

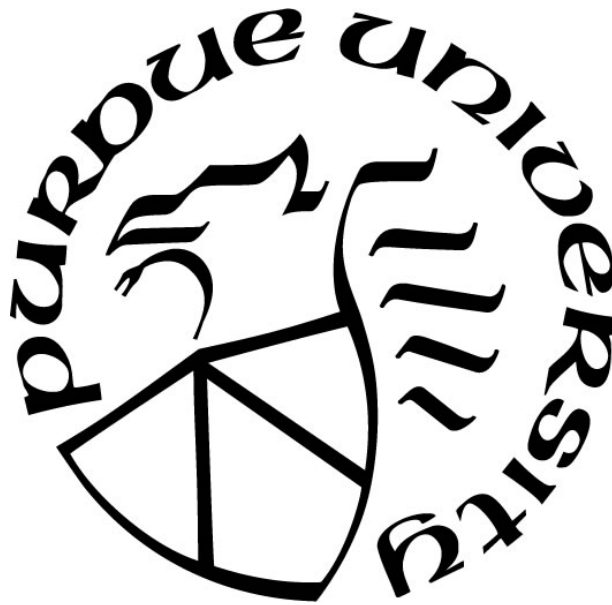
**JUST (NOT) DOING MY JOB: THE MORAL IMPERATIVENESS AND
ASPIRATION OF TASK EXECUTION**

by
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ABSTRACT

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Drawing from literature on job performance, moral intensity (Jones, 1991), and job characteristics theory (Grant, Fried, & Juillerat, 2011; Hackman & Oldham, 1976; Oldham & Fried, 2016), I propose a core feature of work that is not currently recognized or studied in extant work design research: the degree of moral imperativeness and aspiration. That is, jobs differ in how much their performance (i.e., task execution) is a moral imperative or aspiration. I first distinguish the moral imperativeness and aspiration of task execution (MITE and MATE) from related concepts such as task significance (Hackman & Oldham, 1975), prosocial characteristics of work (Grant, 2007, 2008a), and moral intensity of a task (Opoku-Dakwa, 2017, 2018). I then develop and validate a scale. In Study 1, I used job incumbents to provide empirical support that moral imperativeness and aspiration of task execution is distinguishable from related constructs, converge with theoretically-relevant constructs, and predict work criteria as experienced by job incumbents. In Study 2, I used naïve raters to judge the moral imperativeness and aspiration of work tasks at the task level to provide further evidence that they tap objective aspects of occupations.

INTRODUCTION

The mass shooting at Marjory Stoneman Douglas High in Florida is one of the deadliest in recent US history, leaving 17 people including students and coaches dead (CNN, 2018). The school's resource officer, Scot Peterson, remained outside of the building where the shooting was taking place for the majority of time the shooting was occurring. Brown County Sheriff Scott Israel suspended Peterson without pay pending an investigation. Peterson chose instead to resign and is at home under the protection of six local deputies because it is believed that his family has asked for protection (Choi, 2018). The President of the United States stated that Peterson, "...certainly did a poor job," called him a "coward," (Wagner & Bergman, 2018) and said that when action was necessary he "didn't have the courage" (Wan & Nutt, 2018).

This tragic incident brings into sharp focus something that seems to have escaped the notice of industrial-organizational psychology: task execution – performing the behaviors associated with fulfilling job duties or responsibilities – or lack thereof can be perceived as (im)moral depending on the job in question. For example, police officers that faithfully fulfill their job duties are honored and held up as self-sacrificing moral exemplars. By contrast, the light sentencing police officers sometimes receive when failing to fulfill the dictates of their job often leads to public outrage (Crepau, Gutowski, & St. Clair, 2018). Why would the same not be said for a chef or cook? Why do people have different moral reactions to the fulfillment of job responsibilities depending on the job in question?

I believe that these differences will not be found in current objective features of jobs like job type, job complexity, sector, industry, collar, etc. Instead, I propose the idea

of *moral imperativeness and aspiration of task execution* of jobs to explain these phenomena. The idea of moral imperativeness and aspiration of task execution proposes three things. First, that jobs differ in how much their performance is a *moral* obligation or ideal rather than simply a professional/occupational one. Second, that the moral obligation or ideal of performance is a function of the expected moral consequences of the job's core tasks. Third, the degree of moral obligation or ideal of doing that job is a function of the differential effects executing those core tasks has on well-being: in the harm prevented or the flourishing promoted, respectively. Moral imperativeness of task execution is defined as the degree that a job or its tasks *protects and maintains a state of safety and security* in those affected by the job or its tasks. Moral aspiration of task execution is defined as the degree that a job or its tasks *promotes gains in growth and nurturance* in those affected by the job or task. They are conceptualized as independent constructs and named as such given that preventing harm (loss of well-being in others) is more of a moral obligation and promoting flourishing (gains in well-being of others) is more of a moral ideal (Cornwell & Higgins, 2015).

Studying the moral imperativeness or aspiration of different occupations is important for many reasons that relate to how individuals transact with organizational experiences (attraction, selection, transformation, manipulation, and attrition model; Roberts, 2006). Assuming the idea is accurate, jobs higher on moral imperativeness or aspiration might attract people who are interested in the moral values the job serves versus people who simply want the extrinsic rewards of that job. In response, organizations might consider and select for what aspects of moral personality (i.e., character) are most relevant to the performance of that particular job. For example,

research has shown that integrity is one of the strongest predictors of job performance outside of cognitive ability (Ones, Viswesvaran, & Schmidt, 2012; Schmidt & Hunter, 1998). Moral imperativeness or aspiration might play a moderating role here: the relationship between integrity and job performance may be stronger for jobs higher on these characteristics, and thus integrity might be *particularly* important to select on for those jobs. And as a consequence of being selected into the job, some people's personality might be positively shaped by jobs (Oldham & Fried, 2016) high on moral imperativeness and aspiration, whereas others may be unable or unwilling to change and thus fail and leave. Therefore, the idea of moral imperativeness and aspiration has implications for person-job fit, which has downstream implications for outcomes like job performance, job satisfaction, turnover, and tenure (Kristof-Brown, Zimmerman, & Johnson, 2005).

Moral imperativeness and aspiration also have implications for job training. Research suggests that how a person's actions are interpreted will affect how people act in response (Fragale, Overbeck, & Neale, 2011). For example, a police officer position may indeed be high on moral imperativeness. If so, the public may hold police officers to a higher implicit moral standard and perceive small slights (e.g., curtness, demands instead of requests, invasion of personal space or physical contact) when encountering officers versus workers in lower moral imperativeness jobs (e.g., fast food employee) as serious moral transgressions that in turn trigger overreactions. This can engender cycles of escalating conflict between the "employee" and the "customer" that can lead to devastating consequences. Knowing this can inform job training in that jobs higher on

moral imperativeness will require commensurately higher standards of moral sensitivity and conduct to carry out the job tasks *well*.

For instance, meta-analytic results of (quasi-)experiments on the effect of police-led interventions to increase dialogue reflecting procedural justice (i.e., neutrality in decision making, encouraging citizens to participate in the interaction [voice], treating people with dignity and respect, and conveying trustworthy motives¹) has shown it leads to increases in citizens' intentions to cooperate/comply with as well as satisfaction/confidence and perceived procedural fairness in the police (Mazerolle, Bennett, Davis, Sargeant, & Manning, 2013). Obtaining cooperation and compliance, which is central to effectively fulfilling the job tasks of a police officer, is more likely when police conduct themselves in procedurally just ways with citizenry, which reflects higher moral sensitivity and conduct. And training in learning about procedural justice principles has shown it has immediate and long term attitudinal effects on officer support for most components (except trust; Skogan, Van Craen, & Hennessy, 2015) and interventions intended to increase associated behaviors via more deliberate cognitive processing during interactions with citizens led to decreases in the number of arrests made compared to a control group (Owens, Weisburd, Amendola, & Alpert, 2018). This could be particularly important when dealing with vulnerable populations such as those with mental health issues, which is quite common (Borum, 2000) and considering that officers often resort to arrest to handle even minor offenses (e.g., trespassing) by members of this population due to lack of training and support in accessing other methods (Hails & Borum, 2003).

¹This literature construes procedural justice as including elements from both procedural and interpersonal justice as understood in the industrial/organizational literature (Colquitt, 2001).

Moral imperativeness and aspiration are potentially far reaching in their implications—if they are present in jobs. In the following sections, the legitimacy of this idea and how it will be uncovered is argued for. First, the historical roots of Job Characteristics Theory is briefly reviewed (Grant et al., 2011; Hackman & Oldham, 1975, 1976; Oldham & Fried, 2016) to highlight three constructs that are conceptually related construct to moral imperativeness and aspiration. Second, the theory of moral imperativeness and aspiration is developed by drawing on the literature on job performance, moral judgment (e.g., Graham et al., 2012; Gray, Young, & Waytz, 2012), moral intensity (Jones, 1991), and particularly the application of regulatory focus theory to morality (Cornwell & Higgins, 2015) to show how it is still yet distinct from the three related constructs. This specification of moral imperativeness and aspiration clarifies that the constructs are about that which is fundamental to morality (i.e., effect on well-being of others) in ways that make it a necessity (i.e., prevention focus) or aspiration (i.e., promotion focus).

Job Characteristics Theory: Historical Review

Before the theory of moral imperativeness and aspiration is developed, it is important to review what has come before to both provide a context for the concepts as well as note how related constructs are differentially conceptualized and measured. This, in turn, will form the basis for distinguishing between these constructs and moral imperativeness and aspiration.

Job Characteristics Theory (Hackman & Oldham, 1974, 1975, 1976) grew out of the job design literature. Early job design literature was concerned with how to structure jobs in such a way as to maximize relevant organizational outcomes (Parker, Morgeson,

& Johns, 2017). The aim was to design and organize the work done – the activities and tasks that employees performed – to simplify and standardize jobs enough to maximize employee efficiency (Oldham & Fried, 2016). In doing so, it construed job design as fundamentally about the constituent elements of jobs: how the actual tasks were structured and organized (Parker, Morgeson, & Johns, 2017). However, employees seemed to dislike the oversimplified work enough to undermine the purpose of simplifying jobs by restricting their own productivity and eventually researchers sought to figure out how to increase employee performance without sacrificing employee satisfaction with the work (Oldham & Fried, 2016). This research ultimately culminated in the development of the job characteristics theory and model (Hackman & Oldham, 1975, 1976, 1980) that also drew on expectancy theory of motivation (Vroom, 1964) to explicate the mediating, inherently motivating psychological states (i.e., meaning, responsibility for one's work, and knowledge of results) that explained why certain aspects of tasks predicted favorable job outcomes for both the worker (e.g., intrinsic motivation, job satisfaction) and the organization (e.g., higher job performance; Oldham & Hackman, 2010): these task characteristics provided the experience of these inherently rewarding states, which in turn drove motivation to perform.

One particularly relevant task characteristic is task significance, or the degree that the job has a significant impact on the lives of people affected by the job (Hackman & Oldham, 1975). If a worker realizes their job has an impact on the well-being of people, they are thought to derive a sense of meaning that motivates that worker to perform (Hackman & Oldham, 1976). Later meta-analytic findings (Humphrey, Nahrgang, & Morgeson, 2007) partially support this mediation, and field experiments further suggest

the relationship between task significance and performance is mediated by perceived social impact and perceived social worth (Grant, 2008d).

The next major step forward in this literature (Grant et al., 2011; Grant & Parker, 2009; Parker et al., 2017) was an interdisciplinary perspective on job design that sought to integrate job characteristics beyond those in the job characteristics model (e.g., Campion, 1988, 1989; Campion & Thayer, 1985). Morgeson and Humphrey (2006) built on and formalized that research by creating the Work Design Questionnaire (WDQ), which was eventually tested in a meta-analysis that simultaneously pointed out the waning empirical research (Humphrey et al., 2007) on and theoretical advancements (Morgeson & Humphrey, 2006) in work design in the organizational sciences and reinvigorated it. One key finding was the importance of social characteristics of work, which predicted a number of important organizational outcomes (e.g., performance, job satisfaction) above and beyond those included in the traditional job characteristics model.

In the same year, Grant (2007) advanced his relational perspective on job design. He drew a distinction between traditional job characteristics as attributes of tasks versus characteristics of the relational architecture. Grant defined relational architecture as “structural properties of work that shape employees’ opportunities to connect and interact with other people” (2007, p. 396). More specifically, relational job design proposes that employees’ behavior at work can positively impact people, both beneficiaries within and without the organization. It further proposes that a key aspect of the relational architecture will lead to increased *prosocial* motivation and in turn increased performance: job opportunities for impact on beneficiaries. Job opportunities for impact on beneficiaries is the extent that the job provides opportunities to positively influence

beneficiaries. It includes four dimensions: the greater the degree and duration of potential effects (i.e., magnitude), the larger the number of people influenced (i.e., scope), the more often the job offers opportunities to affect others (i.e., frequency of impact), and the more the job is about preventing loss or harm (i.e., prevention focus), the larger the perceived impact on those beneficiaries. Tests of this model (Grant, 2008a, 2008b, 2008c) suggest that perceived impact on beneficiaries and prosocial motivation are mediating mechanisms for enhancing performance.

Related Construct: Moral Intensity of Work Tasks

A more recent, related construct grew out of earlier theorizing in a completely different area of organizational science research altogether: ethical decision-making in organizations. Jones' (1991) moral intensity is a construct formulated to supplement then-extant models of ethical decision-making. The central claim was that, when engaging in ethical decision-making, six characteristics of the moral issue (i.e., magnitude of consequences, probability of effect, temporal immediacy, concentration of effect, social consensus, and proximity) itself plays a major role in how people navigate the steps of ethical decision-making and their ensuing behavior. The theory suggested that the overall degree of harm prevented or benefit conferred to those affected in the moral issue would impact steps of the ethical decision-making process. For example, if a given act is expected to have large (magnitude) consequences for those affected, then it is more likely to be recognized as a moral issue in the first step of the ethical decision-making process.

The construct of moral intensity was originally conceptualized as features of a moral issue, but recent work has applied the concept to work tasks. Opoku-Dakwa (2017) investigated this idea in the context of work engagement, specifically for why actions

taken by organizations to advance some social good is engaging. The literature he reviewed suggested that an antecedent of work engagement is psychological meaningfulness, which in turn he argued should have as an antecedent the moral intensity of a task. He suggested, for example, that submitting a budget request relates to the issue of resource allocation. As such, he argued that tasks are associated with issues with greater or lesser degrees of moral urgency, and the degree of moral intensity of a task is indexed by how high the related issue is on at least one of the six characteristics of moral intensity. Using structural equation modeling, he found, as hypothesized, that indirectly manipulating the moral intensity of vignettes by changing characteristics of the beneficiaries of a volunteer program had a direct positive effect on anticipated effort and an indirect positive effect on it through perceived impact. Opoku-Dakwa (2018) extended these findings by investigating as part of a larger model how much moral intensity, as a characteristic of corporate social initiatives (CSI; i.e., corporate-sponsored initiatives that focus on societal benefit), predicts level of engagement (i.e., employees' personal investment) in achieving CSI goals, first in a vignette study as before and then a field study using a measure he developed.

In summary, job characteristics theory and the job characteristics model grew out of a long history of job design and have culminated in contemporary perspectives recognizing the importance of social aspects of work. Of particular note are two constructs from that literature. First, task significance is the extent that the job makes a difference in the lives of people, theoretically lending meaning to the work done and in turn increasing job performance. Second, Grant's (2007, 2008a) relational job design approach proposes that job opportunities for impact on beneficiaries can engender

prosocial motivation through a mediating mechanism of perceived impact on beneficiaries. Relatedly, Opoku-Dakwa's (2017, 2018) studies indicate that there are characteristics of tasks that vary in moral intensity that motivates people to perform the task through perceived impact, on self or beneficiaries. These constructs seem to be related to influencing the well-being of others and, in turn, experiencing other-oriented psychological states that mediates their effect on enhanced performance.

Job Effects on Beneficiaries: Scope of Moral Consequences and Non-Differentiated Motivational Strategy

Task significance, job opportunities for impact on beneficiaries, and moral intensity of tasks share similar content with some degree of unspecified scope in a) how central the *well-being* of others is to the concept, b) whether well-being includes *both* harmful and beneficial outcomes and relatedly c) whether the impact on well-being is *necessarily* a positive one. Task significance taps the degree to which people inside or outside the organization are affected by the work done in one's job, but in measurement (Hackman & Oldham, 1974) does not specify this in terms of well-being and additionally uses an item that asks about the job's importance in general – in the grand scheme of things. Opoku-Dakwa (2017) followed Jones' (1991) theory about morality being about both harms inflicted on victims and benefits conferred to beneficiaries by measuring whether the task affects physical, emotional, and psychological well-being (Opoku-Dakwa, 2018, study 2) and just suffering prevented (Opoku-Dakwa, 2018, Study 1). Neither of the two constructs specifies having a positive effect necessarily. Although Grant (2007) conceptualized job opportunities for impact on beneficiaries as including both preventing decreases (e.g., a surgeon saving a patient's life) as well as promoting

increases (e.g., a magician increasing positive emotions in an audience) in well-being of people affected by the job, in subsequent operationalization of the construct the items are about *improving* well-being and making a positive difference (Grant, 2008a).

These constructs are certainly consistent with conceptions of morality, but also include aspects beyond it in some cases. It has been argued that the essence of morality itself entails a prototypical situation where a moral agent with mind and therefore the capacity for volition in some way harms an entity with mind – one who has the ability to feel or experience (Gray et al., 2012). More broadly, morality has been conceptualized as concerning both harms and benefits to well-being in others (Jones, 1991). Thus, a morally-relevant and positive job characteristic construct would specify a) that it relates solely to affecting the well-being of people b) in ways that prevents harm or increases well-being. The latter point is particularly important to expand on.

All three aforementioned constructs make no firm commitments on what the *motivational strategy* of actions taken to fulfill a task or do a job is when others' well-being is affected. Yet, recent theoretical applications of regulatory focus theory (Higgins, 1997) to moral psychology (Cornwell & Higgins, 2015) suggests that there are two distinct kinds of morality: one premised on moral imperatives (i.e., oughts, rules, duties, and obligations) and one on moral aspirations (i.e., ideals, virtues, excellences). Applying these concepts to job characteristics, jobs may differ in not only the degree, but also the distinct *kinds* of effect it has on the well-being of beneficiaries. Grant (2007) theorized that jobs higher on prevention focus would be perceived to have a higher impact on beneficiaries than jobs on promotion focus, but the actual measure created based off of

this theory are promotion-focused items (Grant, 2008a). This represents the jumping off point for the development of moral imperativeness and aspiration of task execution.

The Moral Imperativeness and Aspiration of Task Execution: Theory Development

This section specifies for moral imperativeness and aspiration the nature of their effect (i.e., morally positive), the respective underlying motivational strategy of actions taken to achieve that effect (i.e., prevention and promotion focus) and urgency to do so (i.e., moral intensity), and the unit of analysis (i.e., task execution). This culminates ultimately in a synthesis and integration of a variety of literatures on job characteristics (e.g., Wong & Campion, 1991), motivation (i.e., regulatory focus; Higgins, 1997) applied in moral psychology (Cornwell & Higgins, 2015) to conceptualize, define, and operationalize the moral imperativeness of task execution and the moral aspiration of task execution. Each of the main components of the two constructs (i.e., Moral [“M”], Imperative or Aspiration [“I” and “A”], and Task Execution [“TE”]) will be covered in reverse order.

Task Execution: Unit of Analysis

A typical definition of a job is a collection of tasks to be done that are assigned to an employee (Wong & Campion, 1991). Thus, jobs are defined by their core tasks and are different to the degree that there is less overlap in those tasks. A job is constituted by specific tasks – self-contained units of work – that are useful in accomplishing organizational goals (Motowidlo & Kell, 2012; Wong & Campion, 1991). There is some controversy to this day about what job performance ultimately is or should be, whether behaviors (e.g., Campbell & Wiernik, 2015) or results in actually achieving organizationally-valued outcomes (e.g., Aguinis & O’Boyle, 2014). I choose to remain

agnostic on that issue and use the term “task execution” to specifically refer to engaging in the behaviors that are a) the collection of core tasks that define one job from another and b) expected to yield valued outcomes. This borrows from definitions that synthesize both perspectives on job performance, such as the aggregate (i.e., long-run) *expected organizational value* of doing the discrete behaviors that fulfill job tasks (Motowidlo, Borman, & Schmit, 1997; Motowidlow & Kell, 2012). This reflects the inextricable link between behaviors and outcomes in job performance (Binning & Barrett, 1989).

Since jobs differ in their tasks, they differ in their expected organizational value. Similarly, the execution of tasks that constitute a job has an expected, long-run *moral outcome* value insofar as they affect the well-being of people. Since jobs differ in their tasks, they are expected to differ in their expected moral outcomes and thus their degree of moral imperativeness and aspiration.

Imperative and Aspiration (“I” and “A”): Motivational Strategy and Urgency

Imperativeness and aspiration have to do with a) the motivational strategy taken to have an impact on the well-being of others as well as b) the degree of the moral urgency. First, at the heart of the conceptualization of moral imperativeness and aspiration – and what distinguishes them from the three related constructs of task significance, job impact on beneficiaries, and moral intensity of tasks – is considering the two distinct regulatory foci: prevention and promotion focus, respectively (Higgins, 1997). These are distinct strategies used to attain goals. Prevention focus is based in the need for safety and security and maintaining the status quo. Consequently, it is primarily about remaining vigilant to “misses” that would lead to negative deviations from that base state of safety. For prevention focus, goal success is a “nonloss” and failure a loss,

leading to respective emotional reactions of quiescence (e.g., relaxation, calmness) or agitation (e.g., stress, anxiety; Idson, Liberman, & Higgins, 2000).

In contrast, promotion focus is based in needs for growth, nurturance, and accomplishment. Consequently, it is primarily about eager anticipation and seeking “hits” that would represent capitalizing on opportunities for gain. For promotion focus, goal success is a gain and failure is a “nongain,” leading to respective emotional reactions of cheerfulness (e.g., happiness) and dejection (e.g., sadness; Idson et al., 2000).

These two regulatory foci were originally conceptualized as motivational systems that regulate all goal-directed behavior (Higgins, 1997). It has been shown that these qualitatively different *strategic means* to obtain goals can be experimentally induced as situational regulatory focus and that they can also be measured as between-person differences in how chronically activated these systems are (Higgins, 1997, 1998; Higgins et al., 2001; Idson et al., 2000).

In the recent past, regulatory focus theory has been applied to jobs tasks (van Dijk & Kluger, 2011). Because regulatory focus can be induced or primed, it was theorized that *job tasks* can by their nature induce, prime, or call for a prevention or promotion focus behavioral strategy. This was thought to be the case since different tasks (e.g., detecting errors in bookkeeping vs. generating new product ideas) calls for or requires different behavioral strategies (e.g., critical vigilance vs. anticipatory eagerness) that are reflective of regulatory focus (prevention vs. promotion, respectively) for performance. It was shown in that study that prevention and promotion *tasks* seem to be content representative of prevention and promotion focus, respectively, and appear to prime these foci in participants (van Dijk & Kluger, 2011). It is a natural, yet novel extension then to

apply regulatory focus theory to describe between-*job* differences in these two motivational strategies: jobs themselves differ in the degree that they are prevention and promotion focused as a function of their respective, aggregated core *task* scores on these foci.

A meta-analytic investigation of both generalized and work-context based chronic regulatory foci demonstrates that they are orthogonal to each other (Lanaj, Daisy Chang, & Johnson, 2012). This evidence speaks to the orthogonality of the two foci at the between-*person* differences level. Given that this unit of analysis is different from between-task or -occupation differences in the two foci, the orthogonality of them may not hold as applied in the present study. It is an open research question whether jobs can be both highly (lowly) prevention and promotion focused or high on one and not the other given the definition of a job as a collection tasks that themselves will vary along these dimensions. However, none of the three related constructs empirically investigate or attempt to operationalize this potential difference². This conceptual difference in regulatory focus applied to effects on well-being of others is what potentially makes moral imperativeness and moral aspiration distinguishable constructs.

Second, the *degree of moral urgency* of the impact on well-being draws on the moral intensity literature (Jones, 1991). McMahon and Harvey (2006) review of the empirical studies of moral intensity factor structure indicated that a one to three factor solution emerges rather than the six aspects as articulated in the theory piece (Jones,

²Grant (2008a) does not when creating his measure. Perhaps it is because Grant (2007, p.400) seemed to presuppose the two foci were ends of a continuum (“The greater the prevention focus (*as opposed to promotion focus*) of job impact on beneficiaries the stronger the employee’s perception of impact on beneficiaries” (emphasis mine) or because he conceptualized it at the same level as magnitude, scope, and frequency.

1991). A general observation from these studies and their own empirical investigation is that moral intensity items measuring magnitude of consequences, probability of effect, and temporal immediacy consistently load onto the first factor across all studies. These are all central to the connection between act (task execution) and consequence (effects on well-being), which makes these three aspects of moral intensity the most relevant to defining the moral *urgency* aspect of moral imperativeness and aspiration. Thus, moral imperativeness and aspiration of task execution each will include the moral intensity aspects of magnitude of consequences, probability of effect, and temporal immediacy since they collectively tend to load on one dimension that captures most of the variance in moral intensity item scores (McMahon & Harvey, 2006). It is also worth mentioning here that although Opoku-Dakwa's (2017, 2018) work is based in moral intensity theory, he does not operationalize any of the content dimensions in his measure. Task significance and job impact on beneficiaries do tap aspects of magnitude, but not probability of effect and temporal immediacy.

The moral imperativeness and aspiration of task execution constructs are beginning to take shape in conceptualization. They are fundamentally about performing tasks that constitute a job, and they are potentially separable on the basis of the regulatory focus of tasks in achieving outcomes. But what exactly gives them their monikers? The answer is in the relationship between their respective regulatory focus and the focus' specific effect on people affected by task execution: the well-being of others.

Moral ("M"): Effect on Well-Being

Recent research on morality suggests that the perception of harm is central to moralization – making something a *moral* issue as opposed to simply a social convention

issue (Schein & Gray, 2018). Some have made the case that morality is about both harms and benefits in well-being to others (Jones, 1991). In either case, this emerges from research suggesting that the essence of morality is the perception that the moral agent and the moral patient have mind, which indicates the former can intend to do something and the latter can experience the impact of that action (Gray, Young, et al., 2012; Jones, 1991). What seems central to either is a concern about effects on the *well-being* of others. A more inclusive definition though, comprising both harms and benefits in well-being, seems apropos given the emerging research describing how people engage in moral self-regulation.

Researchers have argued for and found two forms of moral regulation systems by drawing on motivational distinctions that have been well-established across multiple areas of psychology. One line of research has distinguished between *proscriptive morality* (i.e., what one *should not* do – harm) based in the avoidance motivational system and *prescriptive morality* (i.e., what one *should* do – help) based in the approach motivational system (Janoff-Bulman, Sheikh, & Hepp, 2009; Sheikh & Janoff-Bulman, 2010). They argued the former concerns avoiding negative outcomes via behavioral inhibition and the latter concerns attaining positive outcomes via behavioral activation. While important in integrating siloed perspectives (i.e., then-extant moral psychology and prosocial behavior literature), some have critiqued this distinction as being insufficiently precise, by conflating approach versus avoidance with behavioral activation and inhibition for example (Cornwell & Higgins, 2015).

Either avoiding negative outcomes or pursuing positive outcomes can *strategically* be pursued in prevention or promotion focused ways, either of which can

involve behavioral activation and inhibition (Higgins, 1997). This is because within regulatory focus theory the avoidance versus approach motivational *system* distinction is orthogonal to the prevention versus promotion motivational *strategy* distinction (Higgins, 1997). This hierarchical view of (moral) motivation recognizes that, for instance, the morally positive (system-level) outcome of *benefiting* the well-being of others or helping can be “approached” using a prevention focus (i.e., being vigilant to and preventing *losses* in others’ well-being) or promotion focus *strategy* (i.e., anticipating and eagerly finding routes to *increase* or facilitate gain in others’ well-being; Cornwell & Higgins, 2015). Furthermore, it recognizes that *either* of these motivational strategies will entail *both* behavioral activation and inhibition at the *tactical* level. This perspective on moral regulation goes beyond the idea that “not harming” (avoiding negative outcomes) is distinct from “helping” (approaching positive outcomes) and vice versa (Janoff-Bulman et al., 2009) at the system level by highlighting that preventing losses to well-being is strategically distinct from promoting gains in well-being at the strategic level (both approaching positive outcomes; Cornwell & Higgins, 2015).

It is important at this juncture to specify that what is of most interest in the present study is whether the job or task has a *positive* effect on the well-being of others – that it is approaching positive outcomes in the well-being of others. Both task significance and moral intensity of tasks remain silent on whether the effect is negative or positive. Perhaps this is to be abstract enough to encompass both harmful and beneficial outcomes on well-being of others, which does make the effect of jobs a *moral* issue. But as the above review of the moral regulation literature suggests, having an effect is too broad when considering the potential system-, strategic-, and tactical-level motivational

distinctions (Cornwell & Higgins, 2015) at play with regard to *which* of and *how* these outcomes are attained.

Moral imperativeness versus moral aspiration – both concerning approaching positive (desirable) outcomes on the well-being of others – are distinguished from each other and named as such due to the connection between their respective regulatory focus with their respective focus’ antecedents. Moral imperativeness is conceptualized as strategically prevention focused, which – beyond mere framing effects – have safety and security needs, discrepancies from the “ought self,” and “ought” goals as antecedents (Higgins, 1997; van Dijk & Kluger, 2011). Thus, moral imperativeness is aligned with moral concepts of moral duty, obligation, and imperativeness (Cornwell & Higgins, 2015). Moral aspiration in contrast is conceptualized as strategically promotion focused, which have as antecedents self-actualization needs, discrepancies from the “ideal self,” and “ideal” goals as antecedents. Thus, moral aspiration is aligned with moral concepts of moral virtue/excellence, ideals, and aspirations. This accords with literature on positive psychology that seeks to normatively and comprehensively define “positive” as that which indirectly (mitigating and preventing the dispreferred) and directly (promoting and preserving the preferred) enables and defines the good life, respectively (Pawelski, 2016).

The literature on these distinct motivational strategies of prevention and promotion focus can thus further inform us about the *types* of well-being each would most be reflective of these strategies (Cornwell & Higgins, 2015; Higgins, 1997; Grant, 2007). As applied here to tasks, prevention focus would be most relevant to maintaining and protecting safety and security types of well-being (i.e., harm), which may be best exemplified by (but not limited to) physical well-being. In contrast, promotion focus

would be most relevant to encouraging growth, fostering nurturance, and aiding accomplishments, best exemplified by (but not limited to) eudaimonic well-being (i.e., flourishing). Not only does this provide greater specification and differentiation of moral imperativeness and aspiration – from both each other and the three related constructs – it also starts to reveal a picture of these actually being orthogonal dimensions. Jobs, defined by a collection of varied job tasks, could theoretically be (low) high on moral imperativeness and aspiration or (low) high on one and not the other.

In sum, the prevention of *harm* (a negative deviation from in safety and security well-being) in others is what would make the task execution of a job a moral *imperative* because preventing harm most closely aligns with moral concepts of *oughts* (duties, obligations, moral necessity; Cornwell & Higgins, 2015; Higgins, 1997). In contrast, the promotion of *flourishing* (i.e., positive gain in growth and nurturance well-being) in others is what would make the task execution of a job a moral *aspiration* because it is mostly associated with moral *ideals* (virtue, excellence, etc.; Cornwell & Higgins, 2015; Higgins, 1997). The degree of moral imperativeness or aspiration of a job is a function of the probable magnitude of effect (McMahon & Harvey, 2006) in well-being of others when engaging in the long-term execution of tasks that differentiate and define it.

Level of Analysis: Task, Job-Incumbent, and Occupation

The theory advanced thus far argues that moral imperativeness and moral aspiration of task execution of a *job* is the aggregate of that of the core technical tasks of that job. This construct conceptualization constitutes both a challenge and an opportunity in light of the limited research on the difference between task-level and job-level job characteristic assessment of constructs that are purported to be the same.

There is good evidence that even assessing the “same” construct using essentially the same items at the job versus task level actually capture distinct constructs and processes (Grant, 2007; Grant et al., 2011; Taber & Alliger, 1995; Wong & Campion, 1991) and are not redundant with each other. First, Wong and Campion (1991) found that task-level measurement of motivational job characteristics provided more information about the ability requirements than ratings at the job-level and that motivational task design and motivational job design were only moderately correlated with each other ($r = .29$). This suggests task-level assessment captures more than what can be subsumed under job-level assessment, even of the same constructs.

Second, the converse is also true. For instance, the impact of motivational aspects of tasks on affective outcomes was attributable to their influence on motivational aspects of the job as a whole (Wong & Campion, 1991). Relatedly, the average enjoyment of tasks within a job only moderately predicted a measure of satisfaction with the work itself (Taber & Alliger, 1995), indicating that there is more to enjoying the work itself than how much one enjoys the tasks that constitute the work.

Part of this difference is substantive. As Grant (2007) noted, a job includes more than just the performance of its core tasks, so it is not surprising that measuring constructs at the job level provides non-redundant information with constructs measured at the task level and vice versa. Another part of this is substantively methodological in that items are often written at a general level of abstraction (e.g., “my job,” “this job”) that captures all aspects of a job, whether that is intended or not.

For the present studies’ purposes, the central unit of analysis is task execution and this will inform item development to maximize comparability across the studies. Still, it

should be recognized that there is a difference between the information yielded from tapping the psychological experience of job incumbents doing their work versus dispassionate raters (e.g., job analysts; Wong & Campion, 1991) rating the tasks that comprise those jobs. As such, the validation methodology used will necessarily need to reflect these differences for the constructs at these two levels of analysis. One final note is that for the sake of comparability, occupation-level scores will be calculated at times. For ratings at the task level, this is simply the aggregation of scores on those tasks, which themselves have been aggregated from multiple raters (e.g., Wong & Campion, 1991). For ratings at the job or job-incumbent level, this requires aggregation of scores from, ideally, multiple job incumbents working in the same occupation (e.g., Morgeson & Humphrey, 2006a).

The preceding section drew on a definition of job performance that emphasizes the probabilistic nature of task execution in achieving outcomes, in this case effects on the well-being of others. Literature on regulatory focus, moral psychology, moral intensity theory, and work design was a) synthesized to differentiate moral imperativeness from aspiration and define their degree of urgency, as well as b) integrated to inform the types of well-being effects most representative of each. Finally, the differences between the supposedly same job characteristics assessed at different levels of analysis were considered.

In the following sections, the preceding elements were taken altogether to inform scale construction for moral imperativeness and moral aspiration as potentially distinct constructs in the motivational strategy employed and the kinds of well-being affected in others (Phases 1 and 2). Subsequent validation of the scale was first investigated with job

incumbents rating their jobs on these characteristics (Phase 3). Finally, Study 2 sought to further establish validity evidence for the scale as theoretically explicated by having naïve raters assess discrete job tasks on these characteristics and aggregating ratings from the tasks themselves to their respective occupation level.

PHASE 1: SCALE CONSTRUCTION FOR MORAL IMPERATIVENESS AND MORAL ASPIRATION

Methods

Item Generation

Scale creation began with conceptualization and definitions of moral imperativeness of task execution and moral aspirations of task execution informed by review of both the literature and of extant scales (Clark & Watson, 1995; DeVellis, 2003; Lynn, 1986). The closest constructs were those reviewed in the introduction: task significance (Hackman & Oldham, 1975), moral intensity of tasks (Jones, 1991; Opoku-Dakwa, 2018), and job impact on beneficiaries (Grant, 2007, 2008a). Regulatory focus theory as applied to moral psychology (Cornwell & Higgins, 2015; Higgins, 1997) was also drawn on. Moral imperativeness of task execution (MITE) and moral aspiration of task execution (MATE) of task execution were differentiated on the basis of a) the motivational strategy of doing the job in positively affecting others' well-being and the relatedly b) different kinds of well-being that are affected.

Items were generated on the basis of clarity and conciseness, avoidance of trendy phrases, items that would likely lack variability in response scores, negatively-keyed items, and complex or double-barreled items (Clark & Watson, 1995; DeVellis, 2003; Haynes, Richard, & Kubany, 1995; Lynn, 1986; Smith & McCarthy, 1995). Each item has a few components that correspond to the different parts of the respective construct names; they will be addressed (i.e., moral, imperativeness or aspiration, and task execution) in reverse order.

Task execution refers specifically to engaging in the behaviors that collectively are performance of the core tasks that distinguish one job from another. To operationalize this, the term “doing” was almost exclusively used to begin items, although “performing” was also used. For Study 1, items refer to “*doing the job*” or engaging in the tasks that define it. For Study 2, the aim was to advance the theory and provide evidence that there are differences between occupations in MITE and MATE as a function of the harm prevented and flourishing promoted by objective between-occupation differences in core tasks. As such, items in Study 2 refer to “*doing this task*.”

Imperativeness and aspiration concerns the a) motivational strategy of the impact of task execution on those affected and the b) degree of the moral urgency of that impact. First, words that represented the relevant regulatory focus were used when selecting verbs for MITE (e.g., “minimizes”, “protects”) and MATE (e.g., “increases,” “improves”) items. These actions or their well-being consequences were modified by the moral intensity aspects of magnitude of consequences (“significant(ly)”), probability of effect (“likely”), and temporal immediacy (“rapidly”), which have all tended to load onto one factor representing the probable magnitude of consequences (McMahon & Harvey, 2006).

For the moral component, extant scales on the kinds of well-being usually considered in work design (Grant, 2007; Opoku-Dakwa, 2018) were drawn on along with the regulatory focus and moral psychology literature to inform decisions on which kinds were most relevant to MITE and MATE. For both MITE and MATE, items were first written tapping well-being at a more general level of abstraction (e.g., “harm” and “well-being,” respectively) and then items were written that targeted the more specific

types of well-being mentioned by Grant (2007) that fit the regulatory focus of each (i.e., both included physical, hedonic, and material well-being; MATE also included eudaimonic well-being).

Instruction Creation and Rating Format Selection

Instructions and rating format are also important parts of the instrument (Haynes et al., 1995). Extant theory and measures of job characteristics (Hackman & Oldham, 1974, 1975; Morgeson & Humphrey, 2006) suggested two major points to emphasize in the instructions. First, the instructions state that the respondent is to consider people both *inside* and *outside* the organization that are affected. Second, instructions ask respondents to answer about the job itself rather than their reactions to or perceptions of the job. In addition, the instructions asked respondents to answer in terms of doing the job or task over the course of many years consistent with the theory regarding job performance used in theory development of MITE and MATE. Two slightly different versions of the instructions were created for Studies 1 and 2 regarding what is rated (i.e., job versus tasks, respectively). A standard 5-point Likert-type scale of agreement was chosen for Study 1 as has been done in past measures for job-incumbent level ratings (Morgeson & Humphrey, 2006). A 3-point Likert-type scale format was chosen for Study 2 consistent with past research using task-level ratings of job characteristics (Wong & Campion, 1991).

Item Review

Six SMEs were chosen to serve as the content validity judges since at least five has been deemed to be sufficient to have confidence in the robustness of the ratings (Haynes et al., 1995; Johnston et al., 2014) and to control for chance agreement (Lynn,

1986). Ideally, the of judges should be those familiar with the content (Sireci, 1998) and balanced in substantive content and psychometric expertise (Davis, 1992). Of the six SMEs chosen (three PhD graduate students and three professors in industrial-organizational psychology), two had motivation, two had well-being, and one had done regulatory focus research in substantive expertise. In terms of psychometric expertise, four had either a strong methodological or psychometric background.

Per best practices, all judges rated the items independently, each were provided definitions of the constructs of interest and familiarized with rating tasks within the survey (Davis, 1992; Sireci, 1998; Smith & McCarthy, 1995), and all 60 items from the initial item pool were presented in a random order to prevent order effects (Sireci, 1998). Each item was rated on representativeness, relevance, clarity, conciseness (DeVellis, 2003), and a comment field was left for judges to leave feedback on each item.

Representativeness was assessed by whether the judges were able to classify the item to its intended construct of either MITE or MATE (Davis, 1992; Sireci, 1998). The rating scale had “MITE,” “Uncertain,” and “MATE” as options. Only those items that either all judges categorized correctly or at most one rated as uncertain what construct it was intended to measure were retained. Then judges rated the relevance of the item for the construct they classified it as assessing. Two standards were used at this stage. First, if at least five judges rated the item as high relevance then it was retained for further development. Second, if at least four judges rated the item as high on relevance, then these were considered for possible retention to account for the possibility that lack of clarity led to lack of agreement regarding relevance. Fourteen items total fit this second criterion. The clarity ratings for this subset were examined with special attention to those

that were rated *high* on clarity as potential items to *remove*. In total, four items that incidentally were all a) intended to be MATE items and b) related to helping people attain greater wealth or material goods were identified as very clear in their meaning, but not especially relevant to the definition of MATE. Judges were equivocal on whether helping people attain financial flourishing constituted the moral aspiration of promoting growth and nurturance. It made theoretical sense to remove these items. The rest were retained for further revision for clarity, conciseness, and consistency (e.g., changing any instances of “someone” to “people,” making all items present tense, etc.). The final revised set of 29 total items (i.e., 11 MITE and 18 MATE) averaged 10.8 words per sentence and had a Flesch-Kincaid Grade Level of 7.0, which accords with recommendations in scale development literature (DeVellis, 2003, p. 67).

PHASE 2: PSYCHOMETRIC EVALUATION AND SCALE DEVELOPMENT

Method

Participants and Procedures

The scales were developed and refined on data obtained through a participant recruitment company that helped collect data on a diverse sample of working adults. This company was paid \$10.00 per eligible participant recruited and they partnered with websites and incentivized participants in the form of points to respond. I included inclusion criteria variables at the beginning of the survey, which the recruitment used to screen people out of the rest of the survey. Specifically, the criteria were those who were 18 years or older, those working full time in at least one job (i.e., at least 35 hours per work), and those who have high reading fluency (i.e., those who can read a newspaper article and have 5 or less words unknown to them). The starting sample comprised 515 people. The recruitment company's internal quality control checks indicated 110 people either completed the survey too quickly or had data quality issues and were screened out, leaving 405 people. I additionally screened out those who I deemed to have completed the survey too quickly (i.e., 12 minutes or less) and those who provided text responses about their specific job title and associated tasks that were indicated low effort responding (e.g., missing completely, gibberish, etc.). This led to a final sample size of 332 respondents.

The sample was predominantly female (75.6%) and white (White = 85.5%, Black = 7.50%, Asian = 3.3%, Latin American = 1.8%, Other = 1.5%, missing = 1), with a

mean age of 41.05 years ($SD = 13.08$). Over half (57.83%) had completed a bachelor's degree or beyond. In terms of occupation representation, the sample reported representing 22 of 23 SOC occupational families (missing Military specific) and 127 broad occupations via a series of items with drop down menus to categorize the broader and more specific occupations they worked.

Measures

I used the starting pool of items developed in Phase 1 to operationalize the concepts of moral imperativeness and aspiration of task execution. An example item for moral imperativeness was, "Doing this job prevents a lot of suffering from happening to people." An example item for moral aspiration was, "Doing this job substantially helps others develop themselves." These items were rated on a 5-point Likert-type scale from 1 ("Strongly disagree") to 5 ("Strongly agree").

Results

Reliability

Scale development began with considering the reliability coefficients for the two scales. Specifically, items were checked to eliminate those whose elimination would improve coefficient alpha, with low corrected item-total correlations, with low variance, or high skew (Clark & Watson, 2019; DeVellis, 2003). This led to eliminating no items. For the moral imperativeness items, the coefficient alpha estimate was high (.94), corrected item-total correlations ranged from .51 to .83, standard deviations ranged from 1.12 to 1.22, and skewness ranged from -.06 to -.48 in magnitude. Means were near the center of the scale (ranged from 3.07 to 3.39), which is desirable for a scale (DeVellis, 2003, p. 94). For moral aspiration items, the coefficient alpha estimate was high (.97),

corrected item-total correlations ranged from .68 to .81, standard deviations ranged from .92 to 1.21, and skewness ranged from -.16 to -.89 in magnitude. Means ranged from 3.20 to 3.89. For all items, respondents used the full range of the scale from 1 to 5, indicating there were no floor or ceiling effects.

Dimensionality and Scale Refinement

Given this, I decided to proceed to investigate the dimensionality of the scale using exploratory factor analysis (EFA). To start, I conducted EFA using the principal axis factoring extraction method with Promax (oblique) rotation. The number of common factors underlying the data was determined using four methods to converge on a solution. The Kaiser criterion (i.e., eigenvalues greater than one) suggested three factors be retained, with initial eigenvalues of 16.75, 2.19, and 1.34 summarizing 57.79%, 7.56%, and 4.61%, respectively, of the total variance. Inspection of the scree plot seemed to also indicate a three-factor solution. Parallel analysis (Horn, 1965) using the maximum likelihood estimator and retention criterion that eigenvalues must exceed the 95th percentile of the eigenvalue distribution from the simulated data suggested a four factor solution. This can be considered an upper bound for how many to retain (Fabrigar & Wegener, 2011, p. 60)). A final method used employed Mplus (Muthén & Muthén, 2010) to run a series of EFAs using maximum likelihood estimation with different factor solutions (Fabrigar & Wegener, 2011, p. 63-65) to examine comparative fit indices. Models with one to four factor solutions with were run and rotated (Geomin). Comparative fit indices (see Table 1) indicated that a three-factor solution sufficiently met retention criteria (Fabrigar & Wegener, 2011, p. 63-65), although the four-factor solution fit better. Interpretability of the factor solution is as important in determining the

number of factors to retain as what is suggested by mechanical methods (Fabrigar, Wegener, MacCallum, & Strahan, 1999). The four-factor solution indicated that two items about preventing loss of financial stability defined one factor with no other items loading above .40 on it. Since retaining this solution would yield an underidentified factor and given the results from all other factor retention methods, a three-factor solution was retained.

To refine the scale, I used this three-factor model to inform what items to eliminate based off of substantial crossloadings (Clark & Watson, 2019). All items loaded onto at least one factor at .40 or above. Three items that crossloaded onto a factor within .10 of its strongest factor loading were eliminated. Further refinement involved fitting a series of confirmatory factor analyses (CFA).

Model fit tends to be determined using heuristic rules for good fit (e.g., SRMR < .08, RMSEA < .06, TLI > .95, and CFI > .95; Hu & Bentler, 1999), but these cutoffs may be too strict in practice (Marsh, Hau, & Wen, 2004). I decided that in cases where fit indices not meet bare minimum cutoffs for close fit for any one index (e.g., CFI > .90; Bentler & Bonett, 1980; Browne & Cudeck, 1993), combinatorial rules for rejection (i.e., TLI < .95 and SRMR > .06, CFI < .96 and SRMR > .06, or RMSEA > .06 and SRMR > .09; Hu & Bentler, 1999) were to be used to determine model fit acceptability.

A series of CFAs were run, the first of which specified that items load onto their respective factors as indicated in the three-factor EFA solution (Model 1, see Table 2). Subsequent models removed the lowest loading item from the prior solution and fitting that CFA model to the data. This was repeated with attention to substantive interpretability concerns. This process was stopped when an item that was specific to the

core meaning of one of the three constructs was the lowest loading item. It was also at this point that the RMSEA estimate indicated the model should be rejected (i.e., .10; Model 8). The comparative fit indices were quite similar. The fourth solution was chosen because the fifth solution would eliminate an item that arguably defined its factor. This led to three items being eliminated: the two aforementioned financial stability items and one item that was written to be vague (“Performing this job is likely to create beneficial outcomes for people. “).

Exploratory structural equation modeling (ESEM; Asparouhov & Muthén, 2009) was used to assess overall model fit to the data to address the issue of cross-loadings (Hopwood & Donnellan, 2010). That is, CFA may be too restrictive since it assumes zero magnitude crossloadings and this a) inflates correlations between factors and b) leads to fit indices that may lead to unnecessary model rejection. Models with a one- to three-factor ESEM solution were fit to the data (see Table 3) using oblique (Geomin) rotation for greater interpretability. Only the three-factor solution fit the data well. These model fit results do need to be interpreted with some amount of caution since, ideally, the development phase of a scale would be followed by both (potentially multiple) rounds of subsequent validation and refinement, each time using a different sample (Clark & Watson, 2019).

Table 4 presents the final set of 23 items and their pattern of factor loadings across the three factors of the scale. The first factor primarily comprised and was most strongly identified by items intended to measure moral imperativeness, although two moral aspiration items about making people especially healthy also loaded here. The second factor included items intended to measure moral aspiration, but were essentially

about helping others grow as people. The third factor included items intended to measure moral aspiration, but were about increasing people's pleasure or positive emotions. It seems that the primary underlying factors that capture between-job task execution differences in how people's well-being are affected are differentiated on the basis of *kinds* of well-being – specifically, physical, eudaimonic, and hedonic well-being, respectively. Internal consistency estimates the factor were high (.95, .94, .93, respectively).

However, the two-factor solution (Table 3) was on the verge of attaining acceptable fit and, given the theory advanced about moral imperativeness and aspiration as underlying regulatory foci, I decided to fit a second-order CFA model where a higher-order factor explained the strong correlation (.73) between the eudaimonic and hedonic well-being factors, which contained the bulk of the moral aspiration items. The fit of the model was acceptable and passed combinatorial rules (Chi-square = 784.14, $df = 227$, AIC = 16445.82, BIC = 16719.79, CFI = .92, TLI = .91, RMSEA = .09 [90% CI = .08 - .09], SRMR = .05). I aggregated items to form scale scores for the eudaimonic and hedonic factors and found the Spearman-Brown reliability coefficient for these two scores (Eisinga, Grotenhuis, & Pelzer, 2013) to be high (.90). In sum, this would suggest that it may be justifiable to aggregate the two scale scores to form an index of moral aspiration of task execution per my original hypotheses.

PHASE 3: CONSTRUCT VALIDATION

Having established adequate psychometric properties of the scale, it was now necessary to provide empirical evidence that what is assessed by the scales are measuring their respective constructs (Cronbach & Meehl, 1955). What is especially important is establishing convergent and discriminant validity evidence or demonstrating that MITE and MATE are a) highly related to similar constructs as well as b) distinct from extant constructs and c) from each other in their pattern of relationships with theoretically-related constructs (Campbell & Fiske, 1959).

Table 5 outlines the hypotheses. The first major hypothesis is that MITE and MATE are both highly related to, but distinct from the three other related constructs. However, it is expected that MATE, compared to MITE, will more strongly relate to job opportunities for impact on beneficiaries (Grant, 2008a) since the items in the latter appear to be oriented towards promoting increases in well-being:

H1: Moral imperativeness of task execution is distinct from (a) task significance, (b) job opportunities for impact on beneficiaries, and (c) moral intensity of the job. Moral aspiration of task execution is distinct from (d) task significance, (e) job opportunities for impact on beneficiaries, and (f) moral intensity of the job. (g) Moral aspiration of task execution will be more strongly associated with job opportunities for impact on beneficiaries than moral imperativeness of task execution.

The second major hypothesis concerns the regulatory focus of this article's focal constructs. If MITE and MATE have been adequately conceptualized and operationalized, then each should evidence a stronger relationship with its intended rather than the non-intended regulatory focus. Past research has suggested that the task type (i.e., prevention- and promotion-focus oriented) seem to prime subsequent behavior consistent with the related regulatory focus (van Dijk & Kluger, 2011). As such and given MITE and MATE concern long-term, repeated enactment of tasks, it is reasonable to assume associations with generalized individual difference measures of regulatory focus (Higgins et al., 2001). However, since MITE and MATE are intended to be aspects of the *tasks* and collectively of doing the *job*, it is expected that these associations should be stronger with a measure of regulatory focus *behavioral manifestations at work* (Wallace, Johnson, & Frazier, 2009) rather than a *generalized individual differences* measure of regulatory focus:

H2: (a) MITE will be more strongly and positively associated with prevention focus (than promotion focus) measures and (b) this association will be stronger with a contextualized, behavioral measure of prevention focus than a generalized individual differences version. (c) MATE will be more strongly and positively associated with promotion focus (than prevention) measures and (d) this association will be stronger with a contextualized, behavioral measure of promotion focus than a generalized individual differences version.

Having established the convergent validity of the scales, the third major set of hypotheses concerns establishing discriminant validity or that MITE and MATE are not highly related to distinct constructs. Since MITE and MATE are conceptualized as fundamentally *job task* characteristics, they should be distinguishable from individual differences of the workers rating the job they do. MITE and MATE are expected to be distinct from individual differences that may influence how moral aspects of job task characteristics are rated, such as sensitivity to injustice (Schmitt, Baumert, Gollwitzer, & Maes, 2010), importance of a moral identity to their sense of self (Aquino & Reed II, 2002), and positive attitudes about oneself or core self-evaluation (Judge & Bono, 2001), which has been shown to correlate with overall job characteristics scores (Chang, Ferris, Johnson, Rosen, & Tan, 2012; Oldham & Fried, 2016):

H3: MITE will be distinguishable from (a) injustice sensitivity, (b) self importance of moral identity, and (c) core self-evaluations. MATE will be distinguishable from (d) injustice sensitivity, (e) self importance of moral identity, and (f) core self-evaluations.

The next step in construct validation is establishing criterion-related validity. In this current study, psychological and behavioral outcomes are of most interest. The theory is that working jobs higher on MITE or MATE will require repeated enactment of certain behaviors that trigger a higher prevalence of certain psychological states (e.g., vigilance for highly prevention-focused jobs, eagerness for highly promotion-focused jobs) at work. This should relate to psychological and behavioral work outcomes.

One that is most central to the MITE and MATE's respective monikers concerns the psychological experience of duty versus aspiration. The constructs themselves concern the degree that doing the job will have different kinds of impact on different types of well-being on others, but the theory formulated is that this does constitute or will at least be experienced as a sense of moral obligation or ideal. Therefore, it is expected that MITE will relate more strongly than MATE to a measure of moral duty in doing the job (Bunderson & Thompson, 2009), whereas MATE will relate more strongly to a measure of moral imperativeness of doing the job framed in terms of mission and values (moral imperativeness dimension; Jaros, 2007). In line with this sense of duty or ideal, it is expected that MITE and MATE will both positively relate to a sense of calling to the work in the neo-classical sense (i.e., drawn by destiny and thus duty; Bunderson & Thompson, 2009) as well as a sense of psychological meaning about work (Spreitzer, 1995) derived from helping people via fulfilling this commitment.

H4: (a) MITE will be more positively, strongly associated than MATE with a measure of moral duty in doing the job, whereas (b) MATE will be more positively, strongly associated than MITE with a measure of moral ideal of doing the job. (c & d) MITE and (e & f) MATE will both positively predict a sense of calling to and meaningfulness about that job.

However, MITE and MATE are expected to differentially predict job engagement and attitudes. Based on past meta-analytic findings on the relationships between regulatory focus and job outcomes (Lanaj et al., 2012), MITE is expected to be negatively with job satisfaction (Brayfield & Rothe, 1951), whereas MATE is expected to

be positively related to job satisfaction and positively associated with work engagement (i.e., sense of vigor, absorption, and dedication while working; Schaufeli, Bakker, & Salanova, 2006). Given that MITE is about preventing harm, it is also expected that jobs higher on MITE will be more stressful since prevention focus failure is associated with high arousal (i.e., agitation) negative emotions rather than promotion focus failure low arousal (i.e., dejection) negative emotions (Idson et al., 2000).

H5: MITE will be (a) negatively associated with job satisfaction and (b) positively associated with work stress. In contrast, MATE will be (c) positively associated with work engagement and (d) job satisfaction.

In predicting work behavior, it has been shown meta-analytically (Lanaj et al., 2012) that prevention focus positively relates to safety performance behavior (Ford & Tetrick, 2011; Hofmann, Morgeson, & Gerrass, 2003) whereas promotion focus did not significantly relate to it. This makes conceptual sense, as those who are vigilant to errors will be more likely to ensure the safety of others around them. Jobs high on MITE should actually entail safety performance behaviors as part of fulfilling the very tasks that constitute those jobs. Thus, MITE should positively relate to safety performance behavior whereas MATE is not expected to relate to it.

Similarly, that same meta-analysis (Lanaj et al., 2012) found that promotion focus was associated with engaging in organizational citizenship behaviors (Fox, Spector, Goh, Bruursema, & Kessler, 2012) or extra-role behaviors that help co-workers (e.g., offering to take on extra work) and the organization (e.g., speaking well of the company). Although this would actually constitute behaviors that lie outside of task performance

– which is essentially what MITE and MATE are concerned with – it is expected that MATE will nevertheless be associated with it since doing jobs high on MATE will likely entail being helpful to co-workers by way of expectation if not central work tasks. Prevention focus was not associated with OCBs and MITE is not expected to be.

H6: (a) MITE will be more positively related than MATE to safety performance. (b) MATE will be positively related to organizational citizenship behaviors.

The final set of hypotheses concern incremental validity, or the evidence that the measures of MITE and MATE will predict variance in relevant outcomes above and beyond more easily obtained information (Sechrest, 1963). Historically, incremental validity has been particularly important in the area of psychology of industrial/organizational psychology as an applied field since there are well-defined outcomes that are of value (e.g., turnover) to interested parties (e.g., organizations; Hunsley & Meyer, 2003). But establishing incremental validity evidence for MITE and MATE is not only important in predicting relevant outcomes for its own sake, but also to validate them as new scales (Hunsley & Meyer, 2003) for the purpose of construct validation (Haynes & Lench, 2003) to show that they are not simply redundant with task significance, job opportunities for impact on beneficiaries, and moral intensity of the job. Demonstrating this is an especially stringent test of the predictive power of MITE and MATE in explaining relevant outcome variance because the benchmark is not just statistical chance, but of what the three aforementioned extant scales can explain *given*

what MITE and MATE share with them (Haynes & Lench, 2003; Hunsley & Meyer, 2003).

H7: Moral imperativeness of task execution and moral aspiration of task execution, as a set, will incrementally predict (a) moral duty, (b) moral aspiration, (c) calling in work, (d) meaningfulness in work, (e) job satisfaction, (f) work stress, (g) work engagement, (h) safety performance, and (i) organizational citizenship behaviors beyond task significance job opportunities for impact on beneficiaries, and moral intensity of the job.

Method

Participants

The same sample of 332 respondents from Phase 2 was used here.

Measures

All items were measured were measured on a 1 (“Strongly disagree”) to 5 (“Strongly agree”) Likert-type scale unless otherwise noted. All scales were presented in a randomized order to respondents and all items within scales were presented in randomized order. All moral imperativeness and moral aspiration items were presented as one scale. Table 6 provides descriptive statistics and measures of internal consistency.

Moral imperativeness of task execution. The items in the current study that loaded on the first factor in Phase 2 concerning affecting the physical well-being of others were used to measure moral imperativeness of task execution. The scale totals nine items.

Moral aspiration of task execution. The items developed in the current study that loaded onto the second and third factor, concerning affecting the eudaimonic and hedonic well-being of others, were used to measure moral aspiration of task execution. Scale scores for each factor were formed from averages of respective items and then averaged to create this index.

Task significance. Task significance was assessed using the three-item measure of the Job Diagnostic Survey (Hackman & Oldham, 1974). Two items were scored on a 1 (“Very inaccurate”) to 7 (“Very accurate”) scale and one was assessed on a 1 (“Not very significant; the outcomes of my work are not likely to have important effects on other people”) to 7 (“Highly significant; the outcomes of my work can affect other people in very important ways”) scale.

Job opportunities for impact on beneficiaries. This construct will be measured using the Job Opportunities for Impact on Beneficiaries scale (Grant, 2008a). The measure includes dimension of Magnitude, Frequency, and Scope. Each dimension is measured using three items on a 1 (“Disagree strongly”) to 7 (“Agree strongly”) scale. Internal consistency of each subscale (.93, .94, .88, respectively,) were high.

Moral intensity of tasks. The three item scale from Opoku-Dakwa (Preliminary Study, Table 2.5, 2018) were adapted for the purposes of this study. Instead of asking about the a project affecting community members, the items were changed to refer to the job the respondent worked and those affected by it, respectively.

Prevention and promotion. Chronic or individual differences in prevention and promotion focus were measured using the Regulatory Focus Questionnaire (Higgins et al., 2001), which has been shown to be the most valid measure of regulatory focus

(Haws, Dholakia, & Bearden, 2010; Summerville & Roese, 2008). Items were rated on a 1 (“Never or seldom”) to 5 (“Often”) scale and totaled five for prevention focus and six for promotion focus.

Contextualized prevention and promotion focus. The Regulatory Focus at Work Scale (Wallace et al., 2009) scale was used to measure prevention and promotion focus behaviors at work. Each is measured using six items.

Injustice sensitivity. The Justice Sensitivity Inventory’s (Schmitt et al., 2010) Perpetrator subscale was chosen to measure injustice sensitivity. The ten-item subscale presents items that state feelings of guilt or bad conscience when committing unjust acts and asks respondents to respond on a 0 (“Not at all”) to 5 (“Exactly”) scale.

Self importance of moral identity. The Self Importance of Moral Identity’s (Aquino & Reed II, 2002) Internalization subscale was used to measure this construct, which taps how central moral traits are to one’s self concept. Nine prototypical moral traits are presented and the measure itself comprises five items.

Core self-evaluation. Core self-evaluation was measured using a 12-item measure (Judge, Erez, Bono, & Thoresen, 2003). The measure assesses positive perceptions of one’s own worth and effectiveness.

Moral duty. The Moral Duty (Bunderson & Thompson, 2009) scale taps how much respondents agree that providing good service to customers is a moral obligation or sacred trust to not be broken. The four-item measure uses a 1 (“Not at all”) to 7 (“To a very great extent”) response scale.

Moral ideal. The Moral Imperativeness (Jaros, 2007) items proposed as an aspect of organizational commitment were adapted to be about respondents’ jobs rather than the

organization for which they work. Despite the name of the scale, items speak about values and a sense of mission rather than duty. The measure comprises three items on a 1 (“Very strongly disagree”) to 7 (“Very strongly agree”) response scale.

Calling in work. A sense of calling in one’s work was measured using the Neoclassical Calling (Bunderson & Thompson, 2009) scale, which construes calling as a sense of destiny drawing one to their work. The six-item measure uses a 1 (“Very strongly disagree”) to 7 (“Very strongly agree”) response scale.

Meaning in work. A sense of meaning in one’s work was measured using the Psychological Meaningfulness of Work (Spreitzer, 1995) scale. The three-item measure uses a 1 (“Very strongly disagree”) to 7 (“Very strongly agree”) response scale.

Job satisfaction. Job satisfaction was measured using the five items of the Job Satisfaction scale (Brayfield & Rothe, 1951) as done in prior research (Judge, Locke, Durham, & Kluger, 1998).

Work stress. Stress at work was measured using the Work Stress (Stanton, Balzer, Smith, Parra, & Ironson, 2001) scale. The eight-item measure presents adjectives describing how one might feel about their job (e.g., “Overwhelming”) and asks them to select “Yes (Describes my job,” “No (Does not describe my job”, or “? (Cannot decide)” and these are coded as scores of 3, 0, and 1.5, respectively.

Work engagement. The shortened Utrecht Work Engagement Scale-9 (Schaufeli et al., 2006) was used to measure engagement at work. The three subscales of Vigor, Dedication, and Absorption are each measured using three items on a 0 (“Never”) to 6 (“Always/Everyday”) response scale. Coefficient alpha for the subscales (.89, .90, .77, respectively) for the subscales were high.

Safety participation. Safety behaviors were measured using the Safety Participation (Ford & Tetrick, 2011; Hofmann et al., 2003) scale. The six items were measured on a “Much less than the average employee” to “Much more than the average worker” response scale. Since I wanted to make the reference point clear, I specified in the instruction that the average employee referred to the average worker working a typical job. This was to control for the likely possibility that respondents might use their organization as the reference point and likely lead to reduced variance in scores given that people working in the same organization (e.g., hospital) might be engaging in a high degree of such behaviors in absolute terms, but average compared to the other employees in that organization.

Organizational citizenship behaviors. The Organizational Citizenship Behavior-Checklist (Fox et al., 2012) was used to measure helpful behaviors at work. The 20-item measure is rated on a 1 (“Never”) to 5 (“Everyday”) frequency response scale.

The measures of internal consistency were generally acceptable to high (i.e., .70 - .98) with some exceptions (see Table 6). The measure of chronic or individual differences in prevention focus had unacceptable internal consistency (.36) and the measure of chronic promotion focus as on the lower side (.62), as was the measure of task significance (.61).

Additionally, the survey included measures of demographic data and organizational job tenure, job tenure, and education level. As mentioned in Phase 2, it also included a series of questions that allowed respondents to categorize their own job into existing ONET occupational major, minor, and broad categories. They were also

asked to type out their official job title and list up to seven work tasks that defined their job.

Results

Tests of association between variables were assessed based off of significant Pearson product-moment correlations. Lack of discriminant validity was demonstrated if constructs do not correlate .80 or beyond (Brown, 2006, p. 32). Tests of a significant difference between correlations was tested using a method to account for dependent correlations from the same sample (Meng, Rosenthal, & Rubin, 1992). Table 5 summarizes the results and indicates whether hypotheses were supported.

The first set of hypotheses concerned convergence with similar constructs, yet discriminability. As hypothesized, moral imperativeness correlated moderately to strongly (i.e., $r_s = .31, .51, \text{ and } .46, p < .01$; respectively) with task significance, job opportunities for impact on beneficiaries, and moral intensity. Similarly, moral aspiration correlated moderately to strongly ($r_s = .43, .70, \text{ and } .45, p < .01$; respectively) with task significance, job opportunities for impact on beneficiaries, and moral intensity. None of the hypotheses were so strong as to indicate that either moral imperativeness or aspiration was redundant with similar constructs. As hypothesized, moral aspiration was more strongly correlated with job opportunities for impact on beneficiaries than moral imperativeness ($r_{\text{diff}} = .19$ [95% CI= .21, .38], $z = 6.54, p < .01$). All of the hypotheses in the first set were supported.

The second set of hypotheses concerned convergent validity with chronic and contextualized prevention focus. Given the unacceptably low reliability of the chronic prevention focus scale mentioned above, the hypotheses involving it (H2a-c) were not

wholly tested. Moral imperativeness was not associated with promotion focus ($r = .03, p = .65, ns$), and this was not compared to its association with prevention focus. Contrary to expectations, it was also not associated with contextualized (work) prevention focus behaviors ($r = .10, p = .08, ns$) and this was also not compared to its association with chronic prevention focus. Hypotheses H2a and b were not supported. Moral aspiration was associated with chronic promotion focus ($r = .17, p < .01$; not tested against its association with prevention focus), contextualized (work) promotion focus behaviors ($r = .36, p < .01$), and the difference in strength of association was significant ($r_{diff} = .18$ [95% CI = .07, .32], $z = 2.94, p < .01$) as hypothesized.

The third set of hypotheses concerned discriminant validity from individual differences that may affect how respondents perceived their job. As hypothesized, moral imperativeness was not so strongly associated with injustice sensitivity, self importance of moral identity (internalization), or core self-evaluations ($r = .04, p = .42, ns$; $r = -.15, p < .01$; $r = .09, p = .12, ns$; respectively) to suggest lack of discrimination, and neither was moral aspiration ($r = .16, p < .01$; $r = -.02, p = .70, ns$; $r = .22, p < .01$; respectively).

The fourth set of hypotheses concerned the psychological experiences about work as a function of differences between moral imperativeness and moral aspiration in that work. The first of these were not supported: although moral imperativeness was positively associated with a sense of moral duty ($r = .20, p < .01$), it was not more strongly associated with it than moral aspiration was ($r = .38, p < .01$) as hypothesized ($r_{diff} = -.18$ [95% CI = -.27, -.12], $z = -4.89$, one-tailed $p < .01$ [wrong direction]). The second of this set of hypotheses was supported: moral aspiration was associated with moral idealization of doing the work ($r = .60, p < .01$) and this was stronger ($r_{diff} = .17$

[95% CI= .14, .31], $z = 5.27$, $p < .01$) than moral imperativeness' association with moral idealization ($r = .43$, $p < .01$). Moral imperativeness was positively associated with a sense of calling ($r = .46$, $p < .01$) and psychological meaning at work ($r = .44$, $p < .01$) as was moral aspiration ($r_s = .60$, $p < .01$; $r = .61$, $p < .01$; respectively) as anticipated.

The fifth set of hypotheses concerned how moral imperativeness and aspiration related to job attitudes. The first of these was not supported: moral imperativeness was not negatively, but rather positively associated with job satisfaction ($r = .21$, $p < .01$) and it was actually not associated with work stress ($r = .00$, $p = .97$, *ns*). The second of the hypotheses was supported: moral aspiration was positively associated with both job satisfaction ($r = .38$, $p < .01$) and work engagement ($r = .57$, $p < .01$).

The sixth and set of hypotheses concerned moral imperativeness and aspiration's association with theoretically-relevant job behaviors. The first of these was not fully supported: although moral imperativeness was positively associated with safety performance ($r = .46$, $p < .01$), it was not stronger ($r_{\text{diff}} = .01$ [95% CI= -.07, .09], $z = .27$, one-tailed $p = .39$, *ns*) than moral aspiration's association with it ($r = .45$, $p < .01$). The second hypothesis was supported: moral aspiration was indeed positively associated with organizational citizenship behaviors ($r = .51$, $p < .01$).

The seventh and final set of hypotheses concerned moral imperativeness and aspiration's ability to predict outcome variance beyond task significance, job opportunities for impact on beneficiaries, and moral intensity. I tested this by conducting hierarchical regressions whereby each outcome was regressed on task significance, job opportunities for impact on beneficiaries, and moral intensity (i.e., hereon referred to as the three extant moral job characteristics) as a set in the first step and MITE and MATE,

as a set, were entered into the second step. For a sense of moral duty in the job, the three extant moral job characteristics explained 28.4% of the variance, $F(3, 328) = 43.33, p < .001$, in the first step and adding MITE and MATE in the second step increased R^2 by 1.3%, $F(2, 326) = 2.92, p = .06$, which was not significant. This hypothesis was not supported. For a sense of moral ideal in the job, the three extant moral job characteristics explained 38.8% of the variance, $F(3, 328) = 69.30, p < .001$, in the first step and adding MITE and MATE in the second step increased R^2 by 5.3%, $F(2, 326) = 15.35, p < .001$, which was significant. This hypothesis was supported. For a sense of calling in work, the three extant moral job characteristics explained 37.0% of the variance, $F(3, 328) = 64.11, p < .001$, in the first step and adding MITE and MATE in the second step increased R^2 by 6.1%, $F(2, 326) = 17.32, p < .001$, which was significant. This hypothesis was supported. For a sense of meaning in work, the three extant moral job characteristics explained 43.0% of the variance, $F(3, 328) = 82.45, p < .001$, in the first step and adding MITE and MATE in the second step increased R^2 by 5.0%, $F(2, 326) = 15.75, p < .001$, which was significant. This hypothesis was supported. For job satisfaction, the three extant moral job characteristics explained 21.9% of the variance, $F(3, 328) = 30.72, p < .001$, in the first step and adding MITE and MATE in the second step increased R^2 by 2.5%, $F(2, 326) = 5.30, p = .005$, which was significant. This hypothesis was supported. For work stress, the three extant moral job characteristics explained 4.8% of the variance, $F(3, 328) = 5.51, p = .001$, in the first step and adding MITE and MATE in the second step increased R^2 by 4.2%, $F(2, 326) = 7.46, p = .001$, which was significant. This hypothesis was supported. For work engagement, the three extant moral job characteristics explained 34.0% of the variance, $F(3, 328) = 56.39, p < .001$, in the first step and adding MITE and

MATE in the second step increased R^2 by 5.6%, $F(2, 326) = 15.08, p < .001$, which was significant. This hypothesis was supported. For safety performance, the three extant moral job characteristics explained 11.4% of the variance, $F(3, 328) = 14.04, p < .001$, in the first step and adding MITE and MATE in the second step increased R^2 by 13.0%, $F(2, 326) = 27.90, p < .001$, which was significant. This hypothesis was supported. Finally, for organizational citizenship behaviors, the three extant moral job characteristics explained 18.2% of the variance, $F(3, 328) = 24.34, p < .001$, in the first step and adding MITE and MATE in the second step increased R^2 by 11.2%, $F(2, 326) = 25.88, p < .001$, which was significant. This hypothesis was supported.

Discussion

Phase 3 sought to develop a measure of the target constructs and then to establish convergent, discriminant, and criterion-related validity of moral imperativeness and aspiration. Psychometric properties of the scale were generally acceptable. Results generally supported the hypotheses. Both moral imperativeness and aspiration were positively associated with similar constructs: task significance, job opportunities for impact on beneficiaries (moral aspiration more so as predicted), and moral intensity of the job. Moral aspiration was positively related to chronic promotion focus and even more related to work-based promotion focus behaviors. Both moral imperativeness and aspiration were discriminable from individual difference measures that may affect perceptions of and ratings about their job (e.g., injustice sensitivity).

In terms of criterion-related validity, both moral imperativeness and aspiration predicted psychological states about respondents' jobs (i.e., moral duty, moral aspiration, calling in the work, and meaning in the work) and moral aspiration positively predicted

job satisfaction and work engagement. For job behaviors, moral imperativeness positively predicted safety performance as expected and moral aspiration predicted safety performance and organizational citizenship behaviors. And in predicting these outcomes, moral imperativeness and aspiration as a set explained a statistically significant amount of incremental variance beyond task significance, job opportunities for impact on beneficiaries, and moral intensity as a set for all outcomes except for a sense of moral duty in the job. This provides fairly strong evidence that a) moral imperativeness and aspiration are not merely redundant with the three extant moral job characteristics and b) have utility in predicting relevant outcomes.

Some hypotheses were not supported and these were mostly with regard to moral imperativeness. It was not associated with contextualized (work-based) prevention focus behaviors, positively rather than negatively associated with job satisfaction, and not associated rather than positively with work stress. It was also less rather than more associated with a sense of moral duty one's job compared to moral aspiration and equally rather than more predictive of safety performance compared to the moral aspiration index.

This may be because most of the unsupported hypotheses were predicated on results from a meta-analysis on prevention and promotion focus (Lanaj et al., 2012) and their relationships with work-related outcomes. Insofar as moral imperativeness is not tapping a prevention focus, the hypotheses would not be expected. In sum, given that the moral imperativeness index was a) formed from a factor that was about affecting the physical well-being of people, b) included two items intended to moral aspiration (concerning making people healthier), and c) did not correlate with prevention focus

behaviors at work, it seems that moral imperativeness is not about jobs having a certain regulatory focus, but rather about affecting physical well-being.

An important caveat in interpreting results is that the sample in Phase 3 was the same as that in Phase 2. Ideally, testing these hypotheses would have occurred in different sample than that used for scale development. This would address concerns related to sampling error, that the results were due to idiosyncrasies about this particular sample and are not generalizable to the larger population. Although using a single sample to validate a scale and test empirical relationships with related constructs has been done in the past (e.g., Morgeson & Humphrey, 2006), best practices would dictate that there should be future investigations that test and extend these findings within a new sample.

STUDY 2: MORAL IMPERATIVENESS AND ASPIRATION OF TASK EXECUTION AT THE TASK LEVEL

Study 2 sought to further establish the validity of moral imperativeness and moral aspiration at its theoretically-intended level of analysis. Since the theory advanced concerned how *tasks* are fundamentally a) what define doing a job, b) differentiate one occupation from another, and c) are acts that have greater or lesser impact on different kinds of well-being on people, it makes theoretical sense to rate moral imperativeness and aspiration of *task* execution at the task level.

At the time of this writing, there is detailed information on 968 occupations in the O*NET database, including the tasks that define and differentiate them. This wealth of information allows us to select a subset of those occupations, have their tasks rated on moral imperativeness and aspiration, and then aggregate those task-level scores to their respective occupation level. These occupation-level scores will serve as consensual indices of moral imperativeness and aspiration for those occupations. Establishing validity evidence using these scores would provide compelling support for the idea that these are truly *job* characteristics rather than simply perceptions of job incumbents.

The present study seeks to apply the methodological logic of (Wong & Campion, 1991) to the occupations' tasks by having them rated on moral imperativeness and aspiration to index overall occupational scores. By also including raters aside from job incumbents to rate tasks from the O*NET online database (Peterson et al., 2001), I heed the call of recent JCT researchers to undertake more task-level research (Taber & Alliger, 1995; Wong & Campion, 1991) as well as multiple raters and methods (Grant et al.,

2011) to avoid common method variance (Wong & Campion, 1991) and triangulate towards more objective ratings.

Overview

Table 7 summarizes the hypotheses for this study. If raters are assessing some characteristic of tasks of an occupation, then occupation-level scores should converge with those of people doing that occupation from Phase 3.

H8: a) Occupational moral imperativeness and (b) aspiration aggregated from task-level ratings by naïve raters will positively correlate with respective construct scores of job incumbents working respective occupations.

Additionally, moral imperativeness and aspiration should be distinguishable from an extant measure for a similar construct, whether measured by the same naïve raters or aggregated from scores of those doing those occupations. Moral imperativeness and aspiration should furthermore be distinguishable from contextualized (work-based) prevention and promotion behaviors, respectively, since moral imperativeness and aspiration are about different kinds of well-being affected in others in particular.

H9: Both (a) occupational moral imperativeness and (b) aspiration will be distinguishable from occupational-level moral intensity of tasks and (c & d) aggregated moral intensity scores of job incumbents working respective occupations. (e) Occupational moral imperativeness will be distinguishable from aggregated contextualized (work-based) prevention focus behavior scores of job-incumbents working respective occupations.

(f) Occupational moral aspiration will be distinguishable from aggregated contextualized (work-based) promotion focus behavior scores of job-incumbent working respective occupations.

Finally, there are a couple of ways to establish criterion-related validity that would provide support for the idea that moral imperativeness and aspiration actually measures aspects of tasks. Moral imperativeness theoretically relates to prevention of harm and empirically is about affecting the physical health of people. If this is so, the level of moral imperativeness should differ between certain jobs that are focused on prevention of harm and those that are not. As Humphrey et al. (2007) hinted, errors in one job might lead to a loss of life, whereas an error in another might only lead to a disgruntled customer. Similar to Morgeson & Humphrey's (2006) hypothesis about task significance, it is expected that moral imperativeness scores will be higher for "human life-focused" jobs on average than "nonhuman life-focused" jobs since these jobs are about preventing harm to human beings, which is fundamental to the conceptualization of moral imperativeness. Similarly, moral aspiration should theoretically be higher for occupations that entail nurturance of people. Finally, if moral imperativeness and aspiration are substantive aspects of jobs and the theory developed that affecting the well-being of others is what makes something a *moral* concern is correct, then the higher the scores for an occupation on moral imperativeness and aspiration, the more important moral characteristics such as integrity should be for the performance of that job. Moreover, moral imperativeness and aspiration should predict scores on the importance of integrity beyond a similar construct.

H10: (a) “Human life-focused” occupations will be higher on average on occupational-level moral imperativeness than “nonhuman life-focused” occupations. (b) Occupations relating to nurturing or caring for people should be higher on average on moral aspiration than those that are not. (c) Moral imperativeness and (d) aspiration scores for occupations will be positively associated with ratings of importance of integrity for doing those occupations. (e) Moral imperativeness and aspiration will, as a set, incrementally predict importance of integrity for doing those occupations beyond occupational moral intensity.

Method

Participants and Procedures

MTurk is an online platform that allows workers (“MTurkers”) to complete tasks in exchange for pay. MTurkers have been shown to be a good source for data collection that is relatively inexpensive and is more diverse than undergraduate samples (Buhrmester, Kwang, & Gosling, 2011). They are also diverse in terms of age, gender, and income (Ross, Irani, Silberman, Zaldivar, & Tomlinson, 2010). They served as naïve raters for this study.

MTurkers were paid \$1.00 to perform the rating task. This rating task took the final sample of 905 participants approximately two minutes per job task or a total of approximately sixteen minutes ($Median_{time} = 16.53$ minutes, $IQR_{time} = 11.43$ minutes). A random job task from an unnamed random occupation was presented to them. They then rated the task on the study measures. Once finished, they were redirected to another

survey and the process repeated until they had rated eight tasks from eight different occupations. The survey concluded with demographic questions.

A couple of methods were used to ensure data quality. To deal with potential language issues, only MTurkers who resided in the United States were allowed to participate. Additionally, only those who had a 95% acceptance rate or better for their work on MTurk tasks were allowed to participate (Peer, Vosgerau, & Acquisti, 2014). The sample initially comprised 1,109 people. Those who were deemed to have completed the task too quickly (i.e., one minute per job task or less or a total of eight minutes or less) were screened out. Since some of the job tasks presented were somewhat complex in sentence structure, only those who agreed that they were moderately high on reading fluency in English were included for subsequent analyses. The final sample comprised 905 respondents approximately equal in gender (50.9% female, missing = 1), middle-aged ($M_{age} = 38.86$, $SD = 11.93$), somewhat racially diverse (White = 76.6%, Black = 15.6%, Asian = 5.7%, Latin American = 2.4%, Other = 1.7%), and well educated, with 63.6% having completed a bachelor's degree or higher.

Archival DOT and O*NET Occupations

O*NET is a content model of work that describes six major areas (Peterson et al., 2001). The O*NET represents consensual descriptions of occupations as developed in collaboration between job analysts and job incumbents across the nation serving as subject matter experts. Consequently, the core technical tasks for each occupation are standardized in ways that allow for between task and occupation (i.e., aggregated) comparisons. I focused on O*NET work role requirements, specifically the tasks that

define these occupations and the fulfillment of which defines their core technical performance.

A subset of occupations were chosen first based on those worked by job incumbents in Phase 3. This would allow for the testing of the present study's hypotheses about associations between occupation-level moral imperativeness and aspiration scores rated in this study and aggregated job-incumbent construct scores from those working those occupations. As stated in Phase 3, those respondents were asked drop-down menu questions that allowed them to self categorize their job starting with the 23 occupational major families, next into occupational minor groups, and finally into a broad occupation (e.g., chief executive officer, personal care aide). They were also asked to type in their official job title and up to seven job tasks that defined their job. The present author coded each of the 332 respondents on how well the self-categorized broad occupation matched the respondents' official job title and stated job tasks. Only those who a) had included a job title that b) reasonably fit the self-categorized broad occupation and/or had reasonably detailed job task information indicating a match were considered good representatives of job-incumbent scores on their respective occupations. This resulted in 251 respondents representing 22 of 23 occupational major families ("Military specific" was missing) and 103 broad occupations as a starting pool.

However, a final question to self categorize into a detailed occupation was not included. It is at this most specific detailed-occupation level that data about job tasks exist on O*NET. As such, the occupations to be used were further narrowed by only including the detailed occupations that shared the same name as the broad occupation to which they respectively belonged. This led to a final set of 38 detailed occupations

ranging from eleven tasks (e.g., management analyst) to 36 tasks (librarian) per occupation for a total of 822 job tasks that were rated in this study.

For the purpose of testing Hypothesis 9a, following Morgeson and Humphrey (2006), I considered “human life-focused” occupations as those that belonged to the community and social services, health care practitioners and technical, health care support, and protective service occupational major families. The remaining major families were considered the “nonhuman life-focused” occupations. To test Hypothesis 9b, occupations belonging to the “Education, Training, and Library” and “Personal Care and Services” occupational families were considered nurturance-related professions.

Measures

Occupational moral imperativeness and aspiration. Tasks were rated by multiple raters in this study on the moral imperativeness and aspiration items developed, refined, and validated in Phases 1 to 3. Items and instructions were adapted to refer to doing the task rather than doing a job. Nine items measured moral imperativeness and 14 items measured moral aspiration. Consistent with past task-level research, a 1 (Disagree) to 3 (Agree) response scale was used given that ratings at the task level have been shown to be less discriminable on characteristics (Wong & Campion, 1991).

Occupational moral intensity. The three items from Opoku-Dakwa (Preliminary Study, Table 2.5, 2018) were adapted for the purposes of this study as before, but adapted to refer to job tasks. A 1 (Disagree) to 3 (Agree) response scale was used.

Job-incumbent moral imperativeness and aspiration. Job-incumbent scores were calculated from data in Phase 3. When there was more than one job incumbent working jobs in the same broad occupation, moral imperativeness and aspiration scores

were aggregated within occupation to derive job incumbent scores for those broad occupations.

Job-incumbent work-based prevention and promotion behaviors. As above, scores were derived from job incumbents from Phase 3 and aggregated within broad occupation as applicable.

Importance of integrity for occupation. O*NET ratings of the importance of the integrity work style personal characteristic for each occupation was used to operationalize this construct.

Analytic Strategy

To calculate occupational moral imperativeness and aspiration, item-level ratings were first aggregated across raters for each task. Next, scale scores were calculated by aggregating from those scores across (sub)scale items. Finally, these task-level construct scores were aggregated across tasks for their respective occupations to create occupation-level scores. The same was done with occupational moral intensity.

Results

Table 7 summarizes the results. The first hypotheses about convergent validity were supported: occupational moral imperativeness correlated with aggregated, job-incumbent moral imperativeness ($r = .43, p < .01$) scores and occupational moral aspiration correlated with aggregated, job-incumbent moral aspiration scores ($r = .34, p < .05$).

Regarding hypotheses about discriminant validity, both occupational moral imperativeness ($r = .73, p < .01$) and moral aspiration ($r = .73, p < .01$) were strongly correlated with the moral intensity of the occupation as rated by the same respondents,

but not to the point of redundancy. However, occupational moral imperativeness was not significantly correlated with moral intensity aggregated from job-incumbent scores ($r = .32, p = .052, ns$) and neither was occupational moral aspiration ($r = .31, p = .056, ns$) as expected, further establishing discriminant validity. This was further supported by the low to moderate correlations between moral imperativeness and aspiration with the theoretically-related regulatory focus. Occupational moral imperativeness ratings were not associated with work-based prevention focus behavior scores of job incumbents working within those occupations ($r = -.08, p = .64$) and occupational moral aspiration was moderately associated with job incumbent scores on work-based promotion focus behaviors ($r = .35, p < .05$).

In an effort to further examine convergent and discriminant validity, a multitrait-multimethod matrix (Campbell & Fiske, 1959) was constructed (see Table 8) for constructs available in both Study 2 and Phase 3: moral imperativeness, moral aspiration, and moral intensity. The naïve raters and job-incumbents were the methods factors. Satisfying the convergent validity condition, validity (monotrait-heteromethod) coefficients were statistically significant and moderate to strong in magnitude (Cohen, 1992). Satisfying the first criteria for discriminant validity, the validity coefficients for moral imperativeness and aspiration were also stronger than the heterotrait-heteromethod coefficients in their respective columns and rows, although this was not the case for moral intensity. The reverse was true for the second criteria for discriminant validity: validity coefficients for moral imperativeness and aspiration were not – but the validity coefficient for moral intensity was – higher than their respective heterotrait-monomethod coefficients. Finally, the last criteria for discriminant validity was not true: the pattern of

interrelationships between coefficients in heterotrait triangles in the heteromethod and monomethod blocks were not the same. These criteria, especially the last two criteria, are ideals that in real world data are “rarely met” (Campbell & Fiske, 1959, p. 104) since methods do contribute much to patterns of covariation between test scores. Altogether, the results nevertheless suggest convergent validity and some evidence for discriminant validity.

The criterion-related validity hypotheses were largely supported. The “known groups” method (Cronbach & Meehl, 1955; Hattie & Cooksey, 1984) hypothesis was conducted using Welch’s *t*-test to account for the large differences in samples sizes between the groups in each hypothesis. “Human life-focused” occupations (e.g., registered nurses; $M = 2.42$, $SD = .20$, $N = 3$) were significantly higher on occupational moral imperativeness than “nonhuman life-focused” occupations ($M = 1.95$, $SD = .20$, $N = 35$); $t(2.36) = 3.85$, Cohen’s $d = 2.32$, $p = .047$. Similarly, nurturance-related occupations (e.g., business teachers, post-secondary; $M = 2.28$, $SD = .11$, $N = 9$) were significantly higher on occupational moral aspiration than non-nurturance-related occupations ($M = 2.09$, $SD = .14$, $N = 29$); $t(16.67) = 4.26$, Cohen’s $d = 1.52$, $p < .01$. Whereas occupational moral imperativeness was not significantly predictive of O*NET ratings about the importance of integrity for those occupations ($r = .23$, $p = .16$, *ns*), occupational moral aspiration scores was strongly predictive of it ($r = .57$, $p < .01$). Finally, hierarchical regression was used to test incremental validity, with occupational moral intensity explaining 30.1% of the variance in importance of integrity for doing corresponding occupations in the first step, $F(1, 36) = 15.47$, $p < .001$, and adding MITE and MATE as a set in the second step increased R^2 by 6.8%, $F(2, 34) = 1.83$, $p = .18$,

which was not significant. This hypothesis was not supported. A post hoc repeat of this analysis using occupational MATE's subscales (eudaimonic and hedonic) instead of aggregating these scores did demonstrate strong incremental variance: adding MITE, MATE-Eudaimonic, and MATE-Hedonic in step two increased R^2 by 18.1%, $F(3, 33) = 3.83, p < .05$.

Discussion

Naïve raters' moral imperativeness and aspiration task-level ratings aggregated to the occupation-level were moderately to strongly associated with respective construct scores of job incumbents working within those occupations. Moreover, these aggregated naïve rater scores were able to predict ratings of how important a moral characteristic – integrity – is for performing those occupations provided by the O*NET database. Finally, occupations that theoretically should be higher on moral imperativeness (e.g., nurse practitioners) and aspiration (e.g., childcare workers) were indeed higher than comparison-group occupations. The present study's results provide fairly strong evidence that moral imperativeness and aspiration exist beyond the mere perceptions of those doing the work.

However, some hypotheses were not supported. Correlations between occupational moral imperativeness and occupational moral aspiration with moral intensity using the same method of assessment (i.e., aggregated from naïve raters' task level scores) were quite strong, although not so high as to indicate complete redundancy. This finding was likely due to different common biases (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003) that are inflating their covariation (see General Discussion for a more in-depth analysis). This interpretation is supported by the markedly lower correlations

between occupational moral imperativeness and occupational moral aspiration with moral intensity aggregated from job-incumbent scores.

Occupational moral imperativeness was not significantly related to respective O*NET ratings of importance of integrity for those occupations ($r = .23$). Similarly, the variance in importance of integrity for doing occupations explained by occupational imperativeness and aspiration, as a set, beyond occupational intensity ($\Delta R^2 = .068$) was also not significant. These two non-significant results are likely due to the low sample size of 38 occupations that led to the effect size estimates not reaching statistical significance. Future research should include a much larger sample of occupations to be rated, perhaps all 968 occupations on O*NET on which there is detailed, data-level information.

GENERAL DISCUSSION

I developed a theory about the moral imperativeness and aspiration of task execution by integrating literature on job characteristics, moral psychology, and motivation. Moral imperativeness was defined as preventing harm in performing job tasks and moral aspiration as promoting flourishing in performing job tasks under the theory that morality is fundamentally about a moral agent affecting the well-being of a moral patient. Items intended to tap these constructs were reviewed by subject matter experts in Phase 1, subjected to psychometric analyses in Phase 2, and their respective scales validated in Phase 3 using job incumbents and using naïve raters in Study 2. Broadly speaking, the results were supportive of my hypotheses and the underlying theory advanced: that doing the tasks that constitute and differentiate occupations can differ in how much they a) positively affect the well-being of others, which in the aggregate will describe occupations' standing on b) two potentially different (from each other and extant moral job characteristics) c) moral characteristics of d) occupations.

First, regarding affecting the well-being of others, job-incumbent scores from Phase 3 on both moral imperativeness and aspiration correlated moderately to strongly with scores on three extant job characteristic measures meant to tap having an affect on the well-being of others (i.e., task significance, job opportunities for impact on beneficiaries, and moral intensity). In Study 2, occupational moral imperativeness and aspiration scores aggregated from task-level ratings from naïve raters were moderately to strongly correlated with aggregated job-incumbent scores from Phase 2 for corresponding occupations. This self-observer convergence in ratings on statements about positively affecting others' well-being lends further support to the notion that substantive aspects of

task execution are being tapped. Finally, that both moral imperativeness and aspiration predicted a host of positive job experiences and attitudes (e.g., calling in work, meaning in work, job satisfaction, etc.) is additional support for the idea that the effect on well-being on others is positive. Finally, in Study 2 and as hypothesized occupations that were “human life-focused” (i.e., related to preventing harm) were higher on average on moral imperativeness compared to those that were not, and occupations that were nurturance related (i.e., those that theoretically help others develop) were higher on average moral aspiration compared to those that were not. Thus, the part of the theory that moral imperativeness and aspiration tap into positively affecting the well-being of others is supported.

Second, although it was theorized that potentially two, largely independent moral dimensions could describe occupations, this empirically did not seem to be the case. Specifically, the constructs do not seem to be primarily differentiated on the basis of regulatory focus as anticipated. The underlying primary factors of the scale were about differences in *kinds* of well-being affected by doing jobs. The first factor concerned affecting physical well-being and was comprised primarily of moral imperativeness items. The second factor concerned affecting the eudaimonic well-being (e.g., helping others grow and develop as people) and the third factor concerned affecting the hedonic well-being (e.g., increasing pleasure) of people, and both were comprised of moral aspiration items. However, when re-running the analyses using moral aspiration’s eudaimonic and hedonic subscales separately rather than aggregating them, the pattern of results are virtually the same (see Appendix, Tables 9 to 13) for most results. Additionally, Phase 2 showed that fitting a model with a higher-order factor explaining

the covariation between the eudaimonic and hedonic factors demonstrated acceptable fit, suggesting that it is somewhat justifiable to infer a higher-order construct in moral aspiration.

It is also important at this point to interpret some anomalous findings that indicate issues with establishing discriminant validity evidence for moral imperativeness and aspiration, both from each other and from other constructs, in terms of common method biases (Podsakoff et al., 2003). First, job incumbent scores in Phase 3 on moral imperativeness correlated with moral aspiration scores highly (.76, Appendix, Table 9). They were also highly correlated (.73, Table 8) in subset of that sample used to create aggregated (within-occupation) job incumbent scores in Study 2. Yet, Study 2 results also showed that occupational moral imperativeness and aspiration scores aggregated from naïve raters' task-level ratings were not highly correlated with each other (.17, Table 8). Also, the former was not highly correlated with job-incumbent (aggregated) moral aspiration (.19) and the latter was not highly correlated with the job-incumbent (aggregated) moral imperativeness (.27). Second, moral imperativeness and aspiration were only moderately correlated with moral intensity (.46 and .45, respectively, Appendix, Table 9) in Phase 3. However, in Study 2, occupational moral imperativeness and aspiration were highly correlated with occupational moral intensity (.73 for both). As has been noted, method variance figures strongly into patterns of covariation between test scores in psychological science (Campbell & Fiske, 1959).

But patterns of interrelationships of variables in the heterotrait triangles in the monomethod and heteromethod blocks of the multitrait-multimethod matrix (see Table 8) are not uniform, suggesting that the it is neither the self-report nor naïve rating method

that are systematically problematic in and of themselves. The most likely explanation is that the item context effect of intermixing (Podsakoff et al., 2003) inflated the correlations that suggest a lack of discriminability. In all the cases mentioned where correlations were higher than expected the (sub)scales' items were presented together, grouped into one "block" of items and this tends to a) decrease within-construct item covariation and b) increase between-construct item covariation, thus inflating correlations between distinct constructs. A post hoc observation that further substantiates this interpretation is that the only other case where (sub)scales had their items intermixed in the present studies was with contextualized prevention focus and contextualized promotion focus in Phase 3, which evidenced a very high correlation (.73, see Table 9) that was much higher than that seen in the study where the scales were developed (.18; Wallace et al., 2009). Otherwise, moral imperativeness and aspiration were shown to be quite distinguishable from each other as well as task significance, job opportunities for impact on beneficiaries, and moral intensity. The fact that moral imperativeness and aspiration as a set incrementally predicted all criteria in Phase 3, with the exception of a sense of moral duty in doing the job, beyond the three extant moral job characteristics is further evidence for discriminant validity. The second aspect of the theory developed about moral imperativeness and aspiration concerning them being two constructs that are different from each other and extant moral job characteristics is somewhat supported.

Third, moral aspiration and imperativeness did seem to relate to moral characteristics of job experiences and of occupations. Both correlated significantly with a sense of moral duty and moral ideal in doing the job in Phase 3, although unexpectedly it was moral aspiration that was more strongly correlated with a sense of moral duty in

doing the job. Apparently, doing jobs that help others flourish is experienced as more of a moral duty than doing jobs that prevent harm. In Study 2, moral aspiration of occupations strongly predicted their corresponding scores on importance of integrity to do the job as taken from O*NET ratings. Occupational moral imperativeness did not significantly predict importance of integrity, and occupational moral aspiration and occupational moral imperativeness as a set did not predict it beyond occupational moral intensity. As mentioned, these non-significant findings are likely due to a smaller than desirable sample size of 38 occupations, though. Additionally, a post hoc analysis using moral aspiration's eudaimonic and hedonic subscales in place of their aggregated scores demonstrated that they (along with moral imperativeness) strongly incremented beyond occupational moral intensity in explaining variance in importance of integrity for occupations. Altogether, these results support the notion that moral imperativeness and aspiration are moral characteristics of jobs, relating to a sense of moral duty and ideal in doing the job and requiring moral characteristics to do them.

Fourth, moral imperativeness and aspiration do seem to be features of jobs rather than mere perceptions of job incumbents. That they didn't correlate at all or lowly with individual differences that would affect ratings (i.e., injustice sensitivity, self importance of moral identity [internalization], and core self-evaluations) suggests the ratings are more than perceptual. That they predicted variance in criteria beyond task significance, job opportunities for impact on beneficiaries, and moral intensity is important, but what is especially noteworthy is *which* criteria they provided the most incremental variance in: work stress, safety performance, and organizational citizenship behaviors. These are arguably the most concrete criteria in Phase 3 compared to the others falling into

psychological experiences (e.g., meaning in work) and attitudes (e.g., job satisfaction) categories about jobs. Since incremental validity analyses using hierarchical regression attributes shared variance to what is entered into the first step, it seems that what moral imperativeness and aspiration do *not* have in common with the three extant moral job characteristics have greatest utility in predicting more concrete criteria. In fact, the *incremental* variance explained in safety performance by moral imperativeness and aspiration was larger than all the variance explained by the three extant moral job characteristics and the variance they shared with moral imperativeness and aspiration. That moral imperativeness and aspiration were able to differentiate between “(non)human life-focused” and (non)nurturance related occupations, respectively, and were predictive of independent ratings of the importance of integrity for corresponding occupations drawn from O*NET provides fairly strong support for the idea that these are features of jobs rather than simply job incumbent perceptions.

In sum, moral imperativeness and aspiration seem to be two separable, moral constructs of jobs that index the degree that jobs positively affect the well-being of others. They do not appear to be redundant with task significance, job opportunities for impact on beneficiaries, or moral intensity and predict theoretically-relevant outcomes. Furthermore, they can differentiate between occupations on the basis of the kinds and ways well-being in others is affected, demonstrating discriminative validity (Foster & Cone, 1995). The bulk of the evidence suggests that the measure developed in the present studies can be used for the assessment purposes of theory building, prediction, and classification of jobs (Foster & Cone, 1995)

Theoretical and Practical Implications

Given the evidence about moral imperativeness and aspiration's relationship with external measures drawn from O*NET, it can be interpreted that they are measuring "objective" job characteristics (Morgeson & Humphrey, 2006). This has both theoretical and practical implications for personnel selection, organizational interpersonal dynamics, well-being, job design, and values to name but a few topics of inquiry. These can be discussed at micro- to macro-levels of analysis.

At the individual level, moral imperativeness and aspiration have implications for personnel selection from a demands-abilities perspective on person-job fit (Kristof-Brown et al., 2005). Specifically, this concerns how well employees' knowledge, skills, and abilities meet the requirements of a given job. Integrity is one of the strongest predictors of job performance aside from general mental ability (Ones, Viswesvaran, & Schmidt, 1993) and the present studies show that moral aspiration scores predict importance of integrity for doing corresponding occupations. It could be the case that having integrity, aside from being generally predictive of job performance, is *especially* predictive of job performance in occupations that positively affect the well-being of others. That is, it could be hypothesized that the relationship between integrity and job performance is moderated by moral aspiration or the degree that the job helps others flourish.

Beyond integrity, there is evidence that there are other character traits that predict job performance (Harzer & Ruch, 2014). Thus, another theoretical implication is that there are other morally-valued attributes or aspects of character (Ng, Tay, & Kuykendall, 2018) that are particularly and differentially predictive of job performance as a function

of (i.e., moderated by) the moral imperativeness and aspiration of jobs. For instance, it is unlikely that the profile of moral characteristics that are especially useful in doing the job of a business school professor well is the same as that for a police officer or a childcare worker.

A practical implication for personnel selection from this perspective is that selecting employees for jobs particularly high on moral imperativeness and aspiration might benefit from considering moral character attributes. Personality assessment, particularly on the Big Five personality traits, has increasingly been used to select employees (Rothstein & Goffin, 2006). But jobs that have the potential to have a very large impact on the well-being of others might require commensurately higher standing on character attributes that are non-redundant with Big Five personality (Ng et al., 2018). As has been noted, training police in dealing with people with mental health issues is not a panacea because not everyone will come out of the training equally skilled (Borum, 2000). Special units comprised of people who are selected on the basis of having the right attitude and skills who are then intensively trained are likely to produce the best results (Hails & Borum, 2003). I would argue that there are likely character attributes that would predispose police officers for being especially effective at being a part of these special units or even being effective police officers in general.

At the organizational level, moral imperativeness and aspiration have implications for organizational interpersonal dynamics, well-being of both customers and employees, and job design. It has been shown that procedurally just interactions with police officers increases both compliance/cooperation with and satisfaction/confidence in them by citizens (Mazerolle et al., 2013). Thus, to be effective (i.e., gain compliance and

cooperation while satisfying the customer) as a police officer – a job that is likely high on moral imperativeness or the prevention of harm – it behooves them to communicate with citizens in procedurally just ways. As some have argued though, this may have to start with supervisors (i.e., sergeants) themselves modeling procedurally just communication in how they interact with first-line police officers (Skogan et al., 2015).

It is often the case that police agencies have a “paramilitary structure “ (Owens et al., 2018, p. 61) that, reflecting a hierarchical order, do not require supervisors to communicate with their direct reports in procedurally just ways, and as a consequence this system can lead to police officers interacting with citizens in the same way. This accords with research on the trickle-down models of organizational justice (Masterson, 2001), abusive supervision (Mawritz, Mayer, Hoobler, Wayne, & Marinova, 2012), and ethical leadership (Mayer, Kuenzi, Greenbaum, Bardes, & Salvador, 2009). Indeed, a promising experiment intended to increase procedurally just communication in police officers had their sergeants role model such behavior during the intervention (Owens et al., 2018). If we want police officers to do their jobs well, then perhaps it is important to help their supervisors recognize that their job has direct bearing on the well-being of police officers and potentially dire, indirect downstream consequences on the well-being of citizens.

In terms of practical implications at the organizational level, jobs may be (re)designed so that employees recognize the impact that they are having on the well-being of others. For instance, it has been shown that meeting someone who benefits from one’s job increases persistence and job performance (Grant et al., 2007). This effect is likely mediated by the perceived or anticipated (prosocial) impact (Grant, 2007, 2008d,

2012; Opoku-Dakwa, Chen, & Rupp, 2018). In other words, providing a real-world, concrete example of one's effect on others' well-being can increase the sense that we are indeed doing so, in turn driving greater performance. An alternative strategy might be to institute practices where employees formally think about having helped someone else (e.g., via journaling or recalling a memory) – in this case an internal or external customer – since recalling when one has been a benefactor to someone else has been shown to increase prosocial behavior (Grant & Dutton, 2012).

Another intriguing alternative is to turn these practices on their head and look at the “dark side” – directly exposing workers to the ill-being that occurs when they fail to do their jobs that are high on moral imperativeness and aspiration. This might actually be more effective with jobs higher on moral imperativeness, as research has shown that negative feedback is actually more effective relative to positive feedback at increasing self-reported motivation and actual performance on prevention tasks, consistent with regulatory fit theory (van Dijk & Kluger, 2011). This should theoretically highlight the safety implications of such work, the concomitant moral responsibility of doing the job well, and the moral accountability implications of failing to do so.

In terms of directly affecting the well-being of external customers, a potential strategy involves drawing on the self-determination theory literature that has shown fulfilling three basic psychological needs (i.e., autonomy, competence, and relatedness) increases well-being across many operationalizations (Ryan & Deci, 2000). For example, a business teacher may help others grow by providing an autonomy supportive environment for a student to explore their interests, draw on social learning theory to role model perseverance and worth ethic as well as provide feedback to develop the student's

sense of competence, and show unconditional positive regard and a genuine sense of caring to instill a sense of relatedness in the student, connecting them to the intellectual community. The strategies described do not have to be limited to something as profound as changing the course of someone's career and maybe even life. Other jobs that have more limited scope and frequency of impact may also benefit from this. For instance, affording a short-order cook at a restaurant the autonomy and self-expression to come up with a dish of the month might bring more meaning and pride in their work. Similarly, providing an autonomy supportive environment for restaurant customers to choose a) how their order is made and b) what types of ingredients are available can allow them a variety of autonomous self-expressions that span the gamut from what is preferential (e.g., no pickles) to what is perhaps more health-related (e.g., gluten-free) to even what is perceived as most ethical (e.g., whether the livestock was pasture-raised and fed a natural diet). This can increase customer well-being under many different kinds of operationalizations. Of course, these strategies are predicated on the assumption that a job in question affects the well-being of others and begins with assessing the degree and kinds of well-being affected across a range of occupations.

Finally, at the societal level, moral imperativeness and aspiration have implications for job design and societal values. Empirically, doing jobs that positively impact the well-being of others relates to a broad variety of positive psychological states in (e.g., meaning) and attitudes (e.g., satisfaction) about doing the job. One could come to the conclusion that jobs can and should be (re)designed to increase this impact or, as mentioned above, to increase awareness or perceptions that that they do. As Morgeson and Humphrey (2006) noted, there has been a longstanding tradeoff between job

satisfaction and training and compensation requirements. That is, changing jobs to increase employee satisfaction often involves manipulating job characteristics (e.g., task variety) that entails more training and more compensation, representing costs to the organization. They suggested that if the aim is to increase worker satisfaction without incurring more organizational cost one could (re)design jobs by focusing on job characteristics that are least correlated with cognitive ability or, failing that, to restructure the social support structures at work to increase job satisfaction. Perhaps jobs could be designed to be higher on moral imperativeness and aspiration and perhaps doing this would increase motivation and thus job performance. Indeed, it is often prescribed that a good deed is – or should be – its own reward.

But a case could be made instead that good deeds should be rewarded, especially if they are central to one's job. After all, research has shown that as cultures develop economically, there is a reliable general tendency for cultures to shift away from values related to survival and towards those reflecting self-expression, such as trust, tolerance, and concern for well-being (Inglehart & Baker, 2000). Given this relationship, it could be argued that this increasing economic surplus should be invested in ways that reflect the values that tend to become en vogue. Bluntly, how much is the well-being of citizens worth and does compensation for jobs that affect citizens' well-being reflect the purported values of the nation to which they belong? It is a cliché that teachers do not get paid enough for the work they do. The moral aspiration of their job might help explain why some intuit this notion: the job tasks that are central to being a teacher help future citizens develop and grow as people. The theoretical implication here is that teachers and

other occupations that have a high, positive impact on the well-being of people should be paid more.

The practical implications of this line of thought might help assuage some potential counterarguments. Consider the cost-benefit ratio of using the measure developed in the present studies to assess all occupations on moral imperativeness and aspiration (Yates & Taub, 2003). Then consider the opportunity cost of not attracting top-tier talent into those occupations that have substantial, positive impact in preventing harm and promoting flourishing in people. What number of cases of diseases will not be prevented, what degree of quality of life will not be improved (Haynes & Lench, 2003; Yates & Taub, 2003) because more lucrative job opportunities lie elsewhere? What is the loss in human capital – talent, ambition, creativity that remains undeveloped – that results from jobs that help future citizens flourish not paying enough for the most capable potential job incumbents to deal with the exigencies of life and supporting a family? Would investing in compensation for these jobs have a long-term return on investment at the societal level, such as careers and businesses started or innovations invented by those that flourished because of a job incumbent that otherwise would not have? Measuring these effects is often hard, but necessary to make a case for investing in assessment programs (Yates & Taub, 2003). Even if there is not an economic case that can be made, the point is that there may be a moral case if a nation does value the well-being of its citizens.

Limitations and Future Directions

The present studies have a few limitations. First, the factor structure revealed three primary factors relating to positively affecting the physical, eudaimonic, and

hedonic well-being of others. It is worth mentioning that the three factors closely mirror the three items used in a past study (Opoku-Dakwa, 2018). Those items measured moral intensity by asking about having an effect on the physical, psychological, and emotional well-being of others. This in part explains the high correlations with that construct in Study 2. However, the present scale allows the different kinds of well-being to demonstrate their differential relationships with work outcomes valued by both incumbents (e.g., job satisfaction, work engagement) and the organizations they work for (e.g., organizational citizenship behaviors). Nevertheless, the kinds of well-being were limited to the types that were mentioned in past theories about job impact on the well-being of others (Grant, 2007). Future research should consider a broader and perhaps more fine-grained variety of kinds of well-being. For instance, moral imperativeness was largely construed as preventing physical harm, but what about preventing psychological harm or promoting a sense of psychological safety? Items in Phase 1 were written about preventing the experience of negative emotions, but subject matter experts' ratings led to their elimination given the definition of moral imperativeness in that study. Future investigations should perhaps include those and see if they are discriminable from preventing loss of psychological safety.

Second, the theory about the moral imperativeness and aspiration relating to a prevention and promotion focus, respectively, was only partially supported. This somewhat undermines the theory advanced thus far. In retrospect, one fundamental issue in applying regulatory focus theory and its application to morality to describe task execution is that another party does the action. That is, regulatory focus theory has shown that certain needs (i.e., safety and growth) and certain goals (i.e., “ought” vs. “ideal”

goals) are antecedents to situational and chronic tendencies to regulate goal-directed behavior using certain motivational strategies (i.e., prevention and promotion focused, respectively). In turn, this leads to predictable and unique patterns of emotional responses to failure and success under each type of regulatory focus (Idson et al., 2000). However, as applied to the current studies, the needs and goals being met are in *internal and external customers* rather than the job incumbent. Thus, future research could investigate a refined version of the theory advanced thus far. Vignette studies (Aguinis & Bradley, 2014) could be used to evaluate whether *customers* emotionally react differently to job incumbents successfully performing jobs high on moral imperativeness and aspiration in ways that reflect prevention and promotion focus, respectively (i.e., calmness or relief versus happiness) or failing to do so (i.e., anxiety versus sadness, respectively). Additionally, whether moral imperativeness and aspiration live up to their monikers can be investigated the same way by having customers judge whether successfully performing jobs high on those dimensions are obligations to be met versus an ideal worth aspiring to, respectively.

The third limitation concerns the use of the same source (i.e., job incumbents) for rating both predictors and criteria, which may undercut interpreting moral imperativeness and aspiration as “objective” features of jobs. This relates to a number of concerns such as whether some self-selection is occurring that leads those who value being moral into jobs that they then perceive as having a positive impact on the well-being of others. This concern is somewhat mitigated by the fact that neither moral imperativeness nor aspiration correlated strongly with measures that would likely introduce error variance in scores due to such perceptual biases (i.e., injustice sensitivity as a perpetrator, self

importance of moral identity, and core self-evaluations) as well as results from Study 2, where naïve raters provided task-level ratings of moral imperativeness and aspiration without contextual information about what occupation the tasks were from. Nevertheless, future research could use different sources to rate the constructs of interest. For instance, *customers* could rate the degree of moral imperativeness and aspiration in situ. After all, what better source is there for rating the impact of well-being of doing a job than that of the very people affected? On the other hand, biases, mood effects, and individual differences in reacting to injustice could also introduce error variance into these ratings. Another alternative is to have job analysts rate moral imperativeness and aspiration at the task-level, as naïve raters did in Study 2. This sample would be informed enough about job tasks as subject matter experts – and likely also the effect they have on the well-being of those affected – yet impartial enough since they are not job incumbents to provide the most accurate ratings.

Conclusion

The present article sought to make a distinction between the kinds and ways that well-being in others can be positively affected by a job. The bulk of the evidence suggests that this effort was successful, that moral imperativeness and aspiration are characteristics of tasks and occupations rather than perceptions of job incumbents. To the extent this is true, two caveats in making valid inferences or interpretation about the results (Kane, 1992) from these studies is worth mentioning. First, the results are contextually bound (Haynes & Lench, 2003; Hunsley & Meyer, 2003) and may not hold across samples or given other factors. Although seemingly positive in their ability to predict valued criteria like job satisfaction and meaning in work, it could be the case that

all of these relationships are moderated by job performance. By that I mean that whereas performing jobs that affect the well-being of others may produce positive psychological experiences about that job, it could also be the case that failing to do it well could lead to negative reactions such as extreme nihilism and dissatisfaction. Similarly, as foreshadowed in the introduction, people may hold up those who do jobs high on moral imperativeness and aspiration *well* as moral paragons, but may also engage in extreme moral censure of those who fail to perform those jobs well. In this way, working a job high on either focal construct may constitute a double-edged sword of sorts. The moral responsibility implications may be stark.

Second, it would be incorrect to infer that it is necessarily that case that *job incumbents* doing jobs high on moral imperativeness or aspiration are necessarily more moral as people or of greater moral worth than those that do not. Character judgments ultimately must account for the reason, intention, or purpose behind what one does (Uhlmann, Pizarro, & Diermeier, 2015). Beyond doing these jobs well, it would be ideal if those who take on the moral responsibility of doing jobs high on moral imperativeness and aspiration do so to realize the goods internal or intrinsic to the activity of their respective occupation (Weaver, 2006), in this case preventing harm and promoting flourishing in those affected.

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APPENDIX

Table 1
Fit Indices for Exploratory Factor Analysis on Moral Imperativeness and Aspiration Items

Number of Factors	χ^2 Test	<i>df</i>	AIC	BIC	CFI	TLI	RMSEA	90% C.I. (LB)	90% C.I. (UG)	SRMR
1	2379.695	377	22202.72	22533.76	0.78	0.758	.126	0.122	0.131	0.07
2	1339.052	349	21218.08	21655.67	0.889	0.871	.092	0.087	0.098	0.04
3	1039.76	322	20972.78	21513.11	0.92	0.899	.082	0.076	0.088	0.03
4	809.161	296	20794.18	21433.45	0.943	0.921	.072	0.066	0.078	0.02

Note. $N = 332$. χ^2 Test = Chi-square test of model fit, df = degrees of freedom, AIC = Akaike information criterion, BIC = Bayesian information criterion, CFI = comparative fit index, TLI = Tucker-Lewis index, RMSEA = root mean square error of approximation, C.I. – confidence interval, LB = lower bound, UB = upper bound, SRMR = standardized root mean residual.

Table 2
Model Fit for Item Trimming Using Confirmatory Factor Analysis

Model	χ^2 Test	df	AIC	BIC	CFI	TLI	RMSEA	90% C.I. (LB)	90% C.I. (UB)	SRMR
1	1093.37	296	19064.17	19372.39	.90	.89	.09	.08	.10	.06
2	918.21	272	18100.62	18397.42	.92	.91	.09	.08	.09	.05
3	849.83	249	17124.21	17409.59	.92	.91	.09	.08	.09	.05
4	784.14	227	16445.82	16719.79	.92	.91	.09	.08	.09	.05
5	736.96	206	15652.48	15915.04	.92	.91	.09	.08	.10	.04
6	692.96	186	14996.83	15247.96	.92	.91	.09	.08	.10	.05
7	646.84	167	14359.77	14599.50	.92	.91	.09	.09	.10	.05
8	592.96	149	13653.07	13881.38	.93	.91	.10	.09	.10	.05

Note. $N = 332$. χ^2 Test = Chi-square test of model fit, df = degrees of freedom, AIC = Akaike information criterion, BIC = Bayesian information criterion, CFI = comparative fit index, TLI = Tucker-Lewis index, RMSEA = root mean square error of approximation, C.I. – confidence interval, LB = lower bound, UB = upper bound, SRMR = standardized root mean residual.

Table 3

Overall Model Fit Indices Using Exploratory Structural Equation Modeling

Model	χ^2 Test	df	AIC	BIC	CFI	TLI	RMSEA	90% C.I. (LB)	90% C.I. (UB)	SRMR
1-Factor ESEM	1756.45	230	17412.14	17674.69	.79	.77	.14	.14	.15	.07
2-Factor_ESEM	855.73	208	16555.41	16901.68	.91	.89	.10	.09	.10	.04
3-Factor ESEM	575.68	187	16317.36	16743.54	.95	.93	.08	.07	.09	.03

Note. $N = 332$. ESEM = exploratory structural equation model, χ^2 Test = Chi-square test of model fit, df = degrees of freedom, AIC = Akaike information criterion, BIC = Bayesian information criterion, CFI = comparative fit index, TLI = Tucker-Lewis index, RMSEA = root mean square error of approximation, C.I. – confidence interval, LB = lower bound, UB = upper bound, SRMR = standardized root mean residual.

Table 4

Items and Respective Factor Loadings for 3-Factor Exploratory Structural Equation Model

Item Label	Item	Physical	Eudaimonic	Hedonic
MITE10	Doing this job protects the current physical safety of people.	.99	-.03	-.14
MITE2	Doing this job substantially protects the physical safety of a lot of people.	.97	.01	-.16
MITE5	Doing this job is likely to protect the physical safety of people.	.94	.01	-.12
MITE4	Doing this job reduces risk of harm to people.	.83	-.11	.05
MITE9	Doing this job prevents immediate harm to people.	.82	.02	.02
MITE11	Doing this job quickly restores people to their usual state of health.	.73	.15	-.02
MITE3	Performing this job decreases the risk of harmful consequences to people.	.66	.09	.11
MATE3	Doing this job makes people way more healthy than they normally are.	.65	.11	.15
MATE10	Doing this job is likely to make people even healthier than usual.	.56	.18	.16
MATE14	Doing this job will probably help others develop into better people.	.02	.92	-.10
MATE13	Doing this job is likely to promote personal growth in people.	-.01	.89	-.01
MATE18	Doing this job rapidly helps others grow as people	.08	.79	-.04
MATE6	Doing this job substantially helps others develop themselves.	-.03	.79	.05
MATE9	Doing this job is likely to lead to good things happening to people.	-.07	.70	.19
MATE2	Doing this job helps others gain a lot of well-being.	.18	.59	.11
MATE15	Doing this job quickly makes great things happen for people.	.08	.57	.20
MATE8	Doing this job increases the chance of good things happening to others.	.11	.50	.23
MATE1	Performing this job increases the well-being of people beyond their usual state.	.21	.41	.28

(table continues)

Item Label	Item	Physical	Eudaimonic	Hedonic
MATE16	Doing this job immediately increases the pleasure people feel.	.25	-.04	.71
MATE4	Doing this job considerably increases the amount of pleasure people feel.	.18	.02	.69
MATE17	Doing this job immediately increases positive emotions felt by people.	.02	.22	.68
MATE11	Doing this job is likely to increase the pleasure people feel.	.14	.11	.67
MATE12	Doing this job is likely to increase positive emotions people feel.	-.06	.31	.65

Note. Strongest factor loadings bolded.

Table 5

Study 1 Hypotheses and Results Summary

Hypotheses	Effect Size	Supported?
<u>H1: Convergent Validity Yet Discriminability</u>		
(a) MITE will be correlated, but distinguishable from task significance	.31	X
(b) MITE will be correlated, but distinguishable from job opportunities for impact on beneficiaries	.51	X
(c) MITE will be correlated, but distinguishable from moral intensity of the job	.46	X
(d) MATE will be correlated, but distinguishable from task significance	.43	X
(e) MATE will be correlated, but distinguishable from job opportunities for impact on beneficiaries	.70	X
(f) MATE will be correlated, but distinguishable from moral intensity of the job	.45	X
(g) MATE will be more highly correlated than MITE with job opportunities for impact on beneficiaries	$r_{\text{diff}} = .19$ [95% CI= .21, .38]	X
<u>H2: Convergent Validity</u>		
(a) MITE will be more strongly and positively correlated with prevention focus than promotion focus	$(r_{\text{prom}} = .03)$	na
(b) MITE will be more strongly correlated with contextualized prevention focus than chronic prevention focus	$(r_{\text{wbprev}} = .10)$	
(c) MATE will be more strongly and positively correlated with promotion focus than prevention focus	$(r_{\text{prom}} = .17)$	na
(d) MATE will be more strongly correlated with contextualized promotion focus than chronic promotion focus	$r_{\text{diff}} = .18$ [95% CI= .07, .32]	X
<u>H3: Discriminant Validity</u>		
(a) MITE will not be highly correlated with injustice sensitivity	.04	X

(table continues)

Hypotheses	Effect Size	Supported?
(b) MITE will not be highly correlated with self importance of moral identity	-.15	X
(c) MITE will not be highly correlated with core self evaluations	.09	X
(d) MATE will not be highly correlated with injustice sensitivity	.16	X
(e) MATE will not be highly correlated with self importance of moral identity	-.02	X
(f) MATE will not be highly correlated with core self evaluations	.22	X
<u>H4: Criterion-Related Validity (Psychological States About Job)</u>		
(a) MITE will be more highly (positively) correlated than MATE with moral duty in doing job	$r_{\text{diff}} = -.18$ [95% CI = -.27, -.12]	
(b) MATE will be more highly (positively) correlated than MITE with moral ideal in doing job	$r_{\text{diff}} = .17$ [95% CI = .14, .31]	X
(c) MITE will be positively correlated with calling in work	.46	X
(d) MITE will be positively correlated with meaningfulness in work	.44	X
(e) MATE will be positively correlated with calling in work	.60	X
(f) MATE will be positively correlated with meaningfulness in work	.61	X
<u>H5: Criterion-Related Validity (Job Attitudes)</u>		
(a) MITE will be negatively correlated with job satisfaction	.21	
(b) MITE will be positively correlated with work stress	.00	
(c) MATE will be positively correlated with job satisfaction	.38	X
(d) MATE will be positively correlated with work engagement	.57	X

(table continues)

Hypotheses	Effect Size	Supported?
<u>H6: Criterion-Related Validity (Job Behaviors)</u>		
(a) MITE will be more strongly and positively correlated than MATE with safety performance	$r_{\text{diff}} = .01$ [95% CI = -.07, .09]	
(b) MATE will be positively correlated with organizational Citizenship Behaviors	.51	X
<u>H7: Incremental Validity</u>		
(a) MITE and MATE will predict variance beyond task significance, job opportunities for impact on beneficiaries, and moral intensity in moral duty in job	$\Delta R^2 = .013$	
(b) MITE and MATE will predict variance beyond task significance, job opportunities for impact on beneficiaries, and moral intensity in moral ideal in job	$\Delta R^2 = .053$	X
(c) MITE and MATE will predict variance beyond task significance, job opportunities for impact on beneficiaries, and moral intensity in calling in work	$\Delta R^2 = .061$	X
(d) MITE and MATE will predict variance beyond task significance, job opportunities for impact on beneficiaries, and moral intensity in meaningfulness in work	$\Delta R^2 = .050$	X
(e) MITE and MATE will predict variance beyond task significance, job opportunities for impact on beneficiaries, and moral intensity in job satisfaction	$\Delta R^2 = .025$	X
(f) MITE and MATE will predict variance beyond task significance, job opportunities for impact on beneficiaries, and moral intensity in work stress	$\Delta R^2 = .042$	X
(g) MITE and MATE will predict variance beyond task significance, job opportunities for impact on beneficiaries, and moral intensity in work engagement	$\Delta R^2 = .056$	X

(table continues)

Hypotheses	Effect Size	Supported?
(h) MITE and MATE will predict variance beyond task significance, job opportunities for impact on beneficiaries, and moral intensity in safety performance	$\Delta R^2 = .130$	X
(i) MITE and MATE will predict variance beyond task significance, job opportunities for impact on beneficiaries, and moral intensity in organizational citizenship behaviors	$\Delta R^2 = .112$	X

Note. $N = 332$. MITE = moral imperativeness of task execution, MATE = moral aspiration of task execution. Effect sizes are Pearson product-moment correlations unless otherwise noted. Italicized coefficients are non-significant; non-italicized were significant at $p < .01$. X = hypothesis was supported; na = hypothesis was not be tested due to low alpha of chronic prevention focus scale. r_{diff} = difference between dependent correlations; CI = confidence interval. r_{prom} = correlation between MITE or MATE with chronic promotion focus. r_{wbprev} = correlation between MITE with contextualized (work-based) prevention focus. ΔR^2 = change in variance explained in the outcome by MITE and MATE as a set after first entering task significance, job opportunities for impact on beneficiaries, and moral intensity as a set.

Table 6
Descriptive Statistics of Study 1 (Phase 3) Variables

Construct	Min	Max	Mean	SD	Internal	
					Consistency	Skewness
Moral Imperativeness of Task Execution	1	5	3.25	1.00	.95	-.42
Moral Aspiration of Task Execution ^a	1	5	3.59	.84	.90	-.75
Task Significance	1	7	5.02	1.32	.61	-.30
Job Opportunities for Impact on Beneficiaries ^b	1	7	5.38	1.32	.96	-1.10
Moral Intensity of the Job	1	5	3.49	1.05	.89	-.55
Prevention Focus	1	4.60	3.12	.60	.36	-.04
Promotion Focus	1.83	5	3.42	.62	.62	.38
Prevention Focus (Contextualized)	1	5	4.29	.61	.91	-.83
Promotion Focus (Contextualized)	1	5	3.99	.69	.87	-.57
Injustice Sensitivity	1	6	4.42	1.05	.93	-.83
Self Importance of Moral Identity (Internalization)	2.40	5	4.10	.71	.70	-.30
Core Self Evaluations	1.92	5	3.49	.64	.85	.30
Moral Duty	1	7	5.60	1.33	.92	-1.08
Moral Aspiration	1	7	5.22	1.25	.88	-.51
Calling in Work	1	7	4.77	1.38	.93	-.53
Meaningfulness in Work	1	7	5.33	1.38	.96	-.95
Job Satisfaction	1	5	3.64	.87	.84	-.63
Work Stress	0	3	1.45	1.01	.86	.08
Work Engagement ^b	1	7	4.90	1.37	.93	-.55
Safety Performance	1	5	3.36	.84	.94	-.28
Counterproductive Work Behaviors (Withdrawal)	1	5	1.77	.89	.89	1.73
Counterproductive Work Behaviors (Abuse)	1	5	1.47	.86	.98	2.53
Organizational Citizenship Behaviors	1	5	3.09	.90	.96	-.05

Note. $N = 332$.

^aInternal consistency index is Spearman-Brown Coefficient using two subscale scores as items.

^bInternal consistency index is based on three subscale scores as items.

Table 7

Study 2 Hypotheses and Results Summary

Hypotheses	Effect Size	Supported?
<u>H8: Convergent Validity</u>		
(a) Occupational MITE will positively correlate with aggregated job-incumbent MITE	.43**	X
(b) Occupational MATE will positively correlate with aggregated job-incumbent MATE	.34*	X
<u>H9: Discriminant Validity</u>		
(a) Occupational MITE will be distinguishable from occupational moral intensity	.73**	X
(b) Occupational MATE will be distinguishable from occupational moral intensity	.73**	X
(c) Occupational MITE will be distinguishable from aggregated job-incumbent moral intensity	.32	X
(d) Occupational MATE will be distinguishable from aggregated job-incumbent moral intensity	.31	X
(e) Occupational MITE will be distinguishable from aggregated job-incumbent prevention focus (contextualized)	-.08	X
(f) Occupational MATE will be distinguishable from aggregated job-incumbent promotion focus (Contextualized)	.35*	X
<u>H10: Criterion-Related and Incremental Validity</u>		
(a) “Human life-focused” occupations will be higher on average on MITE than those that are not	Cohen's $d = 2.32^*$	X
(b) Nurture-related occupations will be higher on average on MATE than those that are not	Cohen's $d = 1.52^{**}$	X
(c) Occupational MITE will positively correlate with O*NET ratings of the importance of integrity for doing occupations	.23	
(d) Occupational MITE will positively correlate with O*NET ratings of the importance of integrity for doing occupations	.57**	X
(e) Occupational MITE and MATE will, as a set, predict variance in importance of integrity for doing occupations beyond occupational moral intensity	$\Delta R^2 = .068$	

Note. $N = 38$. MITE = moral imperative of task execution, MATE = moral aspiration of task execution. Effect sizes are Pearson product-moment correlations unless otherwise noted. Italicized coefficients are non-significant; * denotes significance at $p < .05$; ** denotes significance at $p < .01$. X = hypothesis was supported. ΔR^2 = change in variance explained in the outcome by MITE and MATE as a set after first entering moral intensity.

Table 8
Study 2 Multitrait-Multimethod Matrix

	Occupational (Naïve Raters)			Job-Incumbent (Aggregated)		
	MITE	MATE	Moral Intensity	MITE	MATE	Moral Intensity
Occupational (Naïve Raters)						
MITE	—					
MATE	.17	—				
Moral intensity	.73**	.73**	—			
Job-Incumbent (Aggregated)						
MITE	.43**	.27	.41*	—		
MATE	.19	.34*	.33*	.73**	—	
Moral intensity	.32	.31	.34*	.30	.23	—

Note. $N = 38$. MITE = moral imperativeness of task execution, MATE = moral aspiration of task execution. Italicized coefficients are non-significant; * denotes significance at $p < .05$; ** denotes significance at $p < .01$. Bolded coefficients are validity coefficients.

Table 9

Intercorrelations Among Study 1 Variables

Construct	1	2	3	4	5	6	7	8	9	10	11
1. MITE	—										
2. MATE	.76**	—									
3. MATE-Eudaimonic	.75**	.95**	—								
4. MATE-Hedonic	.69**	.95**	.82**	—							
5. Task significance	.31**	.43**	.49**	.33**	—						
6. Job opportunities for impact on beneficiaries	.51**	.70**	.72**	.61**	.61**	—					
7. Moral intensity of the job	.46**	.45**	.46**	.40**	.37**	.44**	—				
8. Prevention focus	-.11	-.03	.00	-.05	.19**	.09	-.02	—			
9. Promotion focus	.03	.17**	.18**	.15**	.37**	.33**	.06	.20**	—		
10. Contextualized prevention focus	.10	.25**	.23**	.26**	.36**	.38**	.06	.17**	.40**	—	
11. Contextualized promotion focus	.27**	.36**	.35**	.33**	.25**	.38**	.09	.08	.29**	.73**	—
12. Injustice sensitivity	.04	.16**	.14**	.16**	.29**	.22**	.12*	.07	.13*	.34**	.25**
13. Self Importance of Moral Identity	-.16	-.02	-.02	-.02	.34**	.19**	-.05	.31**	.38**	.35**	.15**
14. Core self evaluations	.09	.22**	.21**	.20**	.27**	.29**	.00	.19**	.61**	.45**	.35**
15. Moral duty	.20**	.38**	.35**	.36**	.42**	.51**	.18**	.05	.31**	.49**	.45**
16. Moral aspiration	.43**	.60**	.59**	.56**	.41**	.62**	.34**	.07	.31**	.44**	.47**
17. Calling in Work	.46**	.60**	.58**	.56**	.44**	.60**	.33**	.03	.29**	.25**	.35**

(table continues)

Construct	1	2	3	4	5	6	7	8	9	10	11
18. Meaning in Work	.44**	.61**	.60**	.57**	.45**	.65**	.30**	.09	.33**	.37**	.41**
19. Job satisfaction	.21**	.38**	.38**	.34**	.38**	.43**	.12*	.15**	.49**	.32**	.28**
20. Work stress	.00	-.06	-.03	-.08	.11*	.08	.21**	-.09	-.10	-.09	-.06
21. Work engagement	.40**	.57**	.56**	.53**	.37**	.58**	.26**	.07	.44**	.48**	.55**
22. Safety performance	.46**	.45**	.43**	.43**	.13*	.31**	.24**	-.06	.16**	.25**	.32**
23. Organizational citizenship behaviors	.49**	.51**	.49**	.49**	.24**	.40**	.31**	-.14*	.12*	.32**	.40**

(table continues)

Construct	12	13	14	15	16	17	18	19	20	21	22
12. Injustice sensitivity	—										
13. Self Importance of Moral Identity	.38**	—									
14. Core self evaluations	.09	.23**	—								
15. Moral duty	.37**	.25**	.30**	—							
16. Moral aspiration	.28**	.18**	.39**	.54**	—						
17. Calling in Work	.19**	.06	.40**	.46**	.67**	—					
18. Meaning in Work	.25**	.15**	.38**	.51**	.74**	.71**	—				
19. Job satisfaction	.09	.18**	.57**	.38**	.56**	.55**	.60**	—			

(table continues)

Construct	12	13	14	15	16	17	18	19	20	21	22
20. Work stress	.06	.08	-.31**	-.01	-.12*	-.13*	-.14**	-.358**	—		
21. Work engagement	.22**	.12*	.52**	.52**	.70**	.65**	.69**	.725**	-.24**	—	
22. Safety performance	.07	-.11*	.24**	.19**	.41**	.34**	.35**	.264**	-.13*	.44**	—
23. Organizational citizenship behaviors	.22**	-.02	.08	.39**	.47**	.39**	.35**	.194**	.06	.46**	.57**

Note. $N = 332$. MITE = moral imperativeness of task execution, MATE = moral aspiration of task execution. ** denotes correlation is significant at $p < .01$, * denotes correlation is significant at $p < .05$.

Table 10

Difference Between Moral Aspiration Subscales Correlations With Constructs

HA ^a	Supplemental Hypotheses	Difference in		Upper		z statistic	One-tailed <i>p</i>
		Correlation	Lower Bound	Bound	Bound		
H1b	MATE-Eudaimonic will be more highly correlated than MITE with Job Opportunities for Impact on Beneficiaries	.21	.25	.41	7.31		.00
	MATE-Hedonic will be more highly correlated than MITE with Job Opportunities for Impact on Beneficiaries	.11	.06	.25	3.10		.00
H2d	MATE-Eudaimonic will be more strongly correlated to contextualized promotion focus than chronic promotion focus	.17	.05	.30	2.70		.00
	MATE-Hedonic will be more strongly correlated to contextualized promotion focus than chronic promotion focus	.18	.06	.31	2.88		.00
H4b	MATE-Eudaimonic will be more highly (positively) correlated than MITE with Moral Ideal in doing job	.16	.13	.29	4.82		.00
	MATE-Hedonic will be more highly (positively) correlated than MITE with Moral Ideal in doing job	.13	.07	.26	3.42		.00
H6a	MITE will be more strongly and positively correlated than MATE-Eudaimonic with Safety Performance	.03	-.05	.12	.88		.19
	MITE will be more strongly and positively correlated than MATE-Hedonic with Safety Performance	.03	-.06	.13	.79		.21

Note. ^a = The original hypothesis for moral aspiration of task execution rather than its specific subscales. MITE = moral imperativeness of task execution, MATE = moral aspiration of task execution.

Table 11

Study 1 Incremental Validity Using MATE Subscales

	H7: Incremental Validity	Effect Size	Supported?
(a) MITE, MATE-Eudaimonic, and MATE-Hedonic will predict variance beyond task significance, job opportunities for impact on beneficiaries, and moral intensity in moral duty in job		$\Delta R^2 = .027$	
(b) MITE, MATE-Eudaimonic, and MATE-Hedonic will predict variance beyond task significance, job opportunities for impact on beneficiaries, and moral intensity in moral ideal in job		$\Delta R^2 = .053$	X
(c) MITE, MATE-Eudaimonic, and MATE-Hedonic will predict variance beyond task significance, job opportunities for impact on beneficiaries, and moral intensity in calling in work		$\Delta R^2 = .064$	X
(d) MITE, MATE-Eudaimonic, and MATE-Hedonic will predict variance beyond task significance, job opportunities for impact on beneficiaries, and moral intensity in meaningfulness in work		$\Delta R^2 = .052$	X
(e) MITE, MATE-Eudaimonic, and MATE-Hedonic will predict variance beyond task significance, job opportunities for impact on beneficiaries, and moral intensity in job satisfaction		$\Delta R^2 = .025$	X
(f) MITE, MATE-Eudaimonic, and MATE-Hedonic will predict variance beyond task significance, job opportunities for impact on beneficiaries, and moral intensity in work stress		$\Delta R^2 = .043$	X
(g) MITE, MATE-Eudaimonic, and MATE-Hedonic will predict variance beyond task significance, job opportunities for impact on beneficiaries, and moral intensity in work engagement		$\Delta R^2 = .056$	X
(h) MITE, MATE-Eudaimonic, and MATE-Hedonic will predict variance beyond task significance, job opportunities for impact on beneficiaries, and moral intensity in safety performance		$\Delta R^2 = .130$	X

(table continues)

H7: Incremental Validity	Effect Size	Supported?
(i) MITE, MATE-Eudaimonic, and MATE-Hedonic will predict variance beyond task significance, job opportunities for impact on beneficiaries, and moral intensity in organizational citizenship behaviors	$\Delta R^2 = .114$	X

Note. $N = 332$. MITE = moral imperative of task execution, MATE = moral aspiration of task execution. Italicized coefficients are non-significant; non-italicized were significant at $p < .01$. X = hypothesis was supported. ΔR^2 = change in variance explained in the outcome by MITE and the Eudaimonic and Hedonic subscales of MATE as a set after first entering task significance, job opportunities for impact on beneficiaries, and moral intensity as a set.

Table 12

Intercorrelations Among Study 2 Variables

Construct	1	2	3	4	5	6	7	8	9	10	11	12
1. Occupational MITE	—											
2. Occupational MATE	.17	—										
3. Occupational MATE-eudaimonic	.19	.91**	—									
4. Occupational MATE-hedonic	.12	.85**	.55**	—								
5. Job-incumbent MITE	.43**	.27	.27	.21	—							
6. Job-incumbent MATE	.19	.34*	.32	.27	.73**	—						
7. Job-incumbent MATE-Eudaimonic	.17	.43**	.42**	.33*	.68**	.94**	—					
8. Job-incumbent MATE-Hedonic	.19	.24	.21	.20	.71**	.96**	.80**	—				
9. Occupational moral intensity	.73**	.73**	.69**	.59**	.41*	.33*	.36*	.27	—			
10. Job-incumbent moral intensity	.32	.31	.35*	.18	.30	.23	.27	.17	.34*	—		
11. Job-incumbent contextualized prevention focus	-.08	.16	.23	.03	.24	.37*	.32*	.37*	.00	.17	—	
12. Job-incumbent contextualized promotion focus	-.10	.35*	.41*	.18	.30	.44**	.44**	.39*	.14	.12	.67**	—
13. Importance of integrity	.23	.57**	.66**	.29	.07	.01	.06	-.03	.55**	.20	.04	-.02

Note. $N = 38$. MITE = moral imperativeness of task execution, MATE = moral aspiration of task execution. ** denotes correlation is significant at $p < .01$, * denotes correlation is significant at $p < .05$.

Table 13

“Known Groups” Difference Tests for Moral Aspiration Subscales

Construct	Mean _{nurt}	SD _{nurt}	Mean _{non}	SD _{non}	Welch's <i>t</i>	<i>df</i>	<i>p</i>
MATE-Eudaimonic	2.30	.20	2.12	.17	2.49	12.10	.03
MATE-Hedonic	2.26	.10	2.07	.14	4.58	19.07	.00

Note. *N* = 29 for nurturance-related occupations; *N* = 9 for nonnurturance-related occupation. MATE = moral aspiration of task execution. Mean_{nurt} = mean of construct for nurturance-related occupations, SD_{nurt} = standard deviation of construct nurturance-related occupations. Mean_{non} = mean of construct for nonnurturance-related occupations, SD_{non} = standard deviation of construct nonnurturance-related occupations.