Benzoni (2009). Second, it expands on the Grant and Wade-Benzoni model by examining mentoring received (i.e., psychosocial and career-related) as an additional boundary condition of the relationship between mortality awareness, calling orientation and generative behaviors. Third, this study contributes to theorizing on meaningful work by integrating theories of mortality awareness, work orientation, and mentoring as a method of understanding antecedents of meaningful task and contextual job performance. Prior to this study, no other studies have empirically tested the association between mortality awareness, work orientation, and mentoring relationships. This model integrates several aspects of the meaningful work literature (e.g., calling, workplace relationships) and tests a novel way of conceptualizing meaningful workplace behaviors.

Understanding the effects of death and mortality awareness in the workplace is important for several reasons. There are numerous occupations in which death is a frequent and obvious aspect of the job (e.g., combat military, emergency medical workers, funeral home or hospice workers); and some in which death is less prevalent or overt, but still an integral aspect of the work context (e.g., substance use disorder [SUD] counselors, hospital clerical staff, or life
insurance representatives). Mortality awareness is suggested to manifest in the workplace as a result of both chronic and acute experiences in which the individual is either personally or vicariously exposed to death or near-death incidents (Grant & Wade-Benzi, 2009). The breadth of contexts that facilitate mortality awareness suggests that this is a prevalent phenomenon in any organization or occupation in which death occurs, regardless of its form. Understanding mortality awareness and work outcomes will be especially relevant to individuals working within death-prevalent occupations. Furthermore, empirically linking mortality awareness with work outcomes will extend and bridge current theories on motivation, work orientation, meaningful work, and mortality awareness. Finally, mortality awareness may be used as a motivational factor that can be trained, allowing organizations another method of tapping into employee potential to the benefit of the organization, workgroup, and his or her own professional development.
CHAPTER 2
THEORETICAL FRAMEWORK

Contingency Model of Death Awareness at Work

Grant and Wade-Benzoni (2009) propose a conceptual model that serves to explain the differential effects of mortality awareness as a motivational force on work outcomes. The authors suggest that there are two orientations towards one’s own mortality: anxious and analytical. This model incorporates two existing theories to explain two patterns of relationships between death, mortality awareness, and work behaviors that stem from each of these mortality awareness orientations. Terror Management Theory (TMT; Pyszczynski, Greenberg, & Soloman, 1997) is used to explain the set of predictions associated with an anxious mortality awareness orientation (i.e., death anxiety). That is, when one is frightened by the thought of his or her own death, this motivates self-protective tendencies and leads to withdrawal behaviors in the workplace (i.e., absenteeism, tardiness, and turnover). Generativity Theory (McAdams & St. Aubin, 1992) is used to explain the set of predictions associated with the analytical mortality awareness orientation (i.e., death reflection). It suggests that mortality awareness is associated with a desire to be pro-social in ways that positively impact the lives of others and to build close, meaningful social bonds (McAdams & St. Aubin, 1992, 1998). Used in Grant and Wade-Benzoni’s model of mortality awareness at work, Generativity Theory suggests that individuals who view their mortality analytically (i.e., are death reflective) will be more motivated by pro-social and agentic factors, thus resulting in more generative work outcomes (e.g., desire to mentor, relationally-oriented job performance, helping behaviors, and employment in a service industry). The current
study focuses on the generative portion of Grant and Wade-Benzoni’s model in effort to shed light on a particularly unexamined phenomenon: the link between a death reflective mortality orientation and generative work outcomes. While there has been an abundance of research examining Terror Management Theory (Arndt, Liberman, Cook, & Solomon, 2005; Cohen, Solomon, Maxfield, Pyszczynski, & Greenberg, 2004; Greenberg, Solomon, & Pyszczynski, 1997; Jonas, Schimel, Greenberg, & Pyszczynski, 2002; McGregor, et al., 1998), much less research has focused on understanding the effects of death reflection, particularly in organizational settings. See Figure 1 for a conceptual model of proposed hypotheses.

![Figure 1. Conceptual Model of Study Hypotheses.](image-url)
Boundary Conditions

The generative predictions in Grant and Wade-Benzoni’s (2009) model are presented with several boundary conditions. First, work orientation is suggested to affect the relationship between death reflection and generative work outcomes by influencing the allocation of time and energy at work. Three work orientations are discussed by Grant and Wade-Benzoni. Job orientation suggests that individuals do not highly identify with work and are less likely to carry out meaningful behaviors in the workplace (Wrzesniewski & Dutton 2001; Wrzesniewski, et al., 1997). Career orientation suggests that employees view work as a source of prestige (Wrzesniewski, et al., 1997), and in the presence of death reflection, these individuals should engage in generative work behaviors, but only those that also elevate their sense of status and pride (e.g., mentoring others). Calling orientation suggests that work is a source of meaning, identity, and pro-socialness and thus, individuals with this orientation should engage in more pro-social and meaningful behaviors in the workplace (Grant 2007; Wrzesniewski & Dutton 2001), regardless of the rewards or status associated with those behaviors. The main distinction between career and calling work orientations is that the latter is driven by the desire to help others, while the former is driven by the desire to be recognized for helping others. This suggests that calling work orientation may interact with death reflection to produce the most meaningful generative work behaviors because both are sources of intrinsic pro-social motivation. A death reflective individual will be motivated to make an important positive impact on other people’s lives, and if this individual also has a calling orientation towards work, he or she will be additionally motivated to carry out these behaviors in the workplace as a way of creating personal meaning.
A second boundary condition associated with the mortality awareness – generativity relationship proposed by Grant and Wade-Benzoni (2009) is job design. The authors suggest that job design opportunities will determine the extent to which employees will be able to express their generative tendencies within the workplace. Jobs with higher levels of task significance and opportunities to be impactful and pro-social are inherently meaningful (Grant, 2007; Hackman & Oldham, 1980) and should facilitate the need of employees with calling work orientations to engage in meaningful behaviors at work, as well as the desire of death reflective individuals to meaningfully help and connect with others. More meaningful work designs are proposed to result in the engagement of more generativity in the workplace.
CHAPTER 3
RESEARCH HYPOTHESES

Mortality Awareness

Mortality awareness is a concept that has enjoyed much musing by scholars over the past several hundred years, most notably by existentialism philosophers (e.g., Heidegger, Kierkegaard, Sartre). Mortality awareness is the state of mind characterized by thoughts of one’s own death. Following in the existentialism roots of its incipient stages, death awareness has generally been viewed as a negative process that engenders negative reactions. The emergence of Ernest Becker’s (1973) Pulitzer Prize-winning work on death denial spurred resurgence in the examination of death from a social-psychology perspective. Consequently, the initial bulk of empirical evidence on death orientation revolved around anxiety and theories regarding emotional responses to death (i.e., terror management theory, TMT; Greenberg, Koole, & Pyszczynski, 2004; Greenberg et al., 1997). Individuals who score high in death anxiety tend to exhibit more self-protective behaviors and motivations (e.g., derogating dissimilar others and seeking out similar individuals). More recently, scholars have begun to use mortality awareness and generative theories to explain individual differences in death orientation, most specifically, death reflection.

Death Reflection

Death reflection is a type of mortality awareness that captures an individual’s tendency to view his or her own death from a more analytical perspective, where understanding how one sees death elucidates what one wants in life (Cozzolino, Staples, Meyers, & Samboceti, 2004; Grant
In other words, death reflection allows one to examine his or her life with regards to meaning and purpose. Often times, for one who is death reflective, the salience of death can result in pro-social behaviors such as the desire to belong or connect with others and the desire to make positive impacts on others’ lives (McAdams & de St. Aubin, 1992, 1998). Empirical research supports this idea as death reflection has been linked to generative behaviors and attitudes. Cozzolino et al. (2004) found that the manipulation of death reflection in a laboratory setting significantly reduced greedy and selfish behavior (i.e., taking more raffle tickets intended for a group, for oneself) among college students with high extrinsic value orientation. The authors also found that individuals exposed to the death reflection manipulation tended to subsequently write about general perspective taking and thoughts of others.

Stemming from developmental and personality psychology (Erikson, 1963, 1982), generativity is said to emerge as an individual ages and becomes more aware of his or her own mortality. Additionally, generativity has been associated with death awareness in the form of near-death experiences (Ring & Elsaesser Valarino, 1998). The authors found that individuals who had near-death experiences reported an increased desire to teach or help others in some form. Overall, the link between death reflection and generativity may be viewed as such: death reflection is a cognitive and proactive state that allows one to respond to mortality cues by finding ways to contribute to others and make a lasting impact (Grant & Wade-Benzoni, 2009). In essence, death reflection inspires the individual to achieve “symbolic immortality” by affecting others’ lives through generativity.
Generative Work Behavior

Generative behaviors include those which are pro-social and impactful in nature (McAdams & St. Aubin, 1992). In the workplace, Grant and Wade-Benzoni (2009) suggest these behaviors may manifest as helping behaviors (e.g., organizational citizenship behaviors or desire to mentor) or a shift from a less generative occupation (e.g., accounting) to a more generative occupation (e.g., nursing). The current study operationalizes generativity in two ways. First, several aspects of SUD counseling task performance are generative. SUD counseling is a service occupation, where job tasks revolve around supporting the success, growth, and well-being of patients who are struggling with addiction to drugs and/or alcohol. This type of job requires the counselor to not only have the technical skills to help the patient (e.g., knowledge of treatment procedures, legal matters, or potential medical issues), but to also be able to connect and care for the patient on a more personal level (e.g., helping the patient gain self-esteem and a new sense of self, facilitating empowerment, or helping the patient develop new life skills; Powell & Brodsky, 1993). SUD counselors’ task performance is generative because it allows the counselor to have both a profound impact on the lives of their patients, as well as the ability to develop a deep and meaningful connection with another person.

Organizational citizenship behaviors (OCBs) directed at fellow employees may be another form of generative work behavior. OCBs are not mandatory, not necessarily rewarded by the organization, but benefit both employees and the organization alike (Organ, 1998). OCB-I (organizational citizenship behaviors - individual) refers to these types of behaviors that are targeted toward other individuals directly. OCB-I has been referred to as “altruism” in prior research (Organ & Konovsky, 1989; Smith, Organ, & Near, 1983), which alludes to its nature of being concerned with others, wanting to make a positive difference by helping those in need, and
the willingness to take action to improve the situation of other employees. This may take the form of helping others with their workloads, taking time to socialize new employees, or just listening when another employee is upset (Williams & Anderson, 1991). OCB-Is are generative because they demonstrate the employee’s desire to both connect with and help others.

Together, SUD counseling and OCB-Is allow the employee to engage in meaningful behaviors in the workplace that are directed at both clients and coworkers. No known empirical research has examined the effects of death reflection on generative work behaviors. Generativity theory (McAdams & St. Aubin, 1992), which suggests that death awareness is linked to generativity, and death reflection (Grant & Wade-Benzoni, 2009) which specifies the type of death awareness orientation associated with generative work behaviors, are used to predict:

*Hypothesis 1:* Death reflection is positively related to generative work performance in the form of a) supervisor-rated task performance and b) supervisor-rated organizational citizenship behaviors-individual (OCB-Is).

**Calling Work Orientation as a Boundary Condition**

A career calling or calling work orientation is conceptualized as the feeling or belief that one is engaged in the type of work that one “should” be doing and that this work provides a sense of deep meaning, identity, and involvement (Hall & Chandlar, 2005; Wrzesniewski, 2003). Calling represents one’s perception that work is one’s purpose in life (Hall & Chandlar, 2005) and as psychological engagement in the meaningfulness of one’s work (Dobrow, 2004;; Wrzesniewski et al., 1997). Calling orientation is further suggested to result in the expression of more meaningful and pro-social behaviors within the workplace (Grant 2007; Wrzesniewski & Dutton 2001) and has been found to benefit employee work and career outcomes (Duffy & Sedlacek, 2007; Wrzesniewski et al., 1997).
The positive effects of death reflection on generative behaviors, which is a motivational factor representing the need to be both pro-social and agentic, should be heightened by calling orientation because calling suggests that the individual views the workplace as a means of tangibly expressing the motivational desires associated with death reflection. The motivation to be both pro-social and agentic is complemented by the perspective that work is an outlet for meaningful behavior. When an individual possesses both a calling and death reflective orientation, he or she will see workplace behaviors as methods for fulfilling their need to help others. This leads to the suggested prediction:

*Hypothesis 2:* Calling work orientation will moderate the relationship between death reflection and a) supervisor-rated job performance and b) supervisor-rated OCB-Is.

Specifically, the positive relationship between death reflection and supervisor-rated generative behaviors will be stronger when calling work orientation is higher.

**Job Design and Mentoring as Additional Boundary Conditions**

Job design is posited as a second boundary condition in the original model proposed by Grant and Wade-Benzoni (2009). In their original model, job design is suggested to affect the interaction between work orientation and death reflection by determining the extent to which the employee has the opportunity to help others and perceive task significance. That is, in order for generativity to manifest at work, it is not enough for the employee to simply possess the motivation to pro-socially impact the lives of others or to feel a sense of calling in one’s career. An employee must possess both of these characteristics and have the ability to act out these motivations within the context of work.

However, job design may not serve as the only mechanism to induce a sense of task significance. Described as “the degree to which the job has a substantial impact on the lives …
other people” (Hackman & Oldham, 1975, p. 161), task significance may be achieved in other ways. For example, gaining the skills, knowledge, and experiences associated with performing service jobs successfully may allow employees to have a more visible impact on their patients. Additionally, having coworkers or supervisors that perceive the work as significant may also help communicate task significance to the individual. Finally, having role models who are highly engaged in their service professions or who display positively impactful behaviors may also communicate task significance. All of these processes (e.g., learning, communication, and role-modeling) occur within mentoring relationships at work.

A mentorship is a developmental relationship that occurs between an employee and a higher-ranking, more knowledgeable employee that is designed to facilitate personal and professional development in the employee (e.g., Allen, Eby, Poteet, Lentz, & Lima, 2004) and facilitate learning (Eby, Brown, & George, in press). Mentorships can be formally or informally arranged. Formal mentorships are arranged by the organization (e.g., supervisor-subordinate assignments, mentoring program); whereas informal mentorships occur spontaneously between employees without the intervention or direction of the organization.

Mentoring within mental health (e.g., SUD) counseling typically occurs as formal clinical supervision. Clinical supervision is the direct supervision of a mental health counselor by a senior clinical practitioner SUD counseling is unique from other forms of mental health services in that it does not require the counselor to have specific requirements (e.g., a master’s degree, certification or licensure) to have direct contact with patients (Eby, McCleese, Baranik, & Owen, 2007; Rothrauff, Abraham, Bride, & Roman, 2011; Substance Abuse and Mental Health Administration [SAMHSA], 2009). As such, many substance abuse counselors rely on the mentoring provided by their clinical supervisor to gain the skills, knowledge, and abilities to effectively care for their patients. Effective
clinical supervision (ECS) has been described as a working alliance between the counselor and supervisor (Efstation, Patton, & Kardash, 1990), where the clinical supervisor is able to help the professional development of the counselor by providing task and social support. Empirical evidence has also shown that aspects of ECS are positively associated with SUD counselor job performance (Laschober, Eby &, Sauer, 2013).

Two distinct functions of mentoring, psychosocial and career-related support (Kram, 1985; Ragins & McFarlin, 1990) and have been suggested to be a large part of ECS (Laschober, Eby &, Sauer, 2013). Psychosocial mentoring encompasses the behaviors of the mentor that are more interpersonal in nature and affect the protégé’s sense of identity, competence, and belonging within a specific profession (Kram, 1985). Psychosocial support manifests as clinical supervisors act as role models, encourage and uplift, and provide general social support for counselors’ professional development. Career-related mentoring represents the behaviors of the mentor that provide guidance, learning experiences, upward mobility within the organization, and protection (Kram, 1985). Clinical supervisors who provide career-related support give task-related feedback and suggestions, place the counselor in challenging or visible assignments, and personally sponsor (e.g., nominate for promotion) the career development of the counselor.

The receipt of mentoring from one’s clinical supervisor may operate in a similar way to work design in Grant and Wade-Benzoni’s (2009) model for several reasons. By sharing their own meaningful perceptions of the work and its impact on others, a clinical supervisor may be able to instill in the counselor a sense of task significance. For example, clinical supervisors may be able to communicate the high level of impact that SUD counseling can have on the lives of patients. They may also help facilitate a sense of worth and belongingness among SUD counselors by affirming the importance of this type of work despite its relatively low social
status compared to other healthcare occupations and by validating counselor efforts in a high burnout occupation. Furthermore, due to their position within the organization, clinical supervisors may be able to provide counselors with opportunities to meaningfully help and impact the lives of others by placing them in difficult assignments, providing specific guidelines and recommendations for methods of treatment, and by teaching counselors the relational skills necessary to connect with others while performing this service work.

Taken together, this suggests that mentoring from one’s clinical supervisor may provide the opportunity for counselors to engage in meaningful work. In the context of the present study, SUD counselors who are death reflective (i.e., motivated to positively impact the lives of other people), who view their work as a calling (i.e., want to engage in meaningful behaviors at work), and who receive more mentoring support (i.e., have greater opportunity to experience meaningful work) are expected to display more generative work behaviors. This leads to the third prediction:

*Hypothesis 3:* The receipt of greater psychosocial mentoring support will moderate the relationship between death reflection, calling work orientation and a) supervisor-rated job performance and b) supervisor-rated OCB-Is. Specifically, the positive relationship between death reflection and calling work orientation on supervisor-rated generative behaviors will be stronger when psychosocial mentoring support is higher.

*Hypothesis 4:* The receipt of greater career-related mentoring support will moderate the relationship between death reflection, calling work orientation and a) supervisor-rated job performance and b) supervisor-rated OCB-Is. Specifically, the positive relationship between death reflection and calling work orientation on supervisor-rated generative behaviors will be stronger when career-related mentoring support is higher.
CHAPTER 4

METHOD

Sample

Data were collected from 347 SUD counselors and their clinical supervisors. Participants were employed across seventeen nationally-located treatment centers and were part of a larger longitudinal study funded by the National Institute of Drug Abuse (NIDA). The majority of counselors were female (59%) and White (60%). On average, counselors were 43.51 (SD = 12.39) years old and worked 41.14 (SD = 6.20) hours per week, married (37%), possessed an advanced degree (46%), White (70%), 47.19 (SD = 11.55) years old, married (49%), possessed an advanced degree (68%), and worked an average of 45.25 (SD = 9.16) hours per week. The response rate was 76% for counselors and 84% for supervisors. Treatment centers, on average, were non-profit organizations (88%), not located on a hospital campus (82%), accredited (64%), employed 57 counselors and served 8,804 patients.

Procedure

Data were gathered using paper-and-pencil surveys administered on-site by trained research assistants. Participants were identified by a coordinating supervisor within each treatment center and a meeting time and date was set up to administer and collect the surveys in one session. Counselors who wanted to participate but were unable to attend the scheduled survey administration were provided with materials to complete and return the survey via postal mail. Clinical supervisors provided job performance evaluations of their respective counselors as part of their survey. Each survey took approximately one hour to complete and the treatment
centers were paid $50.00 and $75.00 for counselor and clinical supervisor survey completion, respectively. The researchers encouraged the organizations to contribute the reimbursement to resources that would directly benefit their counselors (e.g., enhancements to lounge or recreation room).

Measures

All measures have been published in previous research and displayed an acceptable range of reliability (i.e., $\alpha = .88 - .97$) in the current study. All measure responses are anchored on a one (strongly disagree) to five (strongly agree) Likert scale unless otherwise specified. The full scale items are provided in Appendix A.

Counselor Measures

Mortality awareness. Mortality awareness in the form of death reflection was assessed using the eight-item Death Acceptance measure (Integration subscale; Kluge & Sinha, 1987). Sample items include “Recognizing the fact of my inevitable death helps me grow as a person” and “My life has more meaning because I accept the fact of my own death.” ($\alpha = .90$).

Work orientation. Counselors’ work orientation in the form of career calling was assessed using Dobrow and Tosti-Kharas’ (2011) twelve-item Calling scale. Sample items include: “My existence would be much less meaningful without my involvement in substance abuse counseling”, “The first thing I often think about when I describe myself to others is that I’m a substance abuse counselor”, and “Helping others with their drug addictions is a deeply moving and gratifying experience for me.” ($\alpha = .88$).

Mentoring received. Mentoring functions were assessed using Ragins and McFarlin’s (1990) twenty-seven item measure. More specifically, twelve items comprise the psychosocial subscale and fifteen items makeup the career-related subscale. Due to the high correlation
between psychosocial and career-related subscales, one overall scale of mentoring received was computed for analyses. Sample psychosocial items include, “My mentor provides support and encouragement” and “My mentor accepts me as a competent professional.” Sample career-related items include, “My mentor helps me learn about the field of substance abuse” and “My mentor gives me tasks that require me to learn skills.” (α = .97).

**Supervisor Measures**

**Counselor job performance.** Clinical supervisory ratings of counselor job performance was assessed using Laschober and Eby’s (2012) twenty-item measure of substance-abuse counselor job performance. Sample items include “This counselor contributes to a positive team environment by working well with other counselors”, “This counselor develops client treatment plans based on observations, clinical experience, and client histories”, and “This counselor intervenes as an advocate for clients in crisis situations and other non-routine events.” (α = .95).

**Counselor organizational citizenship behaviors-individual (OCB-I).** Counselor OCB-I was assessed using Williams and Anderson’s (1991) seven-item measure. This measure asks the counselor’s clinical supervisor to rate each respective counselor’s organizational citizenship behaviors towards other employees. Sample questions from this measure include: “This counselor goes out of the way to help new employees” and “This counselor takes time to listen to employees’ problems and worries.” (α = .88).

**Control variables.** Age has been suggested to be associated with generativity (McAdams & St. Aubin, 1992) and was significantly related to outcomes variables, as was recovery from substance abuse. Thus, both were included as control variables. Job tenure was not significantly related to outcome variables and was therefore excluded as a control variable.
CHAPTER 5

ANALYSES

I first centered the three predictor variables to remove nonessential multicollinearity (Cohen, Cohen, & West, 2003; Marquadt, 1980). I then examined the means, standard deviations and correlations among all study variables. Counselor age and recovery status were significantly correlated with the other variables, and were included as control variables. Tenure was not significantly related to any variables and was consequently excluded from analyses. Four separate hierarchical moderated regression models for each dependent variable were used to examine the effects of death reflection, calling work orientation, and mentoring on task performance and OCB-I. Hypotheses were tested using hierarchical multiple regression (Aiken & West, 1991; Cohen, Cohen, West, & Aiken, 2003). Control variables were entered in step one, followed by the first-order effects (i.e., death reflection, calling work orientation, and mentoring received) in step two, followed by the second-order and third-order interaction terms in steps three and four, respectively. Regression coefficients were examined when the regression models were statistically significant. Changes in $R^2$ were also examined between steps to determine if the addition of more predictors increased the amount of variability explained in task performance and OCB-I. Simple slopes were subsequently analyzed and plotted to depict the nature of significant interaction effects.
CHAPTER 6

RESULTS

Bivariate Correlations

Variable means, standard deviations, and bivariate correlations are presented in Table 1. Job tenure (in months) was not significantly related to either task performance \( (r = .05, p = .36) \) or OCB-I \( (r = -.04, p = .48) \), and thus was omitted as a control variable in the regression analyses. Age was not significantly related to task performance \( (r = -.07, p = .21) \) but was significantly associated with OCB-I \( (r = -.15, p < .01) \). Recovery status was significantly related to task performance \( (r = -.17, p < .01) \), but not OCB-I \( (r = .04, p = .52) \). Age and recovery status were thus included as control variables in the models predicting OCB-I and task performance, respectively. Death reflection was significantly related to calling \( (r = .19, p < .001) \), mentoring \( (r = .16, p < .01) \), and OCB-I \( (r = .11, p < .05) \). Calling was positively related to mentoring \( (r = .21, p < .001) \). Mentoring was significantly related to counselor task performance \( (r = .29, p < .001) \) and OCB-I \( (r = .35, p < .001) \). Counselor OCB-I was significantly related to task performance \( (r = .40, p < .001) \).
Table 1. Variable Means, Standard Deviations, and Intercorrelations

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Job tenure (months)</td>
<td>52.40</td>
<td>57.69</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Age</td>
<td>43.51</td>
<td>12.39</td>
<td>.42**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Recovery Status</td>
<td>.43</td>
<td>.50</td>
<td>.07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Death Reflection</td>
<td>3.47</td>
<td>.80</td>
<td>.009</td>
<td>.14*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Career Calling</td>
<td>3.41</td>
<td>.66</td>
<td>.06</td>
<td>.15**</td>
<td>.32**</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>6. Mentoring</td>
<td>3.53</td>
<td>.76</td>
<td>-0.05</td>
<td>-0.05</td>
<td>.04</td>
<td>.16**</td>
<td>.21**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Task Performance</td>
<td>3.32</td>
<td>.43</td>
<td>.05</td>
<td>-0.07</td>
<td>-0.17**</td>
<td>.004</td>
<td>-0.03</td>
<td>.30**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. OCB-I</td>
<td>3.66</td>
<td>.71</td>
<td>-0.04</td>
<td>-0.15**</td>
<td>.04</td>
<td>.11*</td>
<td>.10</td>
<td>.10</td>
<td>.40**</td>
<td>.88</td>
</tr>
</tbody>
</table>

Note: N = 346 Alpha reliabilities are listed on the diagonal and italicized. *p < .05, ** p < .01

Hierarchical Multiple Regression

Results from the hierarchical regression analyses predicting task performance and OCB-I, are presented in Tables 2 and 3, respectively. Models 1a - 4a represent the regression equations predicting task performance that include the stepwise addition of controls, main effects, two-way interactions, and three-way interaction terms, respectively. Models 1b - 4b represent the same sets of equations predicting OCB-I.

Model 1a, which included the regression of task performance on recovery status was significant, F(1, 345) = 10.29, p < .01. Recovery status was a significant predictor of task performance ($\beta = -.17$, p < .01). Model 1b, which included the regression of OCB-I
on age was also significant, $F(1, 345) = 8.50$, $p < .01$. Age was a significant predictor of OCB-I ($\beta = -.16$, $p < .01$).

Model 2a, which added the main effects of death reflection, calling, and mentoring on task performance was statistically significant, $F(4, 342) = 11.54$, $p < .001$; and adding the main effects significantly increased variance explained by 9% ($\Delta R = .09$, $p < .001$). The regression coefficient for death reflection was not significant ($\beta = -.03$, $p = .60$). Thus, Hypothesis 1a was not supported. Model 2b, which added the same main effects on OCB-I was significant, $F(4, 342) = 14.56$, $p < .001$. Adding the main effect terms added 12% incremental variance ($\Delta R = .12$, $p < .001$), but the regression coefficient for death reflection ($\beta = .07$, $p = .16$) was not significant. Hypothesis 1b was not supported.

Model 3a, which added the two-way interaction effects between death reflection and career calling, death reflection and mentoring, and calling and mentoring on task performance, was significant, $F(7, 339) = 7.15$, $p < .001$. However, the addition of the two-way interaction terms did not produce significant incremental variance ($\Delta R^2 = .01$, $p = .29$). The regression coefficient for the death reflection and career calling interaction was not significant ($\beta = .03$, $p = .58$). Thus, Hypothesis 2a was not supported. Model 3b, which included the same two-way interaction terms predicting OCB-I was significant, $F(7, 339) = 9.44$, $p < .001$, but change in $R^2$ by adding the two-way interaction terms was not significant ($\Delta R^2 = .02$, $p = .07$). The interaction term for death reflection and career calling was not significant ($\beta = .03$, $p = .62$). Hypothesis 2b was not supported.

Model 4a, which added the three-way interaction (i.e., death reflection, career calling, and mentoring) predicting task performance was significant, $F (8, 338) = 6.96$, $p < .001$. The three-way interaction term was significant ($\beta = .12$, $p < .05$) and added significant incremental
variance ($\Delta R^2 = .01, p < .05$). See Figure 2 for a plot of the simple slopes of the regression of task performance on death reflection, calling, and mentoring. The final model (i.e., 4a) accounted for 12% of the variance in substance abuse counselor task performance ($R^2 = .14, R^2_{\text{Adjusted}} = .12, p < .001$). Model 4b, which added the three-way interaction term predicting OCB-I was also significant, $F(8, 338) = 8.35, p < .001$. Adding the three-way interaction term did not yield a significant increase in variance ($\Delta R^2 = .00, p = .39$). Furthermore, although not hypothesized, a significant two-way interaction was found between calling and mentoring when predicting OCB-I ($\beta = -.14, p < .01$). See Figure 3 for a plot of this two-way interaction.
Table 2

*Hierarchical Regression Results for Variables Predicting Task Performance*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1a</th>
<th>Model 2a</th>
<th>Model 3a</th>
<th>Model 4a</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\beta$</td>
<td>$\beta$</td>
<td>$\beta$</td>
<td>$\beta$</td>
</tr>
<tr>
<td>Personal Recovery</td>
<td>-.17*</td>
<td>-.17*</td>
<td>-.18*</td>
<td>-.18*</td>
</tr>
<tr>
<td>Death Reflection</td>
<td>-.03</td>
<td>-.01</td>
<td>-.03</td>
<td></td>
</tr>
<tr>
<td>Calling</td>
<td>-.04</td>
<td>-.04</td>
<td>-.04</td>
<td></td>
</tr>
<tr>
<td>Mentoring</td>
<td>.31**</td>
<td>.30**</td>
<td>.28**</td>
<td></td>
</tr>
<tr>
<td>Death Reflection X Calling</td>
<td></td>
<td>.03</td>
<td>.03</td>
<td></td>
</tr>
<tr>
<td>Death Reflection X Mentoring</td>
<td></td>
<td>.07</td>
<td>.08</td>
<td></td>
</tr>
<tr>
<td>Calling X Mentoring</td>
<td></td>
<td>.04</td>
<td>.02</td>
<td></td>
</tr>
<tr>
<td>Death Reflection X Calling X Mentoring</td>
<td></td>
<td></td>
<td>.12*</td>
<td></td>
</tr>
</tbody>
</table>

| $R^2$                            | .03       | .12       | .13       | .14       |
| $\Delta R^2$                     | .03*      | .09**     | .01       | .01*      |
| Adjusted. $R^2$                  | .03       | .11       | .11       | .12       |

*Note. * $p < .05$, ** $p < .01$.**
Table 3

Hierarchical Regression Results for Variables Predicting Organizational Citizenship Behaviors – Individual (OCB-I)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1b</th>
<th>Model 2b</th>
<th>Model 3b</th>
<th>Model 4b</th>
</tr>
</thead>
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<td></td>
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<td>β</td>
<td>β</td>
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<tr>
<td>Age</td>
<td>-.16*</td>
<td>-.16*</td>
<td>-.16*</td>
<td>-.15*</td>
</tr>
<tr>
<td>Death Reflection</td>
<td>.07</td>
<td>.08</td>
<td>.07</td>
<td></td>
</tr>
<tr>
<td>Calling</td>
<td>.04</td>
<td>.05</td>
<td>.05</td>
<td></td>
</tr>
<tr>
<td>Mentoring</td>
<td>.32**</td>
<td>.33**</td>
<td>.31**</td>
<td></td>
</tr>
<tr>
<td>Death Reflection X Calling</td>
<td>.03</td>
<td>.03</td>
<td>.04</td>
<td></td>
</tr>
<tr>
<td>Death Reflection X Mentoring</td>
<td>.03</td>
<td>.03</td>
<td>.04</td>
<td></td>
</tr>
<tr>
<td>Calling X Mentoring</td>
<td>-.14*</td>
<td>-.14*</td>
<td>.05</td>
<td></td>
</tr>
<tr>
<td>Death Reflection X Calling X Mentoring</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td>.02</td>
<td>.15</td>
<td>.16</td>
<td>.17</td>
</tr>
<tr>
<td>$\Delta R^2$</td>
<td>.02*</td>
<td>.12**</td>
<td>.02</td>
<td>.00</td>
</tr>
<tr>
<td>Adjusted. $R^2$</td>
<td>.02</td>
<td>.14</td>
<td>.15</td>
<td>.15</td>
</tr>
</tbody>
</table>

Note. * $p < .05$. ** $p < .01$. 
Simple Slopes

Simple slopes analyses were subsequently conducted to probe the significant three-way interaction effects between death reflection, career calling, and mentoring on task performance, as well as the interaction between career calling and mentoring on OCB-I. The simple slope regression lines of task performance regressed on death reflection at high and low levels (i.e., +1 and -1 SD from the mean) of the moderator variables were examined (Aiken & West, 1991; Cohen, Cohen, West, & Aiken, 2003). The relationship between death reflection and task performance was positive when both career calling and mentoring were high, however the slope was not statistically significance ($\beta = 1.49, p = .14$). The simple slope for task performance regressed on death reflection approached statistical significance at high levels of career calling and low levels of mentoring ($\beta = -1.80, p = .07$). The simple slope for low career calling and high mentoring was not significant ($\beta = -.76, p = .45$); nor was the simple slope for low career calling and low mentoring ($\beta = -.51, p = .61$). Thus, although the three-way interaction term was a significant predictor of task performance, none of the simple slopes were significantly different from zero.

Plots of the simple slopes (see Figure 2) and tests of differences between slopes revealed a cross-over pattern of interaction. First, the regression line of task performance on death reflection at high levels of calling and mentoring was found to be significantly different from the regression line of task performance on death reflection at high levels of calling and low levels of mentoring, $t(346) = 2.79, p < .01$. More specifically, the slope of the regression of task performance on death reflection was positive, when both calling and mentoring were high, and negative when calling was high but mentoring was low. This suggests that the level of mentoring is particularly important in the overall three-way interactive effect on task performance. Next, a
test between the regression line of task performance on death reflection at high levels of calling and mentoring was almost significantly different the regression line of task performance on death reflection at low levels of calling and high levels of mentoring $t(346) = 1.88, p = .06$. Like the previous slope comparison, the slope of the regression line at low levels of calling and high levels of mentoring was negative, while the slope of the regression line at high levels of calling and mentoring was positive. No other slope difference tests yielded significant results.

**Figure 2.** Simple regression slopes of the three-way interaction between death reflection, calling, and mentoring on task.

Simple slope analysis of the two-way interaction between career calling and mentoring on OCB-I found that the simple slope for the regression of OCB-I on career calling was significantly different from zero at low levels of mentoring ($\beta = 2.18, p < .01$), but not high
levels of mentoring ($\beta = -1.44$, $p = .15$). Additionally, the direction of the simple slope of low levels of mentoring at low and high levels of career calling was positive, while the direction of the slope of high levels of mentoring at low and high levels of career calling was negative. Mentoring appears to make the biggest difference for employees who have a low sense of career calling in that these employees who also receive low levels of mentoring have the lowest ratings of OCB-I.

![Figure 3. Two-way interaction between calling and mentoring predicting OCB-I](image-url)
CHAPTER 7

DISCUSSION

The purpose of the current study was to examine mortality awareness in the workplace in an effort to determine if this sort of existential motivation translates into positive workplace behaviors. The main effect of death reflection, the two-way interaction between death reflection and calling, and the three-way interactive effects between death reflection, calling, and mentoring were tested as predictors of generative job performance (i.e., substance abuse counselor task performance and OCB-I). Grant and Wade-Benoni’s (2009) contingency model of death awareness at work in conjunction with Generativity Theory (Erickson, 1950; McAdams & St. Aubin, 1992) were used as a framework for hypotheses. The three sets of hypotheses were not supported, suggesting several theoretical implications and avenues for future research.

Main Effect of Death Reflection

The main effect of death reflection was not significant for either task performance or OCB-I. This may be due to several reasons including the manner in which generative work behaviors are modeled, unmeasured individual differences relevant to generative motivation, and the operationalization of death reflection. Grant and Wade-Benoni’s (2009) framework proposed that death reflection would have direct positive effects on a variety of generative work behaviors such as mentoring and OCBs. It is possible that models including generative work behaviors need to be more focused when choosing which behaviors they are trying to predict. For example, two similar but distinguishable forms of generative motivations and related behaviors have been suggested by prior research: agentic and communal (Peterson & Stewart,
1993; Kotre, 1984; McAdams, 1988). Agentic behaviors are characterized by the belief that contributing to things outside of the self in a manner that produces something significant (e.g., creating a product that improves communities, for example, a tablet that purifies dirty water) ensures that the individual will be remembered after he or she dies. This form of generativity is concerned with successfully producing something outside of the self that is prosocial in nature. In this context, the actor is more focused on the self than on others. In essence, Kotre (1984) suggested agentic generative acts serve as an everlasting “monument to the self” (p. 16).

Conversely, communal generative behaviors are those which are more focused on others and less on the self. These types of generative behaviors are motivated by the belief that positively impacting the lives of others and forming close relationships is worthwhile because these types of acts, themselves, are inherently meaningful. Contributing to a greater good that continues on after the actor has passed (e.g., teaching and/or providing social support to others) is how that individual achieves symbolic immortality. In this example, the reverence that one receives and the legacy that one leaves behind from helping others is merely a pleasant bonus, rather than the driving force of generative behaviors. While both forms of generative behaviors achieve symbolic immortality (e.g., some aspect of the individual “lives on” after death), the prime motivation behind each is different. Agentic and communal motives have been empirically shown to predict agentic and communal behaviors both directly and through interactive effects with one another (Peterson & Stewart, 1993). Determining which type of workplace behaviors one wants to study based on a taxonomy of agentic and communal themes may result in more predictive models of workplace generativity.

Understanding the specific motivations behind employee generative behaviors is also important because the motivation behind an employee’s desire to be generative may dictate what
those generative behaviors actually look like. Agentic behaviors may be more visible by virtue of the actor wanting to be recognized for his or her “good deeds” (e.g., taking on a leadership role at a non-profit organization so one can be responsible for completing ambitious projects). Agentic behaviors may also be more concerned with producing a tangible generative object (e.g., creating a new protocol that increases the efficiency of a community outreach program).

Communal behaviors may occur more often in contexts where recognition by others’ would be less likely (e.g., teachers using their own funds to provide classroom materials for students). Communal behaviors may also be more focused on building relationships rather than creating products (e.g., developing a genuinely supportive relationship with a client). A direct link between death reflection, which conceptually encompasses both agentic and communal themes, may not be evident unless more specific forms of generative motivation are used to predict different behavioral criteria. Furthermore, some workplace behaviors (e.g., mentoring) may be either agentic or communal, depending on the individual. Other measures of motivation (e.g., making oneself more visible for promotion) should be assessed in order to further determine one’s motivation behind generative work behaviors. Additionally, some workplace behaviors may not appear generative unless other factors are also present. For example, OCB-I may not be meaningful enough to be considered either agentic or communal unless one feels that helping co-workers is necessary to producing something generative or unless one feels affectively close to one’s co-workers. Models including death reflection and generative behaviors should make efforts to account for agentic and communal, as well as other behavioral motivational factors.

In addition to agentic and communal motivation, gender may also be an important factor to consider when studying workplace generativity. Previous research on agentic and communal generativity among young adults found differential patterns of association between specific types
of generative motivation (i.e., agentic and/or communal) and behaviors across genders (Peterson & Stewart, 1993). The authors found agentic motives had a significant main effect on number of children and parenting involvement for women, and a direct effect on personal productivity and general generativity for men. Agentic motivation also interacted with communal motivation to affect social concern and general generativity for women, but not men. Furthermore, communal motivation was not associated with any outcomes for men outside of parenting involvement. Similar findings regarding gender differences were reported in a qualitative study by Morfei, Hooker, Carpenter, Mix, and Blakeley (2004) comparing generativity across different life domains (e.g., occupation, parenting, leisure) for men and women. Morfei et al. (2004) found that women were more likely than men to discuss communal themes in their generative behaviors within the domain of work. Additionally, research examining predictors of workplace generativity has found that agency was a stronger predictor for male generativity and communion (communal motivation) was a stronger predictor for female generativity (Ackerman, Zuroff, & Moskowitz, 2008). Gender has been shown to be an important aspect in the manifestation of different forms of generativity and should be accounted for when examining agentic and communal death reflection motives.

Finally, the manner in which the death reflection construct is operationalized in the current study may be impacting the findings. Previous work on death reflection has been conducted mainly in experimental settings (Blackie & Cozzolino, 2011; Cozzolino et al., 2004) where participants’ mortality awareness is manipulated (e.g., reading a very detailed and graphic scenario that ends with the participant’s death) and then generative outcomes (e.g., generative themes within qualitative data, observed pro-social behaviors) are immediately measured. The other main body of death reflection research has emerged from the near death experience (Ring,
1984; Ring & Elsaesser-Valarino, 1998) and posttraumatic growth (Tedeschi & Calhoun, 1996) literatures. In these settings, individuals report increased feelings of self-efficacy or responsibility, the desire for increased interpersonal relationships, and increased sense of meaning following traumatic events (Tedeschi, Park, & Calhoun, 1998). While seemingly quite different, both of these forms of death reflection (i.e., experimental and posttraumatic) are consistent in that they are related to a specific personal experience with mortality awareness. Direct effects on generative outcomes in the workplace may not be as evident based on the nature of the death reflection measure in this study, which is self-reported and not tied to a specific mortality event. Stronger effects for death reflection may require a measure of death reflection that more directly taps into an individual’s personal sense of mortality. Accounting for one’s personal exposure to death and mortality may also improve models of mortality awareness and generativity.

In sum, the null effect of death reflection on the outcome variables may be attributable to a number of factors. Generative workplace behaviors should not be conceptualized generally, but rather should be specified as either agentic or communal. Individual differences in generative motivation and gender may differentially predict generative workplace behaviors and should be assessed. Additionally, death reflection measures may need to be more specific both in the type of generative motivation associated with mortality awareness (i.e., agentic or communal) as well as the specification of a particular mortality awareness-inducing event.

Two-way Interaction between Death Reflection and Calling

The two-way interaction between death reflection and calling work orientation, as suggested in the original framework by Grant and Wade-Benzoni (2009), was not found to be a significant predictor of either task performance or OCB-I in the current study. Several reasons
including unaccounted-for environmental variables and individual differences in ability that prohibit successful engagement in task-based generative behaviors, whether an employee views OCB-I as relevant to work meaningfulness, individual differences in pro-social self-concept, and contextual factors that inhibit the expression of pro-social motivation, may account for the null findings. Each of these factors may possibly attenuate the interactive effects between death reflection and calling.

First, the null interactive effect on task performance may partially be explained by factors within the workplace that hinder the performance of technical aspects of the job. For example, organizational barriers (e.g., red tape, lack of resources) may prevent effective services to clients. Research on employee job frustration within service-based organizations has found that organizational over-emphasis on bureaucratic paperwork and rules rather than clients, unsound practice principles, not supporting client advocacy, and not having enough time to spend with clients (Gomez & Michaels, 1995; Lewandowski, 2003) are commonplace workplace hurdles in the provision of adequate service. Individuals who self-select into service-based industries are theoretically more likely to have higher generative motivation (Grant & Wade-Benzoni, 2009; Wrzesniewski, 2002, 2003), but the types of work characteristics that are often associated with service work may prevent otherwise productive employees from translating that motivation into task-based work behaviors.

The null interaction effect on OCB-I may also be attributed to a disconnect between the nature of calling and OCB-I as an outlet for expressing generativity. Calling is summarized as a motivation to engage in pro-social behaviors that provide a sense of meaning and purpose as well as identity for the individual; and occupational calling is further described as “an inner urge… to make the world a better place or pursue a worthy cause through one’s occupation” (Elangovan,
Organizational citizenship behaviors have been suggested to be related to calling under the logic that employees who have a sense of calling want to contribute beyond the required tasks of the job (Elangovan et al., 2010). However, the authors also concede that the relationship between calling and OCBs may not be present if the individual does not view OCBs as being related to job aspects central to calling. In this context, individuals who are high in calling see their work as a source of meaningfulness, and may not necessarily view helping their co-workers as contributing to that meaningfulness. Additionally, employees who view their co-workers as instrumental to producing high-quality work that is also meaningful to the individual may be more likely to view OCB-I as a generative behavior because helping others in this context is ultimately contributing to the greater good by facilitating the success of generative work. Workplace generativity models may benefit from including employee ratings of task interdependence, to determine if level of interdependence impacts the extent to which employees high in death reflection and calling engage in OCB-I.

Another explanation for the null findings for the two-way interaction on OCB-I may be related to factors involving employee self-concept orientation. Self-concept orientation refers to how one defines oneself: whether it is as an individual, part of a relationship, or part of a larger group (Brewer & Gardner, 1996; Johnson, Selenta, Lord, 2006; Lord and Brown, 2004; Markus & Warf, 1987). One’s self-concept orientation has been suggested to influence the type of motivations and goals behind certain behaviors (Markus & Warf, 1987). Bolino, Harvey, and Bachrach (2012) extend this theory by suggesting a framework for understanding why, when and how employees with different self-concept orientations choose to engage in OCBs. Bolino et al., (2012) suggest that there are theoretical differences in both the motivation and actual engagement of OCBs between employees with relational (e.g., dyadic) and collectivist (e.g.,
group) orientations compared to those with individual orientations. Relational-oriented employees are posited to engage in OCBs because they are motivated by pro-social values and tend to direct these OCBs towards other co-workers (i.e., OCB-I). Collectivist-oriented employees are suggested to be driven by concern for the organization and thus direct their OCBs towards endeavors that will benefit the organization (i.e., OCB-O). Conversely, individual-orientated employees are suggested to engage in OCBs because they are driven by impression management motivations and want their engagement in OCBs to be highly visible. Additionally, OCBs enacted by relational- and collectivist-orientated employees will occur more frequently and with more effort because these types of behaviors are considered more meaningful based on their concordance with the actors’ pro-social values (Judge, Bono, Erez, & Locke, 2005; Sheldon & Elliot, 1998). Individual-oriented employees are suggested to lack this same meaningfulness attached to OCBs because they engage in these behaviors for personal rather than pro-social reasons (Bolino, et al., 2012). Essentially, relational- and collectivist-oriented employees perform OCBs for generative reasons, and individual-oriented employees perform OCBs for non-generative reasons. Employees high in death reflection and calling should be more relational- or collective-oriented based on their need to be meaningfully pro-social.

Finally, the null findings for OCB-I may be further explained by contextual factors that can undermine the pro-social motivation of relational- and collectivistic-oriented employees by forcing them to adopt an individual-oriented self-concept. Markus and Warf (1987) have suggested that one’s self-concept orientation can be chronic (e.g., trait-like) or working (e.g., contextual). Environmental factors within the workplace such as organizational culture and interpersonal processes can trigger an employee with a certain type of self-concept orientation to take on a different type of orientation within that context (Brickson, 2000; Johnson et al., 2006).
For example, an employee who typically self-identifies as part of a dyad or group may switch to an individual-oriented self-concept if he or she does not have positive relationships with co-workers. Factors such as competitive reward systems, co-worker politics, feelings of alienation, and physical separation may give rise to an employee adopting or adhering to an individual-oriented self-concept rather than relative or collectivistic orientations. Previous research on substance abuse treatment has revealed working conditions that are not conducive to promoting employee self-concepts that are conducive to workplace generativity. For example, a lack of organizational support, procedural and distributive justice, as well as excessive caseloads, bureaucratic processes and politicking among co-workers have been reported by substance abuse counselors (Eby & Rothrauff-Lachober, 2012; Oser, Biebel, Pullen, & Harp, 2013; Perkins & Oser, 2014). These types of workplace characteristics and events can trigger an otherwise chronically relational- or collectivist-oriented employee to switch to an individual orientation in the workplace because they no longer value their relationships with other employees or the organization. These employees are less likely to engage in OCB-I for generative reasons, making it less likely that death reflection and calling will affect the engagement of OCBs.

**Three-way Interaction between Death Reflection, Calling, and Mentoring**

The three-way interaction term for death reflection, calling, and mentoring was significant for task performance but not OCB-I; however, none of the simple slopes were significantly different from zero. Slope difference tests revealed a significant difference between the regression slope for high levels of calling and mentoring across death reflection (i.e., positive slope) compared to the regression slope for high levels of calling but low levels of mentoring across death reflection (i.e., negative slope). Although the slope was not significant, the direction of the slope for high levels of calling and mentoring across death reflection was positive, as
anticipated. Furthermore, although the simple slopes were not significant, this disordinal (Lubin, 1961) pattern of effects may offer insight into directions for future research for expanding mortality awareness and generativity theory in workplace settings.

The null findings for mentoring may be attributed to the fact that mentoring may not be operating in the same manner as job design, which was the original second boundary condition proposed by Grant and Wade-Benzoni (2009). The authors suggested that job design may influence the targets of workplace generativity. More specifically, generativity is suggested to be more likely in the workplace if the work is already perceived to be meaningful (e.g., the work has high task significance or opportunity to help others; Grant, 2007; Hackman & Oldham, 1980). Additionally, if the work itself is not necessarily meaningful, employees who wish to be generative (e.g., those high in death reflection and calling) will engage in behaviors that make their work more meaningful if their job allows it. If these employees cannot create more meaningful aspects of their work, then they will leave for more generative occupations. In the context of the current study, mentoring may be associated with work meaningfulness for some employees but not others. For example, if one’s mentor personally finds the work meaningless or trivial, this may be (directly or indirectly) communicated to the protégé, which may in turn influence the protégé to see the work as less generative. Conversely, if one’s mentor sees the work as highly meaningful, he or she is likely to communicate that belief to the protégé in a manner that may increase the protégé’s workplace generativity. Accounting for mentor perceptions of the meaningfulness of the work may be warranted.

**Significant Two-way Interaction on OCB-I**

Although not specifically hypothesized, there was a significant two-way interaction between calling and mentoring on OCB-I. The slope was positive and significant across levels of
calling for employees who received low levels of mentoring; and negative (but nonsignificant) for those who received high levels of mentoring. The significant positive slope for counselors receiving low levels of mentoring may be reflective of an employee’s desire to receive support from alternative sources in the workplace. If an employee high in calling does not feel technically or socially supported in the workplace by his or her supervisor, then the employee may seek support from other sources (e.g., peers). The significant simple slope across levels of calling at low levels of mentoring may reflect an employee’s reciprocally supportive relationships with co-workers in the absence of supportive supervision. Meta-analytic findings show that co-worker support is positively related to OCB-I (Chiaburi, Lorinkova, & van Dyne, 2013). Additionally, employees are more likely to help others who have helped them, based on Social Exchange Theory (SET; Blau, 1964) and the norm of reciprocity (Gouldner, 1960). Future research should utilize longitudinal designs in order to determine if OCB-I increases over time in the absence of supervisory support among employees high in calling.

Implications

Theoretical. The findings from the current research offer several theoretical implications for the mortality awareness, calling, and generativity literatures. One of the most significant contributions is that this study offers the first empirical test of death reflection as a predictor of generative work behaviors. Although death reflection was not found to significantly relate to either of the generative behaviors at various levels of calling and mentoring, the findings did offer valuable insight for future research and workplace generativity theories. The null findings highlight areas in which models of workplace generativity may be improved.

First, workplace generativity should be more specifically examined within the context of communal or agentic motivation (Kotre, 1984; McAdams, 1993). Whether an employee is being
motivated by personal (i.e., agentic) or pro-social (i.e., communal) desires may influence the exact manner in which generativity manifests, and thus, accounting for these distinctions will impact the effectiveness of death reflection as a predictor of generative work behaviors. Additionally, self-concept orientation (Bolino, et al., 2006) and gender (Ackerman, et al., 2008; Morfei, et al., 2004) may influence the types of generative motivation and behaviors one experiences and engages in at work. Expanding the death reflection portion of the contingency model of death awareness at work (Grant & Wade-Benzoni, 2009) to include agentic and communal motivational and behavioral aspects may benefit its predictive utility.

Second, the concept of mortality awareness can vary greatly based on individual differences with death and near-death experiences and is included in Grant and Wade-Benzoni’s (2009) model; however, the authors include nuances in experiences with death only as predictors for whether an individual will develop a death reflective or death anxious mortality awareness orientation in the workplace. Theory on mortality awareness at work may be expanded by considering the impact that death, as an on-going aspect of the job or one’s life, has on employees after they have already developed a sense of mortality awareness. Additionally, to make measures of death reflection more relevant for workplace settings, researchers should create measures that try to tap into more specific experiences with mortality awareness inducing events and link that awareness to workplace behaviors.

Workplace generativity theory should also consider factors that may impact the expression of generative motivation as certain workplace behaviors. Individuals with highly generative motivations are more likely to self-select into a service-based industry, and these types of organizations are more likely to have numerous environmental factors that are not conducive to the expression of generativity (e.g., organizational barriers characteristic of service
industries). Theories of workplace generativity should consider including environmental variables that may impact the engagement of certain work behaviors for generative motivations.

Although none of the slopes were significant, the only positive slope associated with death reflection was in the presence of high mentoring suggesting a potential avenue for future research. While the simple slopes were not statistically significant in the current study, future studies using different methods to measure the effects of death reflection may be able to obtain significant slopes in the presence of calling and mentoring. The crossover pattern of the interaction in the current study suggests that the receipt of mentoring may be theoretically meaningful with regards to the effects of death reflection on generative work outcomes. Additionally, future research that examines whether mentoring, or other forms of supervisory support, are critical in the process of death reflection-motivated workplace generativity should also include assessments of the mentor or supervisor’s perceptions of the meaningfulness of the work.

**Practical.** The effect of death reflection on task performance was only positive when all three factors were high; however, this effect was not statistically significant. The practical implications that can be drawn from the findings are limited based on the nonsignificance of each of the hypothesized effects. A non-hypothesized significant two-way interaction was found between calling and mentoring on OCB-I, such that OCB-I increased when levels of calling were high and levels of mentoring were low.

**Limitations**

This study does have some limitations. A majority of the measures are self-reported and thus may introduce the issue of common method variance (CMV). However, it has been suggested that the impact of CMV is less severe than once anticipated (Spector, 2006) and is less
likely among higher order interactions like the ones examined in this study. Furthermore, the
dependent variables were supervisor-rated rather than self-reported, making CMV less likely.

This study utilized a cross-sectional design rendering the ability to make causal claims
impossible. Future studies should implement the use of longitudinal and experimental designs.
Despite the short-comings of the cross-sectional design, there are strengths in using supervisor-
rated outcome variables as well as the inter-organizational sample making these findings more
generalizable. A final strength of the study is that, as one of the first empirical tests of death
reflection in the workplace, the findings from this study substantially contribute to the
improvement of future studies examining workplace death reflection.

**Future Research**

The findings from the current study offer several directions for future research. First,
scholars should consider developing psychometrically sound death reflection measures that
account for both agentic and communal motives, and also taps into the employees’ personal
sense of mortality awareness. One way to do so may be to have respondents recall a time that
they were made salient of their own mortality, and then have them report the amount of agentic
and/or communal motivation that arose from that specific event.

Future research should consider investigating the levels of perceived interdependence for
performing service work to determine if co-worker instrumentality affects whether or not OCB-I
manifests as a generative behavior. Exploring employee self-concept orientations may also shed
light on the motivation behind and engagement of generative work behaviors. Organizational
factors that may promote relative and collective orientations or individual orientations should
also be considered. Furthermore, researchers should implement longitudinal designs to determine
what, if any, workplace factors gives rise to changes in self-concept orientation, and how these changes consequently affect employee generative motivation and acts.

Future studies on workplace generativity may also include assessments of employee expectations for mentoring or other developmental and supportive workplace relationships in addition to assessments of employee engagement. Qualitative designs may also be utilized to discern when and how poor developmental relationships can result in employee disengagement and lower task performance in service-based occupations. Examination of these effects is especially pertinent for individuals who are highly motivated to be generative (i.e., those high in death reflection and calling), as these are the employees that appear to be affected the most negatively by low levels of mentoring.

Additionally, future research should attempt to address the pattern of effects found among the three predictors. The crossover interaction (Aiken & West, 1991) that is present when the level of mentoring changes may be partially explained by Conservation of Resources (COR) theory (Hobfoll, 1989), Social Exchange theory (SET, Blau, 1964) and previous research on social support and job performance-related factors. COR theory suggests that employees experience stress when various resources (e.g., financial security, self-esteem) are threatened or lost. Service-industries are known to be relatively stressful (Gomez & Michaels, 1995; Lewandowski, 2003), and the provision of social support from one’s supervisor may balance out the stress (and potential threats to employee performance) experienced by service employees. Numerous studies across different types of service industries (e.g., nursing, financial, education) have linked social support to employee engagement (Hakanen et al., 2006; Othman & Nasurdin, 2013; Schaufeli & Bakker, 2004), which has shown to be positively associated with job performance (Halbesleben, 2010; Schaufeli, Taris, & Bakker, 2006). Shared perceptions of
developmental support in the form of clinical supervisory mentoring has also been shown to predict employee engagement and perceived competence among substance abuse counselors (Burke, Eby, & Vandenberg, 2012). Moreover, Burke et al., (2012) found that perceived competence mediated the relationship between mentoring and task performance, but engagement did not. Supervisor support may impact employee performance by helping to alleviate stress brought on by other workplace factors, but it may also be impacting performance by providing the employee with work-relevant guidance and feedback that increase employee ability (Blancero, Boroski, & Dyer, 1996). Furthermore, SET suggests that employees who feel supported by their supervisors are more likely to respond favorably by becoming more engaged in their work (Hakanen et al., 2006). In the current study, a low level of mentoring may be influencing employee disengagement, and consequently task performance, by subjecting the employee to more levels of burnout or stress, not providing adequate skill develop to perform the job, or angering an employee by not meeting expectations of supervisor support.

There are several directions for future research as a result of the findings from the current study. The creation and validation of a death reflection measure that accurately taps into both the agentic and communal aspects of generative motivation is an especially important next step in mortality awareness and workplace generativity research. Once a valid measure of death reflection has been established, other mechanisms underlying the engagement of workplace generativity may begin to be explored.

Conclusions

Symbolic immortality in the workplace represents the interplay between existentialism and employee experience. The current study has offered some important first steps in testing whether this framework may be used to predict important workplace outcomes (i.e., job
performance). Despite the lack of statistically significant findings, this study hopefully contributes to mortality awareness and workplace generativity literatures by identifying weaknesses in the current framework and offering several avenues for future research.
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APPENDIX A

Death reflective mortality awareness orientation.

1. I enjoy life more as a result of facing the fact of death.
2. Remembering the dead makes me more thankful for life.
3. An occasional visit to a cemetery is a healthy practice.
4. Recognizing the fact of my inevitable death helps me grow as a person.
5. Accepting death helps me be more responsible for my life.
6. My life has more meaning because I accept the fact of my own death.
7. I feel more free when I accept the fact of my death.
8. The more fully I accept death, the more fully I respond to life.

Calling work orientation.

1. I am passionate about my work as a substance abuse counselor.
2. I enjoy my work as a substance abuse counselor more than anything else.
3. Being a substance abuse counselor gives me immense personal satisfaction.
4. I would sacrifice everything to be a substance abuse counselor.
5. The first thing I often think about when I describe myself to others is that I’m a substance abuse counselor.
6. I would continue being a substance abuse counselor even in the face of severe obstacles.
7. I know that being a substance abuse counselor will always be an important part of my life.
8. I feel a sense of destiny about being a substance abuse counselor.
9. Helping people with substance abuse issues is always in my mind in some way.
10. Even when not helping people with their drug abuse issues, I often think about my work.
11. My existence would be much less meaningful without my involvement in substance abuse counseling.
12. Helping others with their drug addictions is a deeply moving and gratifying experience for me.
Mentoring received.

My clinical supervisor…

1. Is someone I can confide in.
2. Provides support and encouragement.
3. Is someone I can trust.
4. Serves as a role model for me.
5. Is someone I can identify with.
6. Represents who I want to be.
7. Serves as a sounding board for me to develop and understand myself.
8. Guides my professional development.
9. Guides my personal development.
10. Accepts me as a competent professional.
11. Sees me as being competent.
12. Thinks highly of me.
13. Helps me reach my career goals.
14. Uses his/her influence to support my career goals.
15. Uses his/her influence in the organization for my benefit.
16. Gives me advice on how to attain my career goals.
17. Suggests specific strategies for achieving my career aspirations.
18. Protects me from those who may be out to get me.
19. Runs interference for me in the organization.
20. Shields me from damaging contact with important people in the organization.
21. Gives me tasks that require me to learn new skills.
22. Provides me with challenging assignments.
23. Assigns me tasks that push me into developing new skills.
24. Helps me be more visible in the organization.
25. Creates opportunities for me to impress important people in the organization.
26. Brings my accomplishments to the attention of important people in the organization.

Counselor task performance.

This counselor…

1. Facilitates individual counseling sessions with clients.
2. Performs assessment and initial diagnostic evaluation of clients.
3. Conducts problem-related and objective-driven sessions.
4. Educates clients on their disease and/or diagnosis to assist in their understanding of the problem (or to support their recovery).
5. Creates therapeutic relationships with clients.
6. Facilitates group counseling sessions with clients.
7. Effectively facilitates group interaction to bring about recovery.
8. Interviews clients, reviews records, and confers with other professionals in order to evaluate individuals' suitability for participation in a particular program.
10. Develops client treatment plans based on observations, clinical experience, and client histories.
11. Reviews and evaluates clients' progress in relation to measurable goals described in treatment and care plans.
12. Intervenes as an advocate for clients in crisis situations and other non-routine events.
13. Provides clients or family members with information about available services and programs.
14. Coordinates counseling efforts with mental health professionals.
15. Coordinates counseling efforts with other health care professionals such as doctors, nurses, and physician assistants.
16. Coordinates activities with courts, probation officers, community services, and other post-treatment agencies.
17. Maintains accurate records and reports regarding clients' histories and progress, services provided, and other relevant information.
18. Participates in treatment center meetings to facilitate patient care (e.g., case conferences).
19. Follows rules and regulations of treatment center in terms of personal and professional conduct.
20. Contributes to a positive team environment by working well with other counselors.

Counselor organizational citizenship behaviors – individual (OCB-I).

This counselor…

1. Helps others who have been absent.
2. Helps others who have heavy workloads.
3. Assists me with my workload (when not asked).
4. Takes time to listen to employees’ problems and worries.
5. Goes out of the way to help new employees.
6. Takes a personal interest in other employees.
7. Passes along information to employees.