

THE DEVELOPMENT AND VALIDATION OF A MEASURE OF THE EXPERIENCE OF
DIRTY WORK

by

Robert Michael Bickmeier

A dissertation submitted to the faculty of
The University of North Carolina at Charlotte
in partial fulfillment of the requirements
for the degree of Doctor of Philosophy in
Organizational Science

Charlotte

2022

Approved by:

Dr. Steven Rogelberg

Dr. Enrica Ruggs

Dr. Eric Heggstad

Dr. Cliff Scott

©2022
Robert Michael Bickmeier
ALL RIGHTS RESERVED

ABSTRACT

ROBERT MICHAEL BICKMEIER. The development and validation of a measure of the experience of dirty work. (Under the direction of DR. STEVEN G. ROGELBERG)

Dirty work is socially constructed as tainted on one or more domains (physical: dangerous, dirty, or associated with death; moral: underhanded or in contradiction to prevailing norms; social: in association with stigmatized others or done in subservience), and it shapes dirty workers' perceptions and experiences of their identities. The processes through which the perception of taint shapes identities and associated outcomes (e.g., identity ambivalence, isolation) and the effects of the magnitude of dirt are not fully understood. To understand these processes, the present study describes the development of a tool to measure the dirt of dirty work. First, the author developed a series of item to assess the content domain of dirty work based on a literature review supported by open-ended responses describing work perceptions from dirty workers. In the subsequent studies, the author reduced the item pool by a series of exploratory factor analyses (EFA). Then, the author tested the overall model fit across two separate samples via confirmatory factor analysis (CFA) and identified a three-factor model. Finally, the author gathered validity evidence through convergent and discriminatory validity analyses: the pattern of correlations generally provided convergent validity evidence with the respective covariates, and the data tentatively supported the measure's ability to discriminate among forms of taint by occupation in a one-way MANOVA.

TABLE OF CONTENTS

LIST OF TABLES	v
LIST OF FIGURES	vi
LIST OF ABBREVIATIONS	vii
CHAPTER 1: INTRODUCTION	1
CHAPTER 2: MATERIALS AND METHODS	34
CHAPTER 3: RESULTS	58
CHAPTER 4: DISCUSSION	64
REFERENCES	98

LIST OF TABLES

TABLE 1: Study 1. Initial Item Pool	84
TABLE 2: Study 1. Initial Exploratory Factor Analysis with Factor Loadings	85
TABLE 3: Study 1. Factor Correlations for Each CFA	86
TABLE 4: Study 1. Final Factor Loadings, Explained Variance, Scale Reliability, and item Statistics of the Reduced Item Pool	87
TABLE 5: Study 1. Factor Cross Loadings and Communalities of the Final Item Pool	88
TABLE 6: Study 2. Factor Correlations for Each CFA	89
TABLE 7: Study 2. Final Factor Loadings, Explained Variance, Scale Reliability, and item Statistics of the Reduced Item Pool	90
TABLE 8: Study 2. Factor Cross Loadings and Communalities of the Final Item Pool	91
TABLE 9: Study 4. Means, Standard Deviations, and Correlations among Study Variables	92
TABLE 10: Final Measure Items, Instructions, and Response Scale	93

LIST OF FIGURES

FIGURE 1: Study 3. CFA with Factor Loadings and Covaried Error Terms	94
FIGURE 2: Study 4. CFA with Factor Loadings and Covaried Error Terms	95
FIGURE 3: Study 4. Final CFA with Factor Loadings	96

LIST OF ABBREVIATIONS

CFA	confirmatory factor analysis
COR	Conservation of Resources
EFA	exploratory factor analysis
MANOVA	multivariate analysis of variance
MBI	Maslach Burnout Inventory
MOAQ	Michigan Organizational Assessment Questionnaire
SDS	Shelter Diagnostic System
SIT	Social Identity Theory

CHAPTER 1: INTRODUCTION

Sex workers, ride-share drivers, home healthcare workers, firefighters, corrections officers, morticians, public defenders, coal miners, bail bonds workers, animal euthanasia technicians, and more occupations share a common phenomenon. The work of these occupations is dirty, or stigmatized—marked as work that is devalued, inferior, and unwanted or undesirable by society (Ashforth & Kreiner, 1999). Dirty work, however, is necessary within the society in which it is performed—someone needs to care for and bury the dead, for example—but the workers are often viewed through a frame of “how can you do [dirty work]?” (Ashforth & Kreiner, 1999; 2014). The implication of that question, then, is “do this undesirable work so that I do not have to.” Dirty workers thus take on a double burden: the work itself and the dirt of doing work that is denigrated and looked down upon. Effectively, dirty workers take on the dirt of the work they do so that the remainder of society can remain clean or free of dirty work (Hughes, 1962). In doing so, though, the dirt of the work becomes a part of the identity that dirty workers construct. The value messages they receive from their peers and others who view their work challenge the identity construction process and mark it with stigma. Through this mark—more formally referred to as “taint” in the dirty work literature—the dirty work and the worker become indistinguishable from the larger societal perspective (Hughes, 1962; Ashforth & Kreiner, 1999).

The literature so far has established a robust foundation of research exploring the identities of dirty workers: how they come to identify or disidentify with the work (e.g., Kreiner et al., 2006), the narratives through which they frame the dirty work (e.g., Tracy & Scott, 2006), how they identify the core dirty work tasks in relation to their work (e.g., Baran et al., 2012), etc. This research thus provides fertile ground for exploring how dirty work shapes those identities

and how identities shape the perception of dirty work. In addition, dirty work researchers consistently call for further examination of how the dirty work identity construction process and the work itself shapes the experiences of dirty workers (cf. Ashforth & Kreiner, 1999; Baran et al., 2012; Lopina, Rogelberg, & Howell, 2012) for better or worse. Consequently, I conducted the following dissertation to propel research forward and make good on an important opportunity to develop a tool to facilitate research efforts to examine and address the “how” of dirty work experiences.

Building upon previous studies and theory development pieces, the following dissertation will chart a new path forward for the literature. By drawing from and integrating the literature to date, I will develop, test, and gather evidence to evaluate the validity of an instrument to measure the personal experience of dirty work—a measure of work dirtiness. Such a tool will allow researchers going forward to more meticulously examine the personal and lived experiences of dirty workers, more robustly analyze the relationships between dirty work and other variables of interest, test relevant theories to dirty work, and provide additional direction and empirical support for sociologically oriented inquiry of dirty work. To understand how and why we should advance the literature, I will begin by providing background of the construct development around dirty work thought. Following that, I will highlight core dirty work research articles, their findings, and their limitations. Then, I will discuss dirty work’s importance and relevance as an organizational variable. After the review, I will present the problem of ascription of taint alongside a purpose statement for the studies conducted as part of this dissertation.

Altogether, the goal of this dissertation is to design a tool to better understand dirty work in the context of the domains of taint. Dirty work is complex and multifaceted, and it can be described in terms of “how dirty” and “how so” with the right tools. The measure produced by

this dissertation will serve as a tool to enable researchers to examine how dirty their sample is and in what ways and to do so across occupations. Research need no longer be confined to single-occupation designs as a constraint of the study methodology (e.g., ethnography). In addition, the measure will serve as a platform to unite these designs (i.e., in-depth, single-occupation ethnographies and interview studies) and their contributions with cross-occupational comparison designs and within-occupation longitudinal designs. To that end, the measure can spur more robust theoretical development to guide future research.

Dirty Work Construct Development

Ashforth and Kreiner (1999) derived the formal domains of taint (physical, moral, and social) ubiquitous to dirty work research today from Hughes' (1962) and Goffman's (1963) earlier works on dirty work and stigma, respectively.

The three domains of taint. Ashforth and Kreiner's (1999) three domains of taint (physical, moral, and social) roughly correspond to the three forms of stigma identified by Goffman (1963): blemish of the physical form, blemish of character, and tribal stigma. Furthermore, Ashforth and Kreiner (1999) added a caveat that the taint should define or involve a core feature of the job. That is, work that entails the occasional dirty task is substantively different from dirty work that is defined by its dirty features. In defining the domains of taint, Ashforth and Kreiner (1999) were careful to distinguish dirtiness from occupational prestige. They argue by example that some jobs can be subject to greater or lesser occupational prestige (as determined by national datasets of prestige ratings) independent of degree of dirtiness. In other words, a relatively high prestige class of occupation could be subject to work dirtiness, such as a lawyer acting as a public defender.

Physical taint is perhaps the most readily observable. Such taint is associated with actual dirt, waste, and other effluvia, and with death or dying. Physically tainted work also includes work performed in dangerous, unsafe, or particularly noxious or disgusting conditions. For example, sanitation workers, morticians, crime scene clean-up personnel, janitors, and coal miners are all iconic of physically dirty work.

Morally tainted work covers the domain of activities that defy or break conventionally held norms, or involve deception, morally objectionable or questionable activities, and adversarial work. Exotic dancers are among the most studied of morally tainted occupations, and sex workers and casino managers also number among morally-tainted occupations.

Finally, social taint is perhaps the least well-defined of the three domains of taint. Social taint entails work undertaken in subservience to others or in association with marked (i.e., stigmatized) others. This definition is potentially problematic because it can easily lead one to conflate the taint of the work with status, obfuscating observation and measurement. That is, observers may struggle to distinguish between the dirt of subservient work and the relative status positions of a client-servant relationship, thereby contaminating the inferences they draw. Prototypical socially tainted occupations include mental healthcare workers, HIV/AIDS healthcare workers, maids/butlers, taxicab drivers, shoe-shiners, and public defense attorneys.

Adding breadth and depth. Later, Kreiner, Ashforth, and Sluss (2006) revisited their earlier conceptualization of dirty work and improved and expanded the scope of their taxonomy. In an important development, they created a means to identify how degree of work dirtiness might vary, and they integrated an additional theory to explain how these differences might affect our understanding of dirty work. Specifically, the degree of taint in dirty work can be delineated in terms of its breadth and its depth. Kreiner and colleagues (p. 621, 2006) define

breadth as “the proportion of work that is dirty or the centrality of the dirt to the occupational identity” and depth as “the intensity of dirtiness and the extent to which a worker is directly involved in the dirt.” The degrees of taint are distinct, meaning that an occupation can differ in its depth and breadth of taint. The breadth/depth categorization of taint appears to have failed to make in-roads in the dirty work literature—in other words, research may cite the original taxonomy without citing the breadth/depth distinction presented here.

Differentiating taint. More recently, Ashforth and Kreiner (2014) suggested that the domains of taint may differ in how those domains are experienced. Ashforth and Kreiner (2014) discuss the difference between “necessity” and “evil” when evaluating dirty work. According to Ashforth and Kreiner (p. 84, 2014), morally stigmatized occupations may be “‘small e’ evil” when their methods are problematic (e.g., aggressive or harassing bill collectors) or “‘big E’ evil” because the occupation’s mere existence upheaves the moral status quo of the society in which it is embedded (e.g., sex workers). In other words, the evilness of work derives from some real or imagined propensity to cause harm to others or the fabric of society in its undertaking. Both physically tainted work and socially tainted work appear to serve some purpose that is greater in proportion to the dirtiness or evil associated with the work. Such work is more necessary than evil. Physically and socially tainted activities must be undertaken in the due course of everyday organizational and social functioning. For example, corpses need to be prepared for burial despite the physical taint associated with handling the dead. Mental health patients need to be treated, despite the stigma associated with caring for and interacting with the mentally ill. In fact, Ashforth and Kreiner (p. 84, 2014) argued that physically and socially tainted work benefits from a “necessity shield” that partially buffers against the effects of taint. Morally tainted work, in contrast, appears to be more evil than necessary. Such work does not

benefit from a necessity shield, and it is largely viewed as unnecessary for everyday functioning. For example, exotic dancing or sex work is arguably unnecessary for everyday functioning, and thus such work should largely be perceived as dirtier than the work undertaken by morticians and mental healthcare workers (Ashforth & Kreiner, 2014).

Although it is certainly promising to see an attempt to delineate why the differences between the domains of taint may matter, there are some problems worth noting with this formulation. First, universally slating one form of taint as dirtier than the other ignores important contextual and occupational-level differences. It may be the case that morally tainted work is a dirtier form of taint for some jobs, but other occupations may not suffer from the effects of moral taint as severely. Second, the specific moral value and its overall importance may better predict the degree of dirtiness associated with the work. For example, a soldier engaged in killing enemy combatants on foreign soil may likely be viewed as much less dirty as a soldier enforcing martial law in domestic lands. Yet both acts are morally tainted within the same occupation. Third, this approach ignores potentially important differences between physical taint and social taint, and potential multiplicative or summative effects of work that is tainted on multiple domains. Fourth and finally, the authors largely ignore previous work on breadth and depth of taint, excluding a possibly important explanation for how and why and under what conditions these forms of taint may differ. For example, it is unclear how the strength of the moral value violated in moral taint interacts with breadth and taint—is an individual who is rarely responsible for performing euthanasia or conducting executions as deeply and broadly tainted as someone who must lie or deceive just as infrequently (such as a public relations coordinator) to perform their jobs?

Integrating the definitions of dirty work. Taken together, Ashforth and Kreiner (1999), Kreiner et al. (2006), and Ashforth and Kreiner (2014) mark the state of the art for defining dirty

work. If the articles are integrated—and it appears that, based on their writings, they should be integrated—the construct of dirty work can be operationalized as follows: dirty work is work that is 1) tainted on one or more domains: physical, social, or moral; 2) that taint can vary in its proportion or immediacy to the occupational identity and the intensity or involvement of the worker; and 3) the domains of taint appear to differ in their relative dirtiness. Relevant to this definition, Ashforth and Kreiner (1999) devote some of their argumentation to distinguish “core” dirty work from work that happens to include some dirty tasks. Even in consideration of the breadth and depth of taint component of the definition, it is unclear how tainted a job must be to qualify as dirty. In fact, Kreiner et al. (2006) suggest that work needs to be characterized by either high-breadth or high-depth taint to qualify as dirty, noting that those occupations experiencing both low-breadth and low-depth taint are not dirty at all. Their classification would further suggest that work dirtiness is not a zero sum quality: some degree of taint does not necessarily make a job dirty. Yet, this operationalization of dirty work does not yet identify the sufficient conditions for identifying work as dirty (though it lists the necessary qualities).

Dirty Work Research Review

As Ashforth and Kreiner (1999) explained, the quest for a positive identity despite the stigma of dirty work can be vexing both to those who experience dirty work and those who study it. Much of the dirty work literature is situated in research of the identity construction process. The identity construction lens has made it possible for the literature to develop a foundation of the processes that dirty workers undertake in responding and adapting to dirty work. However, with few rare exceptions, the methodologies of these studies involve ascribing or assigning taint to a sample (almost exclusively a single occupation) and then justifying that ascription within the taxonomy or typology proposed by Ashforth and Kreiner (1999). As a result, this methodological

approach presents an opportunity to push the literature forward in new directions by changing, and ideally, improving how researchers identify dirty work. In particular, the body of dirty work research suggests that a relational perspective—or a perspective of how the “other” views a dirty worker—should act as an effective compass for understanding how workers understand and internalize the experience of dirty work. Indeed, the context in which workers make sense of their work as socially undesirable, yet something only they may possess the characteristics necessary to complete the work has yielded a ripe field for research. It is through these challenges, however, that dirty workers are at risk for adverse outcomes in terms of well-being, satisfaction, stress, burnout, and other work-related experiences.

Because the context in which dirty workers construct their identities can be dynamic and complex (i.e., constructing a new work identity that is meaningful and socially validating amidst messages that the work and the worker are undesirable or dirty), dirty work research should be supported with tools that allow researchers to scrutinize the perceptions of dirty work in more detail and from the perspective of those who undertake the dirty work. In other words, by challenging the traditional approach of ascribing and justifying the taint of dirty work in a sample, we can instead focus on a more comprehensive approach to understanding dirty work. Moreover, stigma validation studies provide an effective framework for building an instrument to measure work-related stigma. In other words, a descriptive approach to dirty work can complement and strengthen traditional ascriptive approaches and provide a platform to understand changing perceptions of taint (i.e., as a result of taint management strategies) from the experience of the dirty workers. What follows is a review of the extant dirty work research that enabled the development herein of a measure of the experience of dirty work.

Qualitative studies and the experience of dirty work. Several standout studies define qualitative dirty work research in recent years. Generally, their methods followed direct observation or participant observation, and their investigations tended to emphasize understanding the identity processes at play in dirty work rather than challenging current notions and definitions of dirty work. In contrast to much of the quantitative dirty work research, the methodological techniques employed by qualitative researchers allowed them to infer the dirtiness of the work they observed or to provide some support for the taint they ascribed to the workers. More recently, a slate of ethnographies and interview studies represent continued interest in dirty work research, yet these studies simultaneously signal an opportunity for growth in the literature beyond the tradition of single-occupation-focused methodologies (cf. Cassell & Bishop [taxi drivers], 2014; Johnston & Hodge [hospital security guards], 2014; McMurray & Ward [Samaritans charity workers], 2014; Simpson, Hughes, Slutskaya, & Balta [butchers], 2014; Simpson, Slutskaya, Hughes, & Simpson [refuse collectors], 2014; Rivera & Tracy [U.S. border patrol agents], 2014; Cruz [Liberian market women], 2015; Filteau [itinerant energy workers], 2015; Huey & Broll [criminal investigators], 2015; McCabe & Hamilton [slaughterhouse workers], 2015; Hansen Löfstrand, Loftus, & Loader [private security], 2016; Meldgaard Hansen [home healthcare workers], 2016; Morris [approved mental health providers], 2016; Ostaszkiewicz, O'Connell, & Dunning [long-term aged care workers], 2016; Vines & Linders [poker players], 2016; Dobson [social workers], 2017; Fuller & Unwin [hospital porters], 2017; Batista & Codo [funeral workers], 2018; Johnston & Sanscartier [content analysis of food service workers], 2018; Ford [animal shelter workers], 2018; Clarke & Ravenswood [aged care workers], 2019; De Camargo [police officers], 2019; Deery, Kolar, & Walsh [mixed-methods approach to cleaners of abandoned public housing in high crime areas], 2019; Hamilton,

Redman, & McMurray [refuse workers], 2019; Perrott [firefighters], 2019; Rabello & Mahalingam [house cleaners], 2019; Hennekam, Ladge, & Shymko [healthcare workers], 2020; Orupabo & Nadim [cleaners], 2020; Sommerfeldt & Kent [public relations professors], 2020; Mikkelsen [prison officers], 2021; Shepherd, Maitlis, Parida, Vincent, & Lawrence [Mumbai ragpickers], 2021; Tallberg & Jordan [animal shelter workers], 2021; Torelli & Puddephatt [homeless shelter workers], 2021).

A framework for identity construction narratives. To establish a framework for understanding dirty work identities and to tease apart taint management, Tracy and Scott (2006) compared samples of correctional officers to firefighters. Although Tracy and Scott (2006) ascribed taint to their samples according to Ashforth and Kreiner's (1999) taxonomy, they provided some evidence that the dirty work they observed was indeed dirty, both by comparing the relative experiences of the two occupations and connecting their activities to the ascribed domains of taint. They observed depersonalization, or distancing from clients (in this case, inmates or persons in need of first aid) in addition to the previously described strategies of reframing, recalibrating, and refocusing. By comparing two disparate occupations, Tracy and Scott (2006) were also able to test a hypothesis explaining how some workers appear to be proud of their dirty work while other jobs fail to produce the same levels of pride. Specifically, Tracy and Scott (2006) invoked a gender narrative to describe why such a difference might occur. That is, they sought a more macro-level explanation than individual-level or occupation-level differences.

Simply put, the dirty work occupations that generated the sort of pride that was initially puzzling to Ashforth and Kreiner (1999) tended toward more traditionally masculine gender norms. According to Tracy and Scott (2006), firefighters faced danger, rescued people, and even

played to stereotypes of firefighters as sex objects. The less pride-inducing jobs entailed more feminine roles, such as caring for others. Indeed, corrections officers were observed describing their jobs as glorified babysitters, responsible for maintaining watch on inmates. Similarly, when firefighters had to respond to first-aid calls to homeless people, they enacted strategies to distance themselves from the dirt of caring (a traditionally feminine role) for a stigmatized individual in need. Of note, they concluded that taint and prestige are distinct, yet influenced by identity variables including gender and sexuality (Tracy & Scott, 2006). The significance of this conclusion should not be overlooked. If researchers are to understand the complex identity construction processes involved in dirty work, and the experience of dirty work itself, then the proposed measure of the experience of dirty work will need to be deployed alongside measures of such larger social identity categories like gender roles and norms.

Supporting Tracy and Scott's (2006) conclusion, Berkelaar et al. (2012) examined a sample of urban Chinese children to learn how they talk about dirty work. Interestingly enough, Tracy and Scott's (2006) explanation applies cross-culturally: gender narratives shape perceptions of dirty work. In their study, Berkelaar et al. (2012) presented young Chinese children with descriptions of prototypical occupations, such as engineer, teacher, scientist, and soldier, and asked them to describe what makes those jobs attractive and desirable. Dirtiness, in part, appears to come from perceptions of who typically performs the work of that occupation, so typically feminine roles skew toward greater perceptions of dirtiness. Berkelaar and colleagues (2012) also observed that specific dirty traits appear to be occupation specific. For example, dangerous work equates to dirtiness in an otherwise "safe" occupation like engineering. For a soldier, dangerousness is heroic, desirable, and expected, yet not necessarily dirty. In other words, the dirtiness may be deflected by a necessity shield. Or as the authors described it, when

the dirty work combats greater social ills and problems or even other dirtiness, the dirtiness of that work can be negated. These observations hark back to Hughes' (1962) earlier writings that dirty work is at once required by society as it is denigrated by society. That is, it will be necessary to understand dirty work in the context of its overall purpose to fully appreciate the dirtiness of the work.

The dirty worker's relationship with dirty work. Moreover, researchers like Emerson and Pollner (1976) and Davis (1984) made the case for integrating the worker's perspective or experience of dirty work in understanding how dirty work is designated, performed, and reified. Specifically, Emerson and Pollner (1976) argued that designating work as dirty does not *necessarily* result from an inherent quality of the tasks involved. Rather, the perspective of those judging the work is equally important in identifying work as dirty. The authors continue to note that the designation of work as dirty becomes the vehicle through which that experience is constituted. Similarly, Cassell and Bishop (2014), through a series of interviews with taxi drivers, observed that work becomes dirty from the worker's perspective through the interaction between the dirty worker and the client or customer. Cruz (2015) further elaborates upon the importance of understanding the relationship a worker develops between her work and her identity by refocusing the importance of situation and context. According to Cruz (2015), the dirt of work should be viewed in the context of the situation and how the worker appropriates the taint of their work to create meaning rather than as an inherently positive or negative feature of the work. Put differently, the workers' experiences through their own perspectives and those with whom they interact define the taint of the dirty work experience, not the typology of taint.

By declaring work as dirty, the workers enact a relationship between themselves, the dirt of the work, and the social order that provides the context for viewing work as dirty. In fact, for a

worker to describe their work as dirty, they are acknowledging a certain distance or separation from the work. That is, dirty workers are beholden to the same social systems that outside observers are—the same norms and values. Thus, to qualify their work as dirty, dirty workers are justifying the system which degrades certain forms of work and, ideally, distinguishing themselves from the dirty work itself—the work may be dirty, and justifiably so within the system of norms, beliefs, and values relevant to the worker, but the workers themselves are not in their own perspective (Emerson & Pollner, 1976). Although the specific tactics may vary (Ashforth & Kreiner, 1999, Ashforth et al., 2007), ultimately, part of the experience of dirty work appears to entail compartmentalizing the dirt of the work. In the quest for a socially-validating, esteem-enhancing identity, dirty workers tend to attempt to demonstrate that though the work itself may be dirty by the values they and the rest of society espouse, the workers themselves are worthy of value (Ashforth & Kreiner, 1999; Tajfel & Turner, 1986). In other words, to fully appreciate and understand dirty work as a phenomenon one must account for the perspectives and experiences of those performing the dirty work.

Davis (1984) built upon Emerson and Pollner's (1976) study of psychiatric workers to examine how bail bonds workers enacted the dirt of their work and distanced themselves from it. As many authors in addition to Davis note, dirty workers are keenly aware of the dirt of their work. They acknowledge and even openly remark upon how others view their work and the workers themselves as dirty and undesirable (Davis, 1984; Emerson & Pollner, 1976; Grandy & Mavin, 2011; Stacey, 2005; Tracy & Scott, 2006; Tyler, 2011). What makes these observations compelling is the ubiquity of the strategies, remarks, and experiences across what appear to be strikingly different occupations: psychiatrists, bail bonds workers, exotic dancers, home healthcare workers, corrections officers, and construction workers, for example, have all been

observed acknowledging that their work is dirty and enacting strategies to normalize that taint. These strategies appear to conform to the three techniques (reframing, recalibrating, and refocusing) identified by Ashforth and Kreiner (1999). Emerson and Pollner (p. 246, 1976) observe that decrying psychiatric emergency care as “shit work” helps establish the dirt of dirty work as unusual and separate from the routine or defining characteristics of psychiatric work—both for the workers themselves and for observers. Bail bonds workers acted to discredit claims that they were one of the dishonest workers and distanced themselves from other bail bonds workers in an attempt to legitimize themselves (Davis, 1984). The workers made favorable comparisons of themselves to other, purportedly less-reputable bail bonds workers, and attempted to justify the good of their work vis-à-vis the norms and values of the society which they perceive to actively discredit their work. Again, this personal experience of dirty work is a critical component to understanding and measuring dirty work.

Changes over time in the dirty work experience. Stacey (2005) studied a sample of home healthcare workers. Home healthcare work fits the taxonomy of dirty work in its subservience to others and handling of waste. Although the taint was ascribed by the author, part of the methodological process included descriptions of the work and quotes from the employees creating a more compelling argument that the work itself was dirty. For example, some of the observations depicted cleaning human waste and changing diapers and referenced the relative inferiority of home healthcare workers to other healthcare occupations. Ultimately, the focus of the study alluded to the same paradox of dignity in dirt proposed by Ashforth and Kreiner (1999), as Stacey identified and elaborated upon the techniques these home healthcare workers used to find dignity in their work. These dirty workers found meaning in their work, for example, by comparing themselves favorably to other healthcare professionals. In their own words, these

dirty workers provided a level of care that others who avoided dirty work simply could not. In other words, these workers were absorbing the dirty tasks of their work as a sense of pride and mastery, allowing them to persevere in spite of great emotional distress. These processes highlighted what Ashforth and Kreiner (1999) suspected. Dirty workers navigate a volatile identity process, yet like their “clean” counterparts, they ultimately do so in pursuit of a positive, meaningful, validating, and esteem-enhancing identity. Although dirty workers experience emotional distress and discomfort through this identity construction process, it would be premature to claim that dirty work directly causes that distress and discomfort.

A handful of other studies replicated or at least supported Stacey’s (2005) findings. Thiel (2007) observed a number of construction workers in London. The author observed a similar set of processes in how these dirty workers developed their positive identities. Again, these workers pointed to their skills and willingness to undertake the sort of tasks that others could not as a source of pride. Tyler (2011) observed a number of adult shop employees in an area of SoHo known for its community of sex shops. Of note, Tyler (2011) observed that the employees created a narrative around the dirty work that sustained the “edginess” of working in a somewhat dangerous area and selling adult-themed items (i.e., items of morally dubious nature) and acted as a source of attraction to and excitement for the work itself. In other words, they glorified or romanticized the aspects of their work that would otherwise act as a denigrating source of taint. Tyler pointed to the sometimes uncomfortable interactions with customers and the location of the shops (in an unsafe or “edgy” area) as evidence of the dirtiness of the work. Grandy and Mavin (2011) also noted similar processes at work in how exotic dancers found pride and dignity in their work. Part of this approach included constructing a language around the work itself.

Customers were clients, for example, and exotic dancing itself was referred to as performing or art.

Notably, Grandy and Mavin (2011) reported a number of ways in which the performers drew unfavorable comparisons about other dancers and their clientele. For example, some performers distanced themselves from other dancers who went too far or presumably engaged in illegal sexual acts with their clients. And, perhaps uncommon to other dirty workers, these dancers remarked how it was their clients who were morally corrupt and disgusting for entering such an establishment in the first place. By casting others unfavorably and reframing their work as art, these exotic dancers found pride to varying degrees in their dirty work, though reportedly to a lesser extent than had been observed in other occupations. In other words, dirty work is not categorically repulsive, but may indeed be attractive to some, and may become more attractive to workers as they navigate through the occupational identification process. That means that individual perceptions of work dirtiness likely change over time and independently of culturally held ascriptions of taint. And some techniques may be less effective than others in orchestrating the changes in these self- and other-perceptions of the dirtiness or taint associated with dirty work. All the more reason to study how dirty work changes over time and shapes the experiences and perceptions of those who perform it.

Animal euthanasia research and outcomes associated with dirty work. Several studies examined the experiences of animal euthanasia workers as a form of dirty work. Reeve, Rogelberg, Spitzmüller, and DiGiacomo (2005) examined the personal effects of euthanasia and a number of covariates to conducting animal euthanasia—an auspiciously physically and morally tainted task. Chief among their findings, the dirt of animal euthanasia appears to relate to strain that is unique to other job-related strains. Other significant correlates included somatic health

complaints and dissatisfaction with the job. Unfortunately, they did not specifically assess the perceived dirtiness of the task, but the findings are still noteworthy in establishing the range of experiences in dirty work. Rogelberg et al. (2007) investigated recommendations for dealing with animal euthanasia from the workers themselves and noted that burnout was a high-ranking concern. Again, the study did not specifically frame the findings in terms of dirty work; however, such investigations lay the groundwork for subsequent investigations.

Building on those prior studies, Baran, Rogelberg, Lopina, Allen, Spitzmüller, and Bergman (2012) examined the potential consequences of involvement in dirty work. They assessed the dirtiness of work by an indicator of the presence or absence of dirt (i.e., a dichotomous variable) rather than magnitude or degree of dirty work (i.e., a continuous variable). Specifically, Baran et al. (2012) identified their sample by involvement in animal euthanasia and whether they identified animal euthanasia as a core, salient part of their job. Their framework and findings were important, regardless. First, they integrated Conservation of Resources Theory (Hobfoll, 1989; 2001) to predict and explain the relationships they observed between dirty task involvement and several theoretically relevant variables. Second, they compared individuals involved in dirty work to those not involved in a core dirty task within the same general occupation to test for meaningful differences associated with dirty task involvement. Third, they examined within-group differences among the dirty workers with respect to psychological salience of the core dirty task. This third point is interesting because it bucks the trend of excluding worker-level perceptions of or identification with the dirty work.

As predicted, Baran et al. (2012) observed greater employee strain, reluctance to discuss work, and job involvement, and lower work satisfaction associated with more frequent involvement with these participant-identified salient dirty tasks. Their results suggest that the

frequency of involvement with a core dirty task significantly relates to their variables, which could serve as a proxy for magnitude of work dirtiness, or possibly a crude indicator of breadth of work dirtiness. In other words, even relatively simple indicators of dirty work experiences show promise in predicting employee-relevant outcomes. At the very least, it suggests there is some within-group variability in the experience of dirty work within a shared occupation. Just as important, these results underscore the utility of incorporating Conservation of Resources Theory (Hobfoll, 1989; 2001) in dirty work research. Briefly, Hobfoll (1989; 2001) proposes that resource loss is experienced more intensely than a proportional gain of resources; thus, people are motivated to invest their own limited resources to deter further resource loss, to recover from resource loss, and to encourage future resource gains.

Bickmeier et al. (2015) examined the relationships among different forms of taint and several theoretically relevant variables. Unlike previous dirty work research, taint was measured, rather than merely ascribed to the sample of animal euthanasia workers. Specifically, the study measured the magnitude of perceptions of physical and moral taint associated with the work by self-report. Counter to previous expectations (e.g., Baran et al., 2012; Lopina et al., 2012), animal euthanasia work was not greatly morally tainted. In fact, Bickmeier et al. (2015) observed statistically and practically significantly greater physical taint than moral taint within the sample. These findings cannot be understated: this study demonstrated that previous ascriptions of taint to animal euthanasia workers may be discrepant with the workers' own experiences of taint. Furthermore, the study demonstrated some relationships between the perceptions of taint itself and a number of variables as predicted by Conservation of Resources Theory (Hobfoll, 1989; 2001). Specifically, physical taint significantly related to emotional drain and job satisfaction (positively and negatively, as predicted), though moral taint did not. And perceptions of physical

taint related to those variables uniquely beyond involvement with the dirty work itself, job level, and job tenure. This pattern of results suggests that perceptions of taint are independent of the dirty task itself, and meaningful predictors.

Bickmeier et al. (2015) provides preliminary validity support for the inferences drawn from their results. Namely, Bickmeier and colleagues (2015) conducted an exploratory analysis and confirmatory factor analysis in separate samples and observed that the proposed factor structure (two distinct domains of physical and moral taint) held with good model fit. The two-factor model showed superior fit to a single-factor model, further supporting the notion that the domains of taint were distinct. The pattern of results also provided some additional convergent validity evidence in line with previous research. Both forms of taint (physical and moral) positively correlated with euthanasia involvement and emotional drain at work (i.e., dirty work involvement and resource loss) and negatively correlated with job satisfaction. That much aside, the small selection of items raises concerns for deficiency in the content domain of dirty work, so these findings should be taken tentatively. More important, the study indicates the value and possibility of investigating relationships between different domains of taint and variables relevant to the dirty work experience and in investigating variability among perceptions of taint.

Challenging the ascription of taint. In a post-hoc examination, Ashforth et al. (2007) gathered data on the perceived dirtiness of their sample occupations. Initially, the dirty work of the managers in the sample had been ascribed by the authors. In the post-hoc study, data indicated that external observers indeed rated the occupations of the study's sample as dirty. Specifically, their post-hoc sample categorized the 18 occupations represented in the manager sample (and 12 presumably clean or untainted occupations) into physically, morally, or socially tainted work, and also responded to a single item indicating degree of taint. Based on data from

the post-hoc analysis, the authors concluded that sufficient evidence supported their claim that their sample was dirty work. Yet, their analysis demonstrated significant room for improvement in how we empirically identify dirty work. That is, our methods and tools to identify and analyze the quality of dirty work as experienced by the worker—be it by degree, type, etc.—can and should be expanded and improved. That is not to say that dirty work research can only be derived from a self-reported quantitative, measurement-oriented approach. Rather, a dirty work measure should complement the preceding work and open the way for new avenues of research. For instance, research into the emerging construct of emotional dirty work (McMurray & Ward, 2014; Rivera & Tracy, 2014) yielded several significant contributions relevant to dirty work research, theory development, and measure construction. First, they challenged the typology put forth by Ashforth and Kreiner (1999) by establishing a pattern of evidence in support of a new form of taint, emotional dirt: “expressed feelings that threaten the solidarity, self-conception, or preferred orders of a given individual or community,” (McMurray & Ward, p. 1134, 2014). Second, they demonstrated the need for discovery by expanding Ashforth and Kreiner’s (1999) conceptualization of the domains of taint as a tripartite typology through description. Third, McMurray and Ward (2014) established the following venue for future research: identifying, examining, and describing the various and constituent domains of dirty work. If we can refine the tools we use to study the phenomenon, we can develop a new line of research to explore, discover, and understand the experience of dirty work.

Stigma measurement validation studies. Considering dirty work’s intellectual heritage to stigma literature, it would be remiss to fail to acknowledge measurement validation studies of stigma in the development of a measure of dirty work experiences. Several stigma measures have been developed specific to various specific forms of stigma, with measurement of HIV status-

related and mental illness-related stigma being the most common (van Brakel, 2006). These measures can be categorized by their focus on one or more aspects of stigma measurement: internalized stigma, discrimination as a result of stigma, restriction of participation or opportunities as a result of stigma, and stereotypes or community perceptions resulting from stigma. Some common methodological techniques can be observed among exemplar validation studies. Such measures tend to be self-report, rely on qualitative data (e.g., focus groups, interviews) from the target population for item development, and include some form of validation process (Berger, Ferrans, & Lashley, 2001; King et al., 2007; Sayles et al., 2008; Visser, Kershaw, Makin, & Forsyth, 2008). Berger et al. (2001) and Visser et al. (2008) stand out for conforming to what might be closest to the “gold standard” of measurement validation (Hinkin, 1998). The two measurement validation studies undertake a factor analysis along with gathering corroborating validity evidence via administration of related measures (such as scales for depression, self-esteem, and social support/conflict). Unfortunately, Berger et al. (2001) fail to include a confirmatory factor analysis in a separate sample to rule out sample-specific effects, though Visser et al. (2008) do perform a confirmatory factor analysis. Generally, these studies demonstrate the opportunity for greater rigor in measurement validation.

Although these stigma measurement validation studies could largely be improved methodologically, they do provide a valuable foundation for developing a measure of the dirty work experience. Namely, they provide an outline for the content domain for item development. As van Brakel (2006) and Link, Yang, Phelan, and Collins (2004) note, internalized or perceived stigma is a critical component to any stigma measure. That is, such measures emphasize the personal feelings associated with the stigma, and van Brakel (2006) argues that those feelings may associate with more severe consequences than the stigmatizing condition itself. Individuals

in the community may enact stigma toward the stigmatized others through various discrimination behaviors, including stereotyping and restriction of participation. In addition, van Brakel (2006) argues that this fourth pillar of stigma measurement-validation studies—community perceptions—should be valuable to researchers hoping to distinguish self-perceptions (restriction of activities and opportunities) from other perceptions of stigma (acts of discrimination and stereotyping). That is, stigma can be measured from the perspective of the person experiencing stigma, and thus self-report measures become the most applicable tool for investigating the personal or lived experience of stigma. And, stigma can be measured from the perspective of others, in which case the target participant for such an instrument should be someone assessing a real or hypothetical target of stigma.

Ideally, a fully-realized measure of stigma would include data from multiple sources—the stigmatized, the stigmatizers, and even public sources such as mainstream media accounts. However, it would be fallacious and prone to measurement bias to expect a single-rater (i.e. the subject of stigma) to cleanly and clearly distinguish their own internalized stigma from the stigma-actions undertaken by others. Visser et al. (2008) adopt a unique approach by administering a parallel version of their instrument to members of the community of their target population (HIV-infected individuals) and as a self-report questionnaire to HIV-infected individuals themselves. Generally, however, stigma studies rely entirely on self-report of the stigmatized, even in assessing community perceptions and the actions of others toward the stigmatized. Link et al. (2004) highlight the measurement biases in relying on self-report by the stigmatized of community perceptions. In brief, it becomes difficult to disentangle causality—whether these perceptions are the results of individual differences like neuroticism. Because the studies proposed for this dissertation emphasize the personal experiences of dirty workers, the

item development and validation will target domains best served by self-report of the dirty worker. This approach should allow for a cleaner measure and methodology than one in which self-reports are including assays of community perceptions.

Conclusions. Ashforth, Kreiner, and colleagues have developed these somewhat sophisticated systems of categorizing dirty work. Yet, these systems have been subject to only a modest amount of empirical support in the time since publication. Their ideas read intuitively, and they are indeed built upon the back of theory. These identity theories, however, were not designed necessarily to explain dirty work phenomena. While that lack of focus on dirty work does not necessarily exclude these theories from being utilized to conduct dirty work research (as evidenced in the above review), it does beg the question: are these systems of classification close to "truth" or to the lived experiences of people doing dirty work? No subsequent testing has been performed of the breadth-by-depth classification of taint, nor of the necessity versus evil distinction. That is not to say that the dirty work research so far is somehow deficient or wanting. Rather, we have a clear path forward based on the work that has come before: to enrich our understanding of dirty work by examining the worker's experiences and to develop the tools to do so. In fact, developing such an instrument should open myriad paths for future dirty work research.

Dirty work needs to be clearly defined by degree or magnitude to distinguish dirty work from clean work that happens to include some dirty components. This issue is somewhat hinted at by integrating Kreiner et al.'s (2006) breadth and depth; however, they do not provide guidance on sufficient breadth and depth to qualify work as dirty. Observations of magnitude are also necessary to distinguish differences among occupations and within-person variations in perceived work dirtiness over time. As some dirty work studies suggest (e.g., Davis, 1984;

Emerson & Pollner, 1976; Grandy & Mavin, 2011; Tracy & Scott, 2006; Tyler, 2011), individuals actively manage and change their self-perceptions of work dirtiness as they develop their personal identity. The socialization literature also indicates that organizational forces such as managers, training programs, and organizational messaging actively shape newcomers' work identities over time (Ashforth & Kreiner, 1999; Scott & Myers, 2010). Moreover, these processes (socialization and identity development) suggest that personal perceptions of work dirtiness may differ from public or community perceptions of work dirtiness. Indeed, Visser, Kershaw, Makin, and Forsyth (2008) demonstrated such a difference between personal and public perceptions of stigma among HIV patients. To date, no dirty work study has examined how differences in perceptions of taint within-person over time, across dirty workers, or between dirty workers themselves and observers shape the dirty work experience.

The Importance of Dirty Work Research

Understanding dirty work should expand knowledge in several content domains. As has been demonstrated in the literature before, dirty work is built upon learnings from several different literatures. As a consequence, dirty work research should contribute back to literature in stigma, identity, stress, burnout, and a host of other variables. Dirty work's relevance in the organizational context should be apparent, but it is worth specifying why leaders and organizational members should concern themselves with the taint associated with dirty work.

Prestige and status. Dirty work, as a social and organizational phenomenon, cuts across occupations irrespective of the relative prestige of the occupation or the relative status of the individuals performing such work. In brief, dirty work tends to cluster around lower prestige, lower power occupations characterized by diminished access to coping and taint management resources, though even relatively high prestige occupations, such as dentists, perform core dirty

work functions (Ashforth & Kreiner, 1999; Baran et al., 2012). Earlier research indicates that people of relatively lower social status (e.g., women, people of color), too, tend to undertake dirty work occupations at a higher rate (Saunders, 1981; Corlett & Mavin, 2014). In other words, such dirty workers experience multiple or intersectional stigmas, further reinforcing their lower relative status positions. Indeed, some have argued that gender narratives—for example, feminized dirty work is dirtier, whereas more masculine dirty work entails less dirtiness—reinforce these class-based ideas of work dirtiness (Tracy & Scott, 2006).

Relevance to stress and burnout. Strides have been made in understanding the personal and psychological consequences of performing the dirty work itself, too. Specifically, research emphasizing the salient, core dirty tasks of dirty work has demonstrated links with heightened experiences of stress, interpersonal conflict, withdrawal, and even personal health complaints among other undesirable experiences (e.g., Reeve et al., 2005, Baran et al., 2012). In addition, Baran, Rogelberg, and Clausen (2016) observed lower overall psychological and physical wellbeing among slaughterhouse workers. These studies focused on a single dirty occupation (animal shelter workers performing euthanasia). In other words, we have much more to learn about how the experience of dirty work relates to these other occupational variables.

As noted by Baran et al., (2012), Conservation of Resources Theory (Hobfoll, 1989; 2001) provides an effective explanation for how and why dirty workers experience strain and stress specific to the dirt of their work. In brief, people tend to act to gather, retain, and protect valued personal resources. The threat of losing those resources, actually losing resources, or even a zero net gain after investing resources create the conditions for stress. That is, individuals are increasingly likely to appraise their environment as stressful as they experience real or threatened resource loss (Hobfoll, 1989; 2001). Of note, individuals tend to feel resource loss more strongly

than resource gain, so a net gain of an equivalent amount of resources is less beneficial than a loss of equivalent magnitude is harmful. Interestingly, resource loss is actually more debilitating than overall resource level, so possessing few resources to start is less problematic than simply losing resources. That being said, magnitude of resource loss is relative to overall resource level, so those with fewer resources tend to appreciate resource loss more greatly. Dirty workers likely possess fewer resources to start being newcomers in an organization and are likely associated with other stigmatized identities (e.g., ethnic minorities, lower socioeconomic status). Yet dirty workers must allocate some of those limited resources to simply establishing a valued identity, where others may preserve and protect those resources. Given these processes at work, dirty work research presents an opportunity to observe resource expenditure and stress appraisal realistically over time, rather than in experiments or quasi-experiments, potentially enhancing Conservation of Resources Theory and occupational stress research.

Burnout appears to be a natural outcome of navigating a dirty work identity. Tracy and Scott (2006) and Lai et al. (2013) observed depersonalization—a component of burnout—among their samples of dirty workers (correctional officers, firefighters, and casino managers). Bickmeier et al. (2015) reported a significant relationship between perceptions of taint and emotional drain—another core component of burnout. Likely, frequent management of a stigmatized identity—combatting threats to validity, for example—entails dedicating valuable personal resources (Baran et al., 2012; Hobfoll, 1989; 2001). As noted, the processes involved in developing and navigating a dirty work identity place additional demands and stress on dirty workers beyond the demands and stress associated with task performance itself. The situation is a Catch-22. Dirty workers expend resources to manage their identities, and as a result possess fewer resources to manage additional demands, making them more vulnerable to strain,

exhaustion, and burnout. In fact, observing such processes over time could bring to light broader processes in the experience of burnout.

Relevance to other variables. A handful of other variables have been studied in dirty work. Reeve et al. (2005) found evidence of somatic health complaints associated with the strain of a dirty task. Although they did not measure work dirtiness itself, the somatic health complaints may be symptomatic of the sort of resource loss that would be expected in managing the taint of dirty work. Baran et al. (2012) and Bickmeier et al. (2015) found a significant, negative relationship between dirty work and job satisfaction. The former study employed a facet job satisfaction scale and the latter study employed a general job satisfaction scale. It is not surprising to see job satisfaction negatively associated with work dirtiness; however, it is unclear whether job satisfaction results from performing dirty work, or if job satisfaction can somehow mitigate (or in the case of dissatisfaction, worsen) the effects of taint on dirty workers. Dirty work has yet to be examined in terms of how tainted work may influence job performance, though there is some work on identity and performance that may provide some guidance in what to examine and test. For example, van Knippenberg (2000) explained that workers with stronger (i.e., more central) occupational identities tend to outperform their less-identified counterparts. Given the complex and multifaceted propositions to identity development from Kreiner et al. (2006), dirty workers may be ideal to further investigate the relationship between work identity and performance. Finally, several authors have either observed (Brittain & Davis, 2007; Davis, 1984) or remarked upon (Ashforth & Kreiner, 1999; Kreiner et al., 2006) the enhanced risk for isolation among dirty workers. Naturally, such isolation means greatly diminished access to the sort of resources that would protect against the many negative experiences associated with taint.

Moreover, such isolation may increase the employee's risk of turnover or intentions to quit an organization (Lai, Chan, & Lam, 2013).

Relevance to organizations. As outlined above, dirty work cuts across employee variables within an organization. Its effects can be felt from entry to exit, and many of the variables touched by dirty work are organizational research hot topics, like stress, burnout, job satisfaction, performance, and turnover. The potential self-protective properties of stigma (Crocker & Major, 1991; Major & O'Brien, 2005) may be leveraged by an organization to enhance the wellbeing of their employees. Even simply better understanding dirty work should provide ideas for how to navigate and manage these employee concerns. Ashforth et al. (2007) reported a suite of strategies employed by managers of dirty workers, and further refinement of dirty work research should allow us to investigate how effective those strategies are. Thus, we can advise managers on the best or most efficient strategies to adopt to create the best working conditions for their dirty workers. Moreover, lessons from dirty workers in managing the stigma of dirty work and other associated consequences could be appropriated and applied to managing stress, burnout, and other negative work events among employees who do not perform dirty work. Irrespective of employee wellbeing, the costs associated with increased turnover should be of value to any organization, and of special value to organizations that may already be resource-poor and employing dirty workers.

The Problem and Purpose

What should be the burden of proof to empirically demonstrate that a sample of interest is a dirty work occupation? With the definition by Ashforth and Kreiner (1999), the guideline for deciding what constitutes dirty work involves identifying one or more possible forms of taint associated with the work. Single-occupation studies are nearly ubiquitous in dirty work research,

and they consistently follow a pattern of identifying aspects of the work that align with Ashforth and Kreiner's (1999) definition of dirty work to justify the focal occupation as dirty work. Most typically, these studies follow ethnographies or participant interview designs keyed into the workers experience as a member of the specific occupation rather than their broader experience as a dirty worker. In other words, without a tool to measure the presence and level of dirt associated with the work, dirty work researchers are left to ascribe or impute taint in their samples, justify the dirt of their focal occupation through laborious qualitative data analysis, and risk running into a tautology: the occupation is dirty because I said so, and I say it is dirty because it is dirty. With the development of a measure to examine the degree of taint associated with dirty work, dirty work researchers can expand their toolbox to resolve the aforementioned issues and press forward and address questions such as: Do the three domains of taint as identified best represent the construct domain of the experience of dirty work? How much dirt or taint makes an occupation dirty? Does one form of taint mean 'worse' experiences of dirty work? The research that has followed from the aforementioned theoretical work has provided a foundation for building such a measure of the dirty work experience to begin addressing questions like these.

The problem of ascription. As highlighted throughout the preceding paragraphs, taint is traditionally assigned a priori to the jobs under study, and usually, minimal-to-no empirical support is gathered to support those claims (e.g., Ashforth et al., 2007). In other words, dirty work is essentially treated as a binary variable (work is either dirty or it is not) rather than a variable with degrees of variance. Yet, Kreiner et al. (2006) argue that dirty work occupations do indeed vary in their degrees of taint, at least insofar as breadth and depth of taint are concerned. Moreover, Bickmeier et al. (2015) demonstrated that two domains of taint could be measured as

continuous variables and significantly related to personal outcome variables like job satisfaction and emotional drain. In the absence of empirical support, we run the risk of getting these ascriptions wrong. Ashforth et al. (2007) demonstrated that a sample of over 600 independent raters considered over a third of the occupations to which the authors ascribed physical and social taint to be not tainted at all. In addition, Bickmeier et al. (2015) found that animal euthanasia workers were in fact more physically tainted than morally tainted, despite several other studies ascribing greater moral taint to their work. Apparently, there are some meaningful differences in how taint is perceived by the workers themselves, (i.e., variability,) and how taint is being observed by researchers. These findings underscore the importance of a descriptive approach to dirty work supported by a tool to assess the experiences of dirty work. A more thorough measure of the degree of work dirtiness can support a richer understanding of the dirty work experience.

Recently, Ashforth and Kreiner (2014) suggested that moral taint may be dirtier than physical taint. Unfortunately, no such tool or study design exists to test that proposition. In fact, we have seen minimal efforts to even concretely distinguish these three domains beyond the initial theoretical groundwork. From a replication perspective, previously investigated covariates in dirty work research would benefit from re-examining dirty work as a continuous covariate. That is, important nuances are simply lost by limiting the variance in how dirty work is measured (traditionally as a dichotomous or binary variable). This is especially critical to reconsider given the astonishingly complex relationships between dirty work and identity formation in papers by Kreiner et al. (2006). Hence, the field presents an opportunity for a significant contribution through a tool to finely measure the magnitude of dirty work.

Purpose of the study. We have complex questions and processes at play that demand an instrument capable of assessing the relationships between dirty work and other variables. Thus, this dissertation will present a thorough measurement validation study, providing a tool to push dirty work research forward. For example, the relationship between the experience of dirty work, intent to quit, and turnover could be more robustly explored. If the experience of dirty work is predictive of turnover or even intent to quit, then it would prove prudent to develop interventions to help employees manage the dirty work experience. That then begs another question: can an intervention be developed to manage the dirty work experience? In other words, can employees be taught strategies and techniques to manage the dirty work experience (i.e., the three techniques of reframing, recalibrating and refocusing; Ashforth & Kreiner, 1999). And if so, which techniques are the most effective? Is work dirtiness solely experienced by the workers themselves, or could others in their social network (such as close relations like their families) experience the stigma of dirty work? Neuberg, Smith, Hoffman, and Russell (1994) observed a stigma by association effect in which “normal” people interacting with stigmatized people were stigmatized by observers as a result of that interaction. Thus, it seems possible, even likely, that those who choose to interact with someone who has been designated as a dirty worker would experience some of the same fallout, and a measure of the dirty work experience would allow researchers to test this possibility.

Several propositions by Ashforth and Kreiner (1999) remain untested to this day. Namely, the individual differences that predict differences in how individuals adjust to their dirty work, the individual strategies (as opposed to the group-level strategies) to counter threats to a dirty work-related identity and their relationship to the group-level models, the protective effects of high occupational prestige dirty work, and the differences between the forms of taint all

remain essentially unexplored. Ultimately, this tool will serve cross-occupational study designs to compare and contrast dirty work jobs (e.g., of differing types of dirt, level of prestige) and generalize findings, support longitudinal designs to examine and describe how perceptions of taint change and to test the efficacy of stigma management techniques within and across occupations, and serve as a platform for further discovery and identification of domains of taint. In other words, we can test the propositions against the model (i.e., Ashforth & Kreiner, 1999) in a truly theoretically driven design. With this tool, dirty work researchers can revitalize and expand the theoretical framework that will drive dirty work into the future.

Study design. The following series of studies will follow best practices in organizational research for developing and conducting a measurement validation study as recommended by Hinkin (1998). This measurement validation study consists of three major phases: 1) item generation, 2) item reduction, 3) model fitting via confirmatory factor analysis, 4) convergent and discriminant validity evidence gathering. To provide supporting evidence for the measurement validation process, data will be collected from multiple samples across separate studies or phases. For this study, dirty work will initially be defined as work that is marked by one or more domains of taint: physical, social, or moral. In this case, marked is defined as some recognizable indicator of the work that discredits or devalues the person undertaking the work. Thus, the dirtiness of work must potentially be observable by others, even if the mark can be concealed. However, the definition could be refined as data are gathered—for example, one or more domains of taint may appear empirically irrelevant to the experience or measurement of work dirtiness. The phases and associated processes and analyses are described below.

This measurement validation study will take a participant-driven approach. Again, adopting such an approach should provide a clean, focused measure, though it would exclude

potentially relevant factors in understanding the experience of dirty work—community perceptions and actions toward the dirty worker. As Visser et al. (2008) have demonstrated, once a participant self-report measure has been developed and supported with validity evidence, a parallel measure can and should be developed to be administered to others who would interact with (and potentially stigmatize) the dirty worker. The items should tap the perceived and personal experiences of dirty workers. That is not necessarily the only way to conceive of dirty work. Indeed, one could view dirty work as a more formative construct, a constellation of qualities that exists at the occupation-level rather than in the personal and individual experiences. Neither approach is superior to the other. Rather, each approach is suited better to certain types of inquiry and research questions. In this case, and based upon the preceding literature, a participant-driven approach should be best-suited to build upon previous research and to address the questions of interest—those related to the personal experiences of dirty work. Moreover, the findings and process of developing this measure could and hopefully will be applicable to developing a more formative measure of dirty work to address more sociological concerns regarding dirty work.

CHAPTER 2: MATERIALS AND METHODS

Overview

What follows is a series of studies organized across four separate phases: 1), item generation, 2) exploratory factor analysis and item reduction, 3) repeat exploratory factor analysis and confirmatory factor analysis, and 4) final confirmatory factor analysis and validity evidence. In phase 1, I draw upon a large sample of qualitative survey data from dirty workers (animal shelter workers) and my own subject matter expertise to develop a set of items to tap the established content domain of dirty work. In phase 2, I subject the items to a series of exploratory factor analyses to identify a potential factor structure and a set of items that clearly load onto one of those factors in a cross-occupational sample. In phase 3, I repeat the exploratory factor analysis on a separate sample (cross-occupational) to mitigate the capitalization on chance effect of exploratory factor analyses. Then, I test the factor structure through a confirmatory factor analysis on a separate sample. In phase 4, I repeat the confirmatory factor analysis on a separate, cross-occupational sample, and I adjust the measure to achieve good model fit. To provide validity evidence, I examine the measure of the experience of dirty work in relationship to theoretically and empirically relevant variables. Namely, I examine the pattern of correlations to infer convergent validity evidence, and then I conduct regressions to test the hypotheses. Finally, I complete a MANOVA to provide tentative evidence of the measure's ability to discriminate among occupations by domain of taint. Ultimately, the measure should tap into the respondent's perceptions of how others view their work across three dimensions or domains of taint.

Phase 1: Item Development.

In a measurement validation study, Hinkin (1998) first tasks the researchers with developing a thorough set of items with the intent of reducing those items to a more focused list. With that in mind, I developed items that tap the full content domain of dirty work while avoiding generating items that could potentially be contaminated, i.e., map onto different constructs. I generated these items based on preceding dirty work literature to assess the three domains of dirty work (Ashforth & Kreiner, 1999).

I supplemented the item-generation process with items drawn from qualitative pilot data from employees in animal shelters throughout the United States ($n = 1,038$, $k = 21$). In the pilot data, participants provided responses to the following question: “How do you think other individuals in your home view (e.g., easy, hard, glamorous, dirty, etc.) what you do on your job — such as key tasks and how you spend your time at work?” Although the pilot data represents a set of occupations within a single industry, I designed the resulting items with breadth and applicability to multiple occupations in mind. Furthermore, I developed items that are task-agnostic and tap into the actual experienced work dirtiness—such as how people are devalued or discredited by others—to help position the tool as a global (or nearly) way to measure dirty work. Please refer to Table 1 for the list of 46 initial items. Sample items include “disgusting,” “dirty,” “immoral,” “shameful,” “degrading,” and “inferior.”

Phase 2: Study 1 – Item Reduction.

In their seminal work, Ashforth and Kreiner (1999) proposed three distinct forms of taint, and each form or domain of taint consisted of what could be described as a group of subcategories or subdimensions. Namely, physical taint consists of work that is 1) dirty, filthy, or unclean, 2) performed in close association with death, or 3) performed in dangerous conditions. Moral taint includes work that involves 1) deception, deceit, or adversarial work, 2) morally

objectionable activities, or 3) breaking norms. Ashforth and Kreiner (2014) later expand upon this definition to argue that morally tainted work involves work that may be characterized as evil—and especially work that is eviler than it is deemed necessary by the society in which the work is performed. The third and final domain of taint, social taint, incorporates work that is performed 1) in subservience to others or 2) in close association with stigmatized others (e.g., the mentally ill, criminals or prisoners). As a result, I performed my EFAs unconstrained to allow the factors of note to emerge from the data, rather than constraining the EFAs to three factors (for each domain of taint) or more to permit each subdimension to emerge should the data indicate such a pattern.

Sample. Participants were recruited via Amazon's MTurk to complete a web-based survey housing the study measures (via the Qualtrics platform). Data are entirely self-report. I offered participants a small incentive (\$0.75 for an estimated six minutes of participation) for their participation. I filtered the study on MTurk to include only MTurk participants located in the U.S. who had previously completed 1,000 or more HITs (Human Intelligence Task) with a 95% or greater HIT approval rate to ensure the quality and integrity of the study responses. Although best practices suggest a target of 10 cases per item for an exploratory factor analysis (cf. Hinkin, 1998), published measurement validation studies actually sample 3-5 cases per item to achieve factor rotation convergence. To account for incomplete responses and other issues arising in cleaning the data, I recruited a total N of 502 for an initial item pool of 46 items. The survey included two attention checks, and 9 participants failed one or more attention checks. I removed these 9 participants' data, reducing the sample size for Study 1 to $n = 493$. In addition, I identified 107 participants with an inattentive response pattern (i.e., no variance in their responses and a time to complete the survey of 2 minutes or shorter; for comparison, the average

time to complete the survey was 224 seconds with a standard deviation of 137 seconds) and removed those participants. The final sample size for Study 1 is $n = 386$.

Demographic Characteristics. Two individuals failed to provide demographic data, reducing the sample size for demographics to 384. Participants ranged from 19 years to 72 years in age with a mean age of 38.77 years and a standard deviation of 15.84 years. 207 (53.6%) respondents identified as male, and 177 (45.9%) respondents identified as female. Most (302 or 78.2%) of respondents identified as white, 30 (7.8%) respondents identified as Black/African-American, 13 (3.4%) respondents identified as Hispanic/Latino, 22 (5.7%) respondents identified as Asian/Pacific-Islander, 6 (1.6%) respondents identified as Native American, and the remaining 11 (2.8%) respondents identified as “mixed race” or “multiracial.” Education varied from less than high school diploma or doctorate degree. Bachelor’s degree accounted for the single largest group (151 or 39.1%), 56 people reported achieving a master’s degree (14.5%), and 8 (2.1%) individuals reported a doctorate degree or equivalent. Thus, the sample is largely college-educated (55.7% of participants had earned a bachelor's degree or higher). Of the remaining respondents, 42 (10.9%) had an associate degree, 83 (21.5%) had some college, 42 (10.9%) had a high school diploma or GED, and 3 (.8%) reported less than a high school diploma.

Most (320 or 82.9%) respondents were employed full-time, 62 (16.1%) reported part-time employment, 1 respondent indicated they had been unemployed for longer than 6 months, and 1 respondent indicated that they were retired. Respondents had been employed in their current positions from 0 months to 420 months (mean = 56.15 months, standard deviation = 67.39 months). The respondents worked in a variety of industries: 17 (4.4%) in accommodation and food services; 17 (4.4%) in administrative and support services; 10 (2.6%) in agriculture,

forestry, and hunting; 17 (4.4%) in arts, entertainment, and recreation; 14 (3.6%) in construction; 46 (11.9%) in educational services; 29 (7.5%) in finance and insurance; 20 (5.2%) in government; 49 (12.7%) in healthcare and social assistance; 22 (5.7%) in information; 8 (2.1%) in management of companies and enterprises; 11 (2.8%) in manufacturing; 27 (7.0%) in other services (except public administration); 29 (7.5%) in professional, scientific, and technical services; 9 (2.3%) in real estate rental and leasing; 33 (8.5%) in retail trade; 14 (3.6%) in transportation and warehousing; 7 (1.8%) in utilities; and 5 (1.3%) in wholesale trade.

Procedure. I designed the survey in Qualtrics to present the items to participants in random order. I conducted a series of exploratory factor analyses using SPSS 26 to reduce the initial item pool. Because the literature has indicated three distinct domains of taint, I rotated the factor solution obliquely. I determined the number of factors to retain by examining a scree plot and retaining factor solutions with an eigenvalue greater than 1.0 (e.g., the Kaiser rule) and that explain a meaningful proportion of the variance (Hinkin, 1998). I ran the analysis as purely exploratory, i.e., I did not constrain the solution to specific number of factors. To ensure data integrity, the following analyses were completed in parallel using the sample with only the failed attention checks removed ($n = 493$) in comparison to the sample excluding the inattentive responders ($n = 386$). I did not observe a substantive difference in the results. Both data sets ultimately produced the same factor structure and item reduction outcome.

Measures. I asked participants to complete 46 items representing the content domain of dirty work. Qualtrics presented the following instructions before the dirty work items: “Please read each following word or statement, then indicate how you think *your specific job or occupation* is viewed by **others outside of your place of work**. In other words, in your opinion, what are others' impressions of what you do for a living? They would say my specific job or

occupation is (rate each word or statement using the following scale):” Participants then rated each word or statement on a seven-point, unipolar scale (1 = “not at all,” 2 = “very slightly,” 3 = “slightly,” 4 = “somewhat,” 5 = “moderately,” 6 = “a lot,” 7 = “extremely”). After completing the dirty work items, participants completed demographic items.

Results. My initial factor solution converged in 11 rotations and produced 4 factors explaining 71.4% of the total variance. I retained only those items that demonstrated a factor loading of 0.3 or greater and clearly loaded on only a single factor (Hinkin, 1998), which resulted in a 3-factor solution consisting of 38 items. Please refer to Table 2 for the initial EFA results including factor loadings. To elaborate, I removed items based on the following rationale: 1) logistical—the measure should be short enough to be completed quickly by workers across a diverse range of occupations who may have limited flexibility to complete a survey; 2) empirical—the measure should permit inferences across distinct factors to distinguish clearly among the forms of dirt that define work; that is, work is not merely dirty or not, it is dirty by type and degree; 3) theoretical—the ethnographic and interview studies suggest that the form of taint or dirt matters to the experience, so a tool to measure the experience of dirty work should be able to delineate among different forms of taint. In addition, I scrutinized each item to consider whether it was practical, accessible, or added unique information relative to other items loading on the factor. For example, “the bad guy,” and “negative,” each loaded clearly onto a single factor in the initial factor solution, but “the bad guy” was not accessible because of its gendered and idiomatic nature, and “negative” was too broad of a term to add unique information to the factor upon which it loaded; so I removed each of these items through the EFA item-reduction process.

I repeated the exploratory factor analysis and achieved a 3-factor solution (which converged in 7 rotations) explaining 71% of the variance. I removed 3 further items that failed to clearly load on a single factor or demonstrate a factor loading of 0.3, and then I conducted a third exploratory factor analysis on the remaining 36 items. The resulting factor solution converged in 7 rotations and produced 3 factors (moral, social, and physical taint) explaining 70.8% of the variance. All items clearly loaded on a single factor at this stage.

Finally, I conducted reliability analyses and examined item-level statistics, i.e., item-total correlations, reliability if item removed, and corrected item-total correlations for each of the three factors. I removed the items with relatively low corrected item-total correlations (< 0.8) and repeated the reliability analyses and exploratory factor analyses until I reduced the item pool to 21 items and 3 factors explaining 75.3% of the total variance. Please refer to Table 3 for factor correlations associated with each EFA conducted during Study 1. Please refer to Table 4 for factor loadings, item means and standard deviations, and scale reliability estimates. Please refer to Table 5 for cross-loadings and communalities of each item. Because EFAs capitalize on chance, I repeated the EFA on a second, separate sample with the reduced list of items from this step in Phase 2: Study 2.

Summary of findings. Through a series of EFAs, I reduced the initial item pool of 46 items to 21 items and observed a three-factor structure (physical taint, moral taint, social desirability taint) in the data. I named each factor on the constituent items of each of these factors. “Moral Taint” consisted of items such as “immoral,” “dishonest,” and “corrupt” in line with the deception and morally objectionable elements of the moral domain of taint postulated by Ashforth and Kreiner (1999). “Physical Taint” included items such as “dirty,” “nasty,” and “gross,” aligning it with the definition of work that is filthy, dirty, or unclean (i.e., physical

taint), as put forth by Ashforth and Kreiner (1999). Finally, “Social Desirability Taint” (referred to as “Social Taint” for brevity in the tables and analyses) incorporated items like “undesirable,” “unattractive,” and “unlikeable,” mapping it onto a construct of the overall social appeal of the work. It mapped most closely to the social domain of taint put forth by Ashforth and Kreiner (1999), but the factor did not exactly evoke subservient work or work done in close association with stigmatized others—hence the specific label of “social desirability.”

Phase 2: Study 2 – Item Reduction, Revisited.

Sample. I recruited a second, separate sample from Amazon’s MTurk to complete the reduced set of items. As before, I included only MTurk participants who had previously completed 1,000 or more HITs with a 95% or greater approval rate. Amazon’s MTurk service provides filtering options to exclude participants who participated in a specific previous study through MTurker ID assignment. I filtered out participants from Study 1 during recruitment for Study 2, so the Study 2 sample should be independent from Study 1. Participants were offered a small incentive for their time (\$0.50 for an estimated four minutes). I recruited a total sample size of 507. Consistent with Study 1, I removed eight participants who failed one or more attention checks, reducing the sample to $n = 499$.

Demographic Characteristics. Of the 178 participants randomly assigned to Study 2, they reported an average age of 38.27 years (standard deviation = 11.83 years) ranging from 20 years to 74 years. 73 (41%) participants identified as male, and 105 (59%) participants identified as female. Most (148 or 83.1%) of respondents identified as white or Caucasian, 13 (7.3%) identified as black or African American, 5 (2.8%) identified as Hispanic or Latino, 7 (3.9%) identified as Asian or Pacific Islander, 1 (.6%) identified as Native American, and the remaining 4 (2.2%) of respondents identified as “mixed” or “multiracial.” All respondents indicated having

a minimum high school diploma or GED equivalent level of education. Most respondents were college-educated with a bachelor's degree or higher: 60 (33.7%) respondents reported earning bachelor's degrees, 24 (13.5%) reported earning master's degrees, and 7 (3.9%) reported earning some form of doctorate degree. 22 (12.4%) respondents reported earning an associate degree, 51 (28.7%) had completed some college, and 14 respondents reported possessing a high school diploma or GED equivalent level of education.

Most participants worked full-time (130 or 73.0%), 45 (25.3%) worked part-time, 1 reported being unemployed for less than 6 months, 1 reported being unemployed for longer than 6 months, and 1 reported being retired. Current job tenure ranged from 0 months to 432 months, with an average of 49.74 years and a standard deviation of 70.48 years. The respondents worked in the following industries: 10 (5.6%) in accommodation and food services; 10 (5.6%) in administrative and support services; 5 (2.8%) in agriculture, forestry, and hunting; 10 (5.6%) in arts, entertainment, and recreation; 5 (2.8%) in construction; 24 (13.5%) in educational services; 7 (3.9%) in finance and insurance; 5 (2.8%) in government; 26 (14.6%) in healthcare and social assistance; 13 (7.3%) in information; 1 (.6%) in management of companies and enterprises; 8 (4.5%) in manufacturing; 10 (5.6%) in other services (except public administration); 12 (6.7%) in professional, scientific, and technical services; 2 (1.1%) in real estate rental and leasing; 24 (13.5%) in retail trade; 5 (2.8%) in transportation and warehousing; and 1 (.6%) in utilities.

Procedure. Qualtrics presented the items to participants in random order. Again, I removed all participants who demonstrated inattentiveness (i.e., no variance in their responses and a time to complete under 2 minutes; for Study 2, the average time to complete was 184 seconds with a standard deviation of 220 seconds), resulting in a sample size of $n = 351$. I then

randomly assigned the participants to either Study 2 (repeat exploratory factor analysis, $n = 178$) or Study 3 (confirmatory factor analysis, $n = 173$).

Measures. Qualtrics presented the following instructions before the 21 retained dirty work items: “Please read each following word or statement, then indicate how you think *your specific job or occupation* is viewed by **others outside of your place of work**. In other words, in your opinion, what are others' impressions of what you do for a living? They would say my specific job or occupation is (rate each word or statement using the following scale):” Participants then rated each word or statement on a seven-point, unipolar scale (1 = “not at all,” 2 = “very slightly,” 3 = “slightly,” 4 = “somewhat,” 5 = “moderately,” 6 = “a lot,” 7 = “extremely”). After completing the dirty work items, participants completed demographic items.

Results. The initial factor solution converged in 3 rotations and produced a 3-factor solution explaining 71.9% of the total variance. Only those items and factors that met the same criteria outlined in Study 1 (factor loading of 0.3 or greater and clearly loaded on only a single factor) were retained. One item, “intolerable,” cross-loaded on multiple factors and failed to conceptually align with either of them clearly, so I removed that item and repeated the EFA. Furthermore, “intolerable” could map onto environmental characteristics that are largely irrelevant to the dirt of the work, such as a difficult supervisor or coworkers, long hours, or under-staffed shifts. The resulting 3-factor solution converged in 7 rotations and explained 72.6% of the total variance. However, another item, “shameful,” cross-loaded on multiple factors, so I removed it and repeated the EFA. “Shameful” could arise from a moral objectionable quality or from social (un)desirability, and it is also a cognitively complex evaluation for a respondent to make. Namely, I can convey to you that I find the work you do disgusting by my facial expressions, gestures, body language, or by simply saying so, and you

can readily infer that. To infer that I find the work shameful, you must deduce and decide whether I find it shameful that you specifically complete the work, whether I would find the work shameful if I completed it, and how I would communicate that to you. In other words, a respondent must infer a great deal of information to evaluate how shameful other people think their work is. The resulting 3-factor solution converged in 7 rotations and explained 73.1% of the total variance. I conducted scale reliability analyses and examined item-level statistics (namely corrected item total correlations), yet I observed no reason to further eliminate items from the scale. Please refer to Table 6 for the factor correlations associated with each EFA conducted during Study 2. Please refer to Table 7 for the factor loadings, item means and standard deviations, and scale reliability estimates for the reduced item pool. Please refer to Table 8 for the cross-loadings and communalities of each item. The resulting 19 items and 3 factors were retained for Study 3's CFA.

Summary of findings. I repeated the EFAs on a new sample of participants and observed the same factor structure from Phase 2: Study 1. I eliminated two items from the previous list to reduce the current item pool to 19 items and three factors.

Phase 3: Study 3 – Model Fit.

Sample. I randomly assigned 173 participants from the pool of participants ($n = 351$) to Study 3 for confirmatory factor analysis. As outlined in Study 2 and Study 1, I removed all participants who failed one or more attention checks or demonstrated an inattentive response pattern before randomly assigning the participants to this condition.

Demographic Characteristics. Participants in this sample ranged in age from 21 years to 71 years (mean = 37.72 years, standard deviation = 11.95 years). 81 (46.8%) respondents

identified as male, 91 (52.6%) respondents identified as female, and 1 (.6%) respondent identified as non-binary. Most respondents were white or Caucasian (143 or 82.7%), 11 (6.4%) identified as black or African American, 3 (1.7%) identified as Hispanic or Latino, 13 (7.5%) identified as Asian or Pacific Islander, 2 (1.2%) identified as Native American, and 1 (.6%) identified as “multiracial.” All participants obtained at least a high school diploma or GED equivalent. Most respondents (111 or 64.2%) were at least college educated with a bachelor’s degree: 75 (43.4%) reported earning bachelor’s degrees, 26 (15%) reported earning master’s degrees, and 10 (5.8%) reported earning some form of doctorate degree. Of the remaining participants, 21 (12.1%) had earned an associate degree, 27 (15.6%) had completed some college, and 14 (8.1%) had obtained a high school diploma or GED equivalent.

Most respondents (141 or 81.5%) were employed full-time, and 26 (15%) respondents were employed part-time. The remaining respondents were either unemployed for 6 months or fewer (1 or .6%), unemployed for longer than 6 months (4 or 2.3%), or retired (1 or .6%). Respondents’ current job tenure ranged from 0 months to 800 months (mean = 58.01 months, standard deviation = 83.87 months). The respondents worked in the following industries: 6 (3.5%) in accommodation and food services; 12 (6.9%) in administrative and support services; 5 (2.9%) in agriculture, forestry, and hunting; 7 (4.0%) in arts, entertainment, and recreation; 3 (1.7%) in construction; 28 (16.2%) in educational services; 12 (6.9%) in finance and insurance; 5 (2.9%) in government; 24 (13.9%) in healthcare and social assistance; 7 (4.0%) in information; 1 (.6%) in management of companies and enterprises; 9 (5.2%) in manufacturing; 13 (7.5%) in other services (except public administration); 11 (6.4%) in professional, scientific, and technical services; 2 (1.2%) in real estate rental and leasing; 15 (8.7%) in retail trade; 9 (5.2%) in transportation and warehousing; 2 (1.2%) in utilities; and 2 (1.2%) in wholesale trade.

Procedure. As noted in Phase 2: Study 2 above, Qualtrics presented the items to participants in random order. I subjected the factor structure discerned in Study 2 to a confirmatory factor analysis in AMOS (CFA; Hinkin, 1998). Because I identified a three-factor solution, I compared both a single-factor solution and an intermediate two-factor solution to the three-factor solution. I assessed the models for relative fit on multiple indices (i.e., TLI, CFI, RMSEA, SRMR) and for overall goodness of fit (Hinkin, 1998).

Results. The initial CFA produced inadequate, albeit nearly adequate fit (TLI = 0.90, CFI = 0.91, RMSEA = 0.11). I examined the factor loadings, and I decided to remove 3 poorly performing items to improve model fit. I removed the following three items: 1) “disgraceful,” because the item is less accessible to respondents than the remaining items on the factor, and it likely adds minimal unique information over items like “dishonorable” and “immoral”; 2) “dishonest,” because it likely adds little unique information beyond the “underhanded” and “untrustworthy” items, and “underhanded” and “untrustworthy” capture a broader class of behaviors than “dishonest,” which limits to deliberate falsehoods and misrepresentations rather than a broader class of behaviors intended to deceive; 3) “corrupt,” because of its association with political wrongdoing and illegal activity, the indicator is likely contaminated, and it may result in overly complex value judgments for the respondent. For instance, a respondent would have to decide if activities that are normal, typical, and even necessary in their profession, such as providing small gifts to facilitate a business deal, would be viewed as corrupt by someone outside of the profession.

I repeated the CFA with the remaining 16 items and observed a slight improvement in model fit (TLI = 0.92, CFI = 0.93, RMSEA = 0.10). In this 3-factor solution, I observed the following correlations among the latent variables: physical taint to moral taint = 0.62, social taint

to moral taint = .53, and physical taint to social taint = .72. For comparison, a 2-factor solution demonstrated worse fit (TLI = 0.74, CFI = 0.78, RMSEA = 0.178), and a single-factor solution demonstrated the worst fit (TLI = 0.63, CFI = 0.68, RMSEA = 0.21). Thus, the 3-factor solution (physical, social, and moral taint) proved the superior model. Finally, I re-fit the model by allowing the error terms of some of the physical taint items to covary according to the modification indices. The final resulting model demonstrated adequate fit (TLI = 0.95, CFI = 0.96, RMSEA = 0.08, SRMR = 0.05). With error terms covaried, I observed the following correlations among the latent variables: physical taint to moral taint = 0.62, social taint to moral taint = .54, and physical taint to social taint = .71. The improvement in model fit after covarying the error terms may suggest that systematic error among the physical taint items was reducing overall model fit, so I conducted another CFA in a separate sample in the subsequent study. Please refer to Figure 1 for a depiction of the measurement model along with factor loadings and covaried error terms.

Summary of findings. I assessed via CFA the model fit of the three-factor structure identified in the previous studies. Based on the results of the CFA, I eliminated three inadequately fitting items, reducing the item pool to 16 items. The CFAs supported a three-factor structure (i.e., demonstrated greater fit than a two-factor or single-factor solution). However, the model fit showed room for improvement. The modification indices suggested that the model fit could be improved by covarying the error terms, and those adjustments produced good overall model fit. I retained the 16 items for Phase 3: Study 4.

Phase 4: Study 4 – Validity Evidence.

To accumulate validity evidence in support of the inferences that can be drawn from this measure, I examined the relationship between the three domains of dirty work and several

empirically and theoretically relevant variables: stress, burnout, job satisfaction, job involvement, and intent to quit. Each of these variables have been briefly examined within the dirty work literature, so those studies provide a foundation from which I propose and test hypotheses predicting the relationships between the dimensions of dirty work and each of these variables. Because the previous designs have relied on single-occupation designs, they preclude the development of any hypotheses distinguishing between each domain of taint. In other words, I lack sufficient data to predict how each form of taint performs. Nonetheless, I present each domain of taint's hypotheses separately to facilitate the interpretation of results. In addition, I test the degree of taint across each industry. Together, these hypotheses provide more context for examining and understanding how these domains of taint are unique from one another.

Sample. I recruited participants ($n = 266$) via Amazon's MTurk service to complete self-report surveys on Qualtrics. I included only those MTurkers who had completed 1,000 or more HITs already with a 95% or greater approval rate. I offered a small incentive for participation (\$1 for an estimated eight minutes). I removed 12 participants who failed one or more attention checks, resulting in a final sample size of 254.

Demographic Characteristics. Participant ages ranged from 19 to 76 years (mean = 38.02 years, standard deviation = 11.82 years). 147 (57.9%) respondents identified as male, and the remaining 107 (42.1%) respondents identified as female. Most respondents (193 or 76%) identified as white or Caucasian, 23 (9.1%) identified as black or African American, 18 (7.1%) identified as Hispanic or Latino, 11 (4.3%) identified as Asian or Pacific Islander, 6 (2.4%) identified as Native American, 1 (.4%) identified as "other: Filipino," and 2 (.8%) identified as "multiracial." Most respondents (149 or 58.6%) were college educated with at least a bachelor's degree: 121 (47.6%) had earned a bachelor's degree, 25 (9.8%) had earned a master's degree, and

3 (1.2%) had earned a doctorate degree. 30 (11.8%) respondents had earned an associate degree, and 45 (17.7%) reported completing at least some college. Only 1 (.4%) respondent had attained less than high school diploma, and the remaining 29 (11.4%) had attained a high school diploma or GED equivalent.

Most of the respondents (214 or 84.3%) worked full-time, and 33 (13%) of the respondents worked part-time. One (.4%) respondent had been unemployed for 6 months or shorter, 3 (1.2%) had been unemployed for longer than 6 months, and the remaining 2 (.8%) respondents were retired. Current job tenure ranged from 0 months to 415 months (mean = 54.38 months, standard deviation = 63.86 months). The respondents reported working in the following industries: 11 (4.3%) in accommodation and food services; 18 (7.1%) in administrative and support services; 4 (1.6%) in agriculture, forestry, and hunting; 10 (3.9%) in arts, entertainment, and recreation; 14 (5.5%) in construction; 29 (11.4%) in educational services; 21 (8.3%) in finance and insurance; 11 (4.3%) in government; 19 (7.5%) in healthcare and social assistance; 22 (8.7%) in information; 5 (2.0%) in management of companies and enterprises; 14 (5.5%) in manufacturing; 11 (4.3%) in other services (except public administration); 24 (9.4%) in professional, scientific, and technical services; 4 (1.6%) in real estate rental and leasing; 25 (9.8%) in retail trade; 10 (3.9%) in transportation and warehousing; and 2 (.8%) in wholesale trade.

Procedure. I designed the set of surveys to present each scale in random order per participant. Further, I randomized the presentation order of each constituent item on that scale. I examined model fit of the dirty work items via confirmatory factor analysis in AMOS 27.0. To provide validity evidence, I correlated the data from the dirty work experience measure with data from the following measures.

Results: convergent validity – stress and burnout. Stress and the related construct, strain, have been examined in several studies of dirty work. Reeve et al. (2005) examined euthanasia-related strain among animal shelter workers who euthanize animals and found a positive relationship between euthanasia involvement (the ascribed dirty task of the work) and strain. Furthermore, the relationship they observed between the two variables was unique beyond other job-related strains, indicating that involvement in the dirty work (if not the dirtiness of the work itself) contributed to a distinct, meaningful proportion of the variance in job-related strain. Similarly, Baran et al. (2012) found that involvement in a salient, core dirty task (again, animal euthanasia as ascribed by the researchers) positively related to indicators of employee strain. Finally, Bickmeier et al. (2015) observed that work dirtiness (measured, not ascribed) positively correlated to both stress and a core component of burnout (emotional drain). In addition, Bentein, Garcia, Guerrero, and Herrbach (2017) observed a positive relationship between perceptions of work dirtiness and emotional exhaustion. In fact, their results suggested that perceived dirty work mediates the relationship between social isolation and emotional exhaustion. These findings taken together tentatively suggest a positive relationship between work dirtiness and both stress and burnout. Thus, I expect that work dirtiness will positively relate to both stress (Hypotheses 1a, 1b, 1c) and burnout (Hypotheses 2a, 2b, 2c) and such relationships should provide validity evidence for the measure. I assessed the emotional exhaustion dimension of burnout using the Maslach Burnout Inventory (Maslach & Jackson, 1981). I measured stress using the Stress in General Scale (Stanton, Balzer, Smith, Parra, & Ironson, 2001) which categorizes stress along dimensions of pressure and threat.

Hypothesis 1a: Perception of physical taint positively relates to stress in general.

Hypothesis 1b: Perception of moral taint positively relates to stress in general.

Hypothesis 1c: Perception of social taint positively relates to stress in general.

Hypothesis 2a: Perception of physical taint positively relates to the exhaustion dimension of burnout.

Hypothesis 2b: Perception of moral taint positively relates to the exhaustion dimension of burnout.

Hypothesis 2c: Perception of social taint positively relates to the exhaustion dimension of burnout.

Convergent validity – job satisfaction. The same studies (Reeve et al., 2005; Baran et al., 2012; Bickmeier et al., 2015) identified a similar relationship between dirty work and job satisfaction. Reeve et al. (2005) noted that the strain associated with animal euthanasia uniquely, negatively related to job satisfaction. Baran et al. (2012) observed reduced job satisfaction in relation to a salient, core dirty task. Finally, Bickmeier and colleagues (2015) demonstrated a statistically significant, negative relationship between degree of work dirtiness and job satisfaction, and that relationship held in the presence of other covariates. COR Theory (Hobfoll, 1989; 2001), in conjunction with Social Identity Theory (Tajfel & Turner, 1984), provide insight into this phenomenon. As outlined previously, one's occupation provides a driving force for one's social identity. When that core component is systematically devalued (i.e., stigmatized), it becomes more difficult to draw positive meaning from that identity. One must direct more resources and activities (e.g., reframing, refocusing, and recalibrating) to find meaning and value in that social identity. As more resources are directed toward that identity, and the identity faces consistent threats to its value, its ability to provide a sense of satisfaction is greatly diminished. Thus, I anticipate that degree of work dirtiness will negatively relate to job satisfaction

(Hypotheses 3a, 3b, 3c). I measured job satisfaction using the three-item scale from the Michigan Organizational Assessment Questionnaire (Camman, Fichman, Jenkins, & Klesh, 1979).

Hypothesis 3a: Perception of physical taint negatively relates to job satisfaction.

Hypothesis 3b: Perception of moral taint negatively relates to job satisfaction.

Hypothesis 3c: Perception of social taint negatively relates to job satisfaction.

Convergent Validity – Job involvement. Job involvement, or the degree to which an employee relates to his or her job and its associated tasks (Cooper-Hakim & Viswesveran, 2005), should necessarily follow from the previous discussion of stress, burnout, and job satisfaction. Briefly put, the same efforts undertaken by dirty workers to manage the stigma of their dirty work (and explaining the relationships between work dirtiness and stress, burnout, and job satisfaction), should correspond to a greater degree of job involvement. That is, the frequent monitoring, re-evaluating, and normalization tactics undertaken by dirty workers should directly relate to greater job involvement (Hypotheses 4a, 4b, 4c). I measured job involvement using a subset of items from Lodahl and Kejner (1965) that Reeve and Smith (2001) identified as superior indicators of job involvement.

Hypothesis 4a: Perception of physical taint positively relates to job involvement.

Hypothesis 4b: Perception of moral taint positively relates to job involvement.

Hypothesis 4c: Perception of social taint positively relates to job involvement.

Convergent validity – intent to quit. Mael and Ashforth (1995) and Van Dick et al. (2004) reported a negative association between strong work identification and turnover. These strong identification processes align with the disidentification and ambivalent identification processes

among dirty workers as proposed by Kreiner et al. (2006), so perception of work dirtiness may tentatively relate to intent to quit. Lai et al. (2013) directly tested Kreiner et al.'s (2006) proposition. In their study, Lai et al. (2013) observed that perception of moral dirtiness indeed positively related to occupational and organizational disidentification, and in turn, disidentification positively related to turnover intentions among dirty workers. Consequently, I predict that perception of work dirtiness will positively relate to intent to quit (Hypotheses 5a, 5b, 5c). I measured intent to quit using the 3-item intent to quit scale provided by Konovsky and Cropanzano (1991).

Hypothesis 5a: Perception of physical taint positively relates to intent to quit.

Hypothesis 5b: Perception of moral taint positively relates to intent to quit.

Hypothesis 5c: Perception of social taint positively relates to intent to quit.

Discriminant validity – differentiating among dimensions of taint. Because Ashforth and Kreiner (1999) defined dirty work along three dimensions, I attempted to support that distinction. First, I examined overall model fit of a three-factor structure corresponding to the three proposed forms of taint (physical, moral, and social). Second, I compared model fit of that three-factor structure to a single-factor model and an intermediate two-factor model. Third, I conducted a one-way MANOVA in which scores of each dimension of taint are examined across occupational industries. I expect to see a significant difference in degree of perception of taint by type across occupational industry (Hypothesis 6a). If hypothesis 6a is supported, then I will need to perform a post-hoc test to examine between-occupation differences by form of taint. I expect that perceptions of work dirtiness by form of taint will differ between occupational industries (Hypotheses 6b, 6c, 6d). Of the occupational industries represented, construction work most

closely resembles a physically tainted occupation, government occupations most closely resemble morally tainted occupations, and accommodation and food services most closely resembles a socially tainted occupation (Ashforth & Kreiner, 1999).

Hypothesis 6a: Perception of taint by type (physical, moral, and social) will significantly differ across occupational industry.

Hypothesis 6b: Perception of physical taint will significantly differ between occupational industries. Specifically, construction work will significantly differ from accommodation and food services; administrative and support services; agriculture, forestry, and hunting; arts, entertainment, and recreation; educational services; finance and insurance; government; healthcare and social assistance; information; management of companies and enterprises; manufacturing; other services (except public administration); professional, scientific, and technical services; real estate rental and leasing; retail trade; transportation and warehousing; utilities; and wholesale trade.

Hypothesis 6c: Perception of moral taint will significantly differ between occupational industries. Specifically, government occupations will significantly differ from accommodation and food services; administrative and support services; agriculture, forestry, and hunting; arts, entertainment, and recreation; construction; educational services; finance and insurance; healthcare and social assistance; information; management of companies and enterprises; manufacturing; other services (except public administration); professional, scientific, and technical services; real estate rental and leasing; retail trade; transportation and warehousing; utilities; and wholesale trade.

Hypothesis 6d: Perception of social taint will significantly differ between occupational industries. Specifically, accommodation and food services will significantly differ from administrative and support services; agriculture, forestry, and hunting; arts, entertainment, and recreation; construction; educational services; finance and insurance; government; healthcare and social assistance; information; management of companies and enterprises; manufacturing; other services (except public administration); professional, scientific, and technical services; real estate rental and leasing; retail trade; transportation and warehousing; utilities; and wholesale trade.

Study 4 results – model fit. I fit the 16 dirty work items to the same 3-factor solution I observed in Study 3. The model initially demonstrated nearly adequate fit ($TLI = 0.91$, $CFI = 0.93$, $RMSEA = 0.11$, $SRMR = 0.048$). I observed the following correlations among the latent variables: physical taint to moral taint = 0.77, social taint to moral taint = .66, and physical taint to social taint = .71. As before, the modification indices suggested allowing the error terms of the physical taint items to covary. With the physical taint items' error terms covaried, I reran the model and observed adequate fit ($TLI = 0.95$, $CFI = 0.97$, $RMSEA = .08$, $SRMR = 0.043$) similar to the model fitness observed in a separate sample in Study 3 ($TLI = 0.95$, $CFI = 0.97$, $RMSEA = 0.08$, $SRMR = 0.05$). With the error terms covaried, I observed the following correlations among the latent variables: physical taint to moral taint = 0.81, social taint to moral taint = .66, and physical taint to social taint = .71. See Figure 2 for a visual representation of the measurement model including factor loadings and covaried error terms.

Because I observed a similar pattern of modification indices with respect to error covariances across two separate samples, I investigated the model for alternate improvements. Namely, I suspected that systematic error (in this case, highly similar item pairs essentially tapping the same elements of the latent construct) might be diminishing overall model fit. I

removed three (“disgusting,” “filthy,” and “unclean”) of the six physical taint items that demonstrated 1) high inter-item correlations, and 2) lower factor loadings. In comparison to the other physical taint items, these three items also likely did not add unique information (i.e., “dirty” versus “unclean,” “disgusting” versus “gross”). In addition, these items likely captured what are ultimately nuanced differences in the dirt of work that are manifesting as covariance in measurement error: compare “dirty” and “filthy,” “disgusting” and “gross” and “nasty.” “Disgusting” might also capture work that is morally objectionable and cause trouble for respondents identifying whether they are evaluating the work as physically or morally disgusting. Ultimately, I retained the three physical taint items, “dirty,” “nasty,” and “gross” because they fit the conceptual definition of physical taint, each provided unique information, and were accessible to respondents.

Then, I re-specified a 13-item, 3-factor solution and repeated the CFA. Overall fit of the 13-item model proved to be strong: (TLI = 0.95, CFI = 0.96, RMSEA = 0.09, SRMR = 0.04). Finally, I observed the following correlations among the latent variables in this 3-factor model: physical taint to moral taint = 0.79, social taint to moral taint = .66, and physical taint to social taint = .72. With respect to the 13-item model specification, both the intermediate 2-factor model (TLI = 0.85, CFI = 0.88, RMSEA = 0.15, SRMR = 0.07) and the single-factor solution (TLI = 0.68, CFI = 0.74, RMSEA = 0.22, SRMR = 0.10) demonstrated inferior fit to the 3-factor solution. Please refer to Figure 3 for a depiction of the final 13-item, 3-factor model with factor loadings. I conducted the remaining analyses using the 13-item, 3-factor model of dirty work. Table 9 includes means, standard deviations, intercorrelations, and reliability estimates of the 3 factors (physical taint, social taint, and moral taint) and the other study variables. Refer to Table 10 for the final items, instructions, and response scales of the measure.

CHAPTER 3: RESULTS

Summary of results. With this series of validation studies, I sought to 1) explore the domains of taint proposed by Ashforth and Kreiner (1999), 2) identify and support a model structure describing the dimensions or domains of taint, and 3) develop a measure to assess the degree or level of taint associated with work across each of those dimensions. Ultimately, I set these three goals to develop a measure of the experience of dirty work. In other words, how do individuals/employees believe others perceive their work in terms of degree of dirtiness. To that end, I developed an expansive set of items supported by job-related perceptions of dirty workers (specifically, animal shelter workers), and then I subjected that pool of items to a series of analyses to produce a useful tool to facilitate dirty work research. Across four studies, I reduced the item count in a series of EFAs by retaining only clearly loading items, then I repeated the EFA in a separate sample to address the EFAs tendency to capitalize on chance, then I examined overall model fit in a CFA in a separate sample, and then in a final sample, I eliminated several unnecessary items to produce a well-fitting model. The following analyses support the measure with validity evidence (i.e., correlations and regressions with theoretically relevant variables, MANOVA to distinguish domain of taint scores across occupations).

Convergent and Discriminant Validity. See Table 9 for the associated correlations. Stress in general demonstrated significant, positive correlations with all three forms of taint as I expected. Hypothesis 1a, 1b, and 1c are all supported. The exhaustion dimension of burnout significantly, positively related to all three forms of taint, and I observed the largest effect size characterizing the relationship between exhaustion and social taint. The pattern of results for the exhaustion dimension of burnout aligned with my expectations; Hypotheses 2a, 2b, and 2c are supported. Job satisfaction significantly, negatively correlated with social taint, but it did not

correlate to physical taint nor moral taint. I anticipated work dirtiness would negatively correlate with job satisfaction, so Hypothesis 3c is supported. Hypothesis 3a and 3b are not supported. Job involvement significantly, positively correlated with physical and moral taint, but it did not correlate with social taint. I expected job involvement to correlate significantly, positively to work dirtiness, so Hypothesis 4a and 4b are supported. Hypothesis 4c is not supported. Finally, intent to quit significantly, positively correlated with all three forms of taint. Hypotheses 5a, 5b, and 5c are supported.

Stress Regression. Only social taint significantly related to stress ($\beta = .10, p < 0.01$) in the regression model ($r^2 = .13$) of all three forms of taint. Note that separately, all three forms of taint significantly, positively correlated with stress. This pattern of results mirrors the pattern of results I observed with the exhaustion dimension of burnout: social taint uniquely explains the dirty work variance associated with stress.

Burnout Regression. Only social taint ($\beta = .57, p < .01$) remained significant in a regression with burnout (exhaustion) as the dependent variable ($r^2 = .27, p < .01$). Both physical taint ($\beta = -.18, p < .10$) and moral taint ($\beta = .17, p < .10$) approached significance, however. In contrast, each form of taint significantly, positively related to the exhaustion dimension of burnout in bivariate correlations. This pattern of results suggests that social taint uniquely explains the dirty work variance in the exhaustion dimension of burnout.

Job Satisfaction Regression. To further explore these relationships and discriminate among the three forms of taint, I regressed each separate validity variable onto the three taint scales. Both physical taint ($\beta = .19, p < 0.01$) and social taint ($\beta = -.41, p < .01$) significantly related to job satisfaction ($r^2 = .21, p < 0.01$). Note that the bivariate correlation between physical taint and job satisfaction was not significant. Further note that physical taint *negatively*

relates to job satisfaction in a bivariate correlation, but in a regression with the other forms of taint, physical taint now *positively* relates to job satisfaction. A moderating variable may be contributing to the interaction of these variables in the shared regression model. The relationship between moral taint and job satisfaction remained nonsignificant in the regression.

Job Involvement Regression. All three forms of taint demonstrated significant relationships in a regression of job involvement ($r^2 = .15$). I calculated the following regression weights for physical taint ($\beta = .16, p < 0.01$), moral taint ($\beta = .14, p < 0.01$), and social taint ($\beta = -.17, p < 0.01$). Note that social taint did not significantly relate to job involvement in a bivariate correlation. This pattern of results further strengthens the prediction that perceived work dirtiness positively associates with job involvement.

Intent to Quit Regression. Both physical taint ($\beta = -.18, p < 0.05$) and social taint ($\beta = .43, p < 0.01$) significantly related to intent to quit in a regression model including all three forms of taint ($r^2 = .24$). Note that physical taint *positively* correlated to intent to quit in a bivariate correlation. Furthermore, moral taint significantly correlated to intent to quit in a bivariate correlation analysis. This pattern of results is similar to the pattern of results I observed between the three forms of taint and job satisfaction. Intent to quit significantly, negatively correlates with job satisfaction in this sample ($r = -.71$). A moderating variable may help explain the relationship between the dimensions of work dirtiness and both job satisfaction and intent to quit.

Discriminating among Occupational Industries. I examined the ability of the three forms of taint to discern differences in mean scores by occupational industry through a one-way MANOVA. I calculated a significant difference in degree of perceived taint by type based on a respondent's occupational industry: $F(51, 697) = 3.170, p < .01$; Wilk's $\Lambda = 0.54$, partial $\eta^2 = .19$. Hypothesis 6a is supported. In a test of between-subjects effects, I observed a significant

difference between occupational industry based on physical taint score ($F [17, 236] = 3.57, p < .01$; partial $\eta^2 = .20$) and social taint scores ($F [17, 236] = 1.71, p < .05$; partial $\eta^2 = .11$).

Hypothesis 6b and 6d are supported. Upon closer inspection, no single occupation significantly differed from the others (thus, nor did accommodation and food services), so Hypothesis 6d is only partially supported in this sample. Moral taint, however, did not demonstrate a statistically significant difference by occupational industry in the MANOVA. Hypothesis 6c is not supported. Because the occupational industries represented in the sample (i.e., administrative and support services, educational services) do not represent core dirty work jobs (e.g., mortician, exotic dancer, corrections officer), these results should be interpreted tentatively.

I focused on the construction industry in a Tukey's post-hoc test to evaluate differences in physical taint between the construction occupational industry and other occupational industries. In the post-hoc test, I observed statistically significant differences in degree of physical taint between construction occupations and administrative and support services (mean difference = 2.02, $p < .01$); professional, scientific, and technical services (mean difference = 2.07, $p < .01$); retail trade (mean difference = 1.98, $p < .01$); and other services except public administration (mean difference = 1.93, $p < .01$). Further, I calculated a marginally significant difference between construction occupations and arts, entertainment, and recreation (mean difference = 1.87, $p < .10$); educational services (mean difference = 1.47, $p < .10$); and information (mean difference = 1.57, $p < .10$). The remaining occupational industries did not demonstrate significant differences with construction occupations by degree of physical taint.

These results are promising, yet tentative, because they demonstrate the measure of dirty work experience has some limited ability to discriminate among occupations by degree of specific dimension of taint, even in a sample consisting of minimal dirty work occupation

respondents (only 12 participants of 254 [4.7%] with the following occupations: 1 auto service tech, 1 defense attorney, 1 drug and alcohol screener, 1 ironworker, 1 janitor, 3 law enforcement [sic]/police officer, 1 structural welding foreman, 1 teacher of homeless people, 1 veterinary technician, and 1 welder) and relatively low reported taint (physical taint $\bar{x} = 1.80$ and standard deviation = 1.44, moral taint $\bar{x} = 1.78$ and standard deviation = 1.32, social taint $\bar{x} = 2.56$ and standard deviation = 1.55; participants responded to constituent items on a 7-point unipolar scale).

Addressing common method bias. To mitigate common method bias in the design, the survey platform (Qualtrics) counterbalanced the presentation of the items via randomization (in line with recommendations from Podsakoff, MacKenzie, Lee, and Podsakoff, 2003). In the analyses, I calculated a common latent factor across the measured items and compared regression weights in the presence of the common latent factor and in its absence (Podsakoff et al., 2003; Gaskin, 2012). The results indicated minimal differences among the regression weights for the dirty work items (i.e., little to no evidence of common method bias). This approach is imperfect for detecting common method bias (and indeed, each approach proposed by Podsakoff et al., 2003, presents advantages and disadvantages), for it does not yield insight into the form of common method bias. In addition, the common latent factor approach could identify a source of common variance among the variables of interest unique from common method variance. However, the common latent factor test is important for this design because it alternatively addresses a theoretical limitation of a model of dirty work. With the very weak evidence of a common latent factor across the dirty work items, the case for a three-factor model consisting of distinct domains of taint is strengthened. That is, the evidence further supports the notion that the domains of taint matter and that they are distinct. Work is not merely dirty; work is tainted across

very specific domains. This evidence also spurs the need for further inquiry into identifying unmapped domains of taint within the dirty work experience.

CHAPTER 4: DISCUSSION

(Re)defining the Domains of Taint. In the final phase of the study, I consolidated the measure to 13-items corresponding to three distinct factors. Within the data, three items (“dirty,” “nasty,” “gross”) constituted the physical taint factor. Together, these three items map onto work that is physically dirty or gross. The few descriptors representing danger or risk of injury at work (i.e., “dangerous,” “risky”) failed to clearly load on any single factor. No items describing work performed in close association with death were developed or retained. The reasons for the exclusion of death-related items were twofold. First, the sample of dirty workers (specifically, animal shelter workers who performed animal euthanasia) did not identify death (i.e., animal euthanasia) or association with death as characteristic of the work that they performed or of how others view the work that they perform. In other words, the death of animal euthanasia did not emerge as a defining characteristic of the job in a nationwide sample of over 1,000 dirty workers from over 20 different organizations. Second, I aimed to develop a measure of dirty work that works across a broad cross-section of occupations instead of a measure that is more-or-less occupation-specific. To that end, I developed data-driven items that would fit a variety of occupations. Based on a review of dirty work occupations described in the relevant literature (cf. Ashforth & Kreiner, 1999), I determined that work performed in association with death is an occupation-specific experience (e.g., mortician, coroner). Such items may be better-suited to an occupation-specific adaptation of the overall measure. In review, the measure assesses the physical domain of taint purely through identifying and measuring work experiences that associate with dirt and waste or that may be revolting.

With respect to the moral domain of taint, I selected and retained five items (“immoral,” “dishonorable,” “underhanded,” “untrustworthy,” and “tainted”). Of the three domains of taint

specified by Ashforth and Kreiner (1999), the moral taint domain functions the most broadly across occupations as initially defined. Consequently, it is no surprise that the items within the observed model and the latent variable they indicate most closely map onto the original specification of moral taint. Three of the items (“dishonorable,” “underhanded,” “untrustworthy”) capture experiences involving deception, deceit, or adversarial efforts or that could be described as breaking norms (i.e., “dishonorable”). The remaining two items, “immoral” and “tainted,” map onto work that involves morally questionable or objectionable activities. Taken together, these results and supporting model fitness indicators support the original definition of morally tainted work and suggest the presence of moral taint across various forms of work and occupations.

The third and final domain of taint proposed by Ashforth and Kreiner (1999), social taint, includes two very different sources of taint: subservient work and stigma-by-association. I incorporated items in the initial pool that might represent work that is done in notable subservience to others. Based on a review of research of stigma-by-association (e.g., Neuberg et al., 1994), stigma-by-association appears to be a distinct construct from stigma that involves different experiences, normalization tactics, and identification strategies. Namely, stigma-by-association effects are moderated by the status of the individual who is stigmatized by association with a stigmatized other (Neuberg et al., 1994). As an observed individual’s relative status increases, generally, the effect of stigma-by-association increases (Neuberg et al., 1994). For example, a defense attorney who routinely works with violent or undesirable clients would likely experience a much lesser stigma-by-association effect for working with a violent or undesirable client than a celebrated defense attorney known for serving high-profile clients who took on a violent or otherwise undesirable client. In addition, stigma-by-association effects may

be difficult to observe by self-report, because they rely on direct knowledge of how an observer views your relative status, that of your stigmatized associate, and the degree to which that stigma-by-association marks you. Moreover, stigma-by-association may be somewhat occupation-specific, because *only* those occupations which involve client work and *only* the subset of those occupations that work with stigmatized clients could have the opportunity to experience secondhand taint or stigma-by-association. In other words, social work taint that results from work performed in close association with stigmatized others would be better assessed by an altogether separate tool and study design.

Regarding the other subdimension of social taint, I did not ultimately retain items that indicated a subservient or socially inferior form of work. Instead, a distinct but meaningful pattern emerged with the items. Initially, I labeled the third factor in the model as social taint, but the items do not point to a latent variable that represents subservient work or work done as an inferior to others. In fact, the constituent items (“not worth it,” “undesirable,” “unpleasant,” “unattractive,” and “unlikeable”) describe an experience of work or domain of taint that I would define as “socially undesirable or unappealing.” This definition speaks to an important precept in how dirty workers come to understand their work. To elaborate, Ashforth and Kreiner (1999) refer to Social Identity Theory (Tajfel & Turner, 1984; Ashforth & Mael, 1989) to argue that dirty workers seek to develop a socially validated, esteem-enhancing identity despite the dirt or taint associated with their work. In other words, the apparent social desirability of a job describes an important and meaningful element of the dirty work experience.

Socially (Un)desirable. Ultimately, when an individual perceives their work to be dirty, the degree to which they identify that work as socially undesirable (i.e., “how can you do it?”) affects how they attach meaning to the work itself over time. In more detail, dirty workers

engage in normalization tactics and identification strategies (Ashforth & Kreiner, 1999; Kreiner et al., 2006; Ashforth et al., 2007) to reframe the undesirable qualities of their tainted work as a badge of honor or other desirable element. Put differently, the qualities of the work that may initially mark the job as undesirable may lead the worker to internalize those associations and become isolated, or they could disidentify from the work itself to separate themselves from the taint, or they could even adapt that taint to develop an occupation-level identity (Ashforth & Kreiner, 1999; Kreiner et al., 2006). For example, dirty workers may invoke narratives claiming that only they are capable of doing the work involved and possess some special characteristic or desirable quality enabling them uniquely to do the work that others cannot (Stacey, 2005), or they may craft narratives that characterize others as lacking the ability or strength of character to accomplish the difficult or demanding work that dirty work may entail (Ashforth & Kreiner, 1999).

Similarly, dirty workers appeal to gendered narratives to aggrandize or reconstruct their work as meaningful and worthy: identify dirty work as masculine, and it becomes work that is idolized by the workers themselves and can even become lionized by observers, but feminine work (i.e., caring for others) does not instigate that same process of reframing dirty work into socially desirable, esteem-enhancing work (Tracy & Scott, 2006). Altogether, the body of research indicates that the social desirability dimension of taint may help contextualize which stage of identity formation a worker is in, how successful a particular normalization tactic is, or it may even function as a moderator of the relationship between the other forms of taint and relevant dependent variables. Based on the pattern of results in this series of studies and previous research, I contend that this “social desirability” domain of taint represents an important and

exciting insight into understanding how the perception of dirty work unfolds for those who perform it.

Hypotheses in Context. The hypothesis tests provide compelling, yet tentative, evidence in support of the model structure and inferences which can be drawn from the measure.

Hypothesis sets 1, 2, and 5 are all fully supported. All three forms of taint significantly, positively relate to stress in general, the exhaustion dimension of burnout, and intent to quit.

Hypothesis sets 3 and 4 are partially supported. The pattern of results with Hypothesis sets 3 and 4 are especially fascinating. Namely, social desirability taint significantly, negatively correlates with job satisfaction as predicted, but neither physical taint nor moral taint correlate with job satisfaction. Inversely, physical and moral taint significantly, positively correlate with job involvement, but social desirability taint does not significantly correlate to job involvement. In other words, the social desirability of the work appears to operate somewhat independently of the other forms of taint with respect to these two theoretically relevant variables.

The regression models reveal more about the pattern of relationships among the domains of taint and the dependent variables specified by previous research and theoretical groundwork. When I regressed job satisfaction onto the three domains of taint, I observed that social taint remained a significant, negative predictor of job satisfaction, but now physical taint acted as a positive, significant predictor of job satisfaction. That means that physical taint's relationship to job satisfaction changed in direction of the relationship (from its albeit nonsignificant correlation) and rose to statistical significance. Because social desirability taint remained significant in the same model, I suspect that an interaction may be present between social desirability taint, physical taint, and job satisfaction. In fact, this interaction would support and align with the propositions by Ashforth and Kreiner (1999) explaining how workers come to

identify with their dirty work. The dirt, it seems, becomes a badge of honor, and work that is physically tainted should be far more likely to act as a shield against negative appraisals or a source of pride (Ashforth & Kreiner, 2014).

When I regressed job involvement onto the three domains of taint, I observed a different pattern of results than from the separate bivariate correlations with job involvement. In the regression model with the other forms of taint, social desirability significantly, negatively related to job involvement, and both physical and moral taint remained significant, positive predictors of job involvement. Again, these results suggest that the domains of taint operate somewhat independently. In this case, greater moral and physical taint associate with greater thoughts of job involvement. Dirty workers may be more likely to think about the job outside of work (i.e., “I live, eat, and breathe my job,” “Sometimes I lie awake at night thinking ahead to the next day.”) or view work as a significant source of meaning or identity (i.e., “The most important things that happen to me involve my work,” “I am very much involved personally in my work.”) to the extent that their work includes physically or morally tainted elements.

Conversely, lower social desirability taint may discourage dirty workers from developing a meaningful relationship or identity with their work. In other words, if dirty work cannot become a source of pride for a worker, they may be less willing or able to invest themselves in the work and internalize it as an identity. However, to the extent that they can find meaning in the physical and moral taint of the work, they can likewise develop and find meaning and involvement in the work. Because social desirability taint’s relationship with job involvement emerged only in the presence of the other domains of taint in a regression model, I would interpret that pattern of results as tentative indication of an interaction among the focal variables of the regression. To clarify, physical taint and/or moral taint may be moderating the relationship

between social taint and job involvement as sources of pride through which dirty workers can forge esteem-enhancing identities. Alternatively, social desirability taint may be moderating the relationship between job involvement and physical taint and/or moral taint. As stated above, these regression findings are highly tentative, and further interaction testing would be best reserved for subsequent research in which interaction tests could act as focal research questions.

When I regressed the exhaustion dimension of burnout onto all three domains of taint in the same model, only social desirability taint remained significantly, positively related to burnout. This finding could suggest that social desirability uniquely explains the variance attributed to exhaustion by dirty work. In other words, the exhaustion associated with perceptions of physical and moral taint actually arise from the social (un)desirability of the work. Because each domain of taint significantly, positively associated with exhaustion in a bivariate correlation, this pattern of results could indicate some form of interaction between the three domains of taint. For example, social desirability taint may moderate the relationship between exhaustion and the other forms of taint. In fact, Bentein et al. (2017) observed that perceptions of dirty work mediated the relationship between social isolation and emotional exhaustion, underscoring dirty work's potential as an intervening variable. Specifically, the social (un)desirability of the work that arises in conjunction with the physically or morally tainted elements of the work may predict changes in exhaustion.

Each domain of taint significantly correlated with stress, but in a regression model including all three domains, only social taint remained significantly, positively related to stress. This regression pattern resembles the pattern of results I observed in the exhaustion dimension regression model. Similarly, this finding may mean that social desirability taint uniquely explains the shared variance between perceptions of dirty work and stress. Alternatively, an interaction

may explain why social desirability taint continues to predict stress. It may be that social desirability taint's effect on stress strengthens as a function of physical and moral taint.

Finally, intent to quit demonstrated a similar regression pattern with the three domains of taint to the job satisfaction regression. First, physical taint switched the direction of its bivariate relationship with intent to quit from positive to negative in a regression with the other forms of taint. Second, moral taint no longer significantly predicted intent to quit. Third, social taint remained a significant, positive predictor of intent to quit. Given intent to quit's strong correlation with job satisfaction ($r = -.71$), this similar regression pattern is not surprising. In fact, I suggest it provides further tentative evidence for the presence of an interaction between social desirability taint and the other domains of taint.

Ultimately, however, the goal of this research is to establish support for a model and measure of the experience of dirty work. To avoid capitalizing on chance by repeat significance tests and drawing premature inferences, I recommend that further significance testing of the relationship between the three domains of taint and theoretically relevant variables (e.g., the correlates presented in Study 4) and testing for interactions among those variables be incorporated into subsequent study designs (especially designs that target dirty workers with their sampling frame). In fact, previous research implies the presence of a complex and nuanced relationship between the social desirability taint of work and the physical and moral taint of that work: workers create meaningful identities in response to the identity threats posed by physical and moral taint (Ashforth & Kreiner, 1999; Ashforth & Kreiner, 2014), but those identities may lead to isolation, disidentification, ambivalent identification, or strong identification (Kreiner et al., 2006) depending on the context (i.e. the social desirability of the dirt of the work, cf. Tracy & Scott, 2006) in which dirty workers develop the narrative of their dirty work identity. In other

words, the dirtiness of work becomes meaningful to the worker when it means that the job and, importantly, the worker performing it, is viewed through a lens of social desirability taint in the society in which the work is performed.

Furthermore, social desirability taint's consistent relationship with variables of interest in regression models may suggest a broader and important-to-understand pattern. If workers are committed to developing a socially validated, esteem-enhancing identity (Tajfel & Turner, 1984; Ashforth & Mael, 1989), perceptions that the work is tainted by social undesirability may directly impede those efforts to develop a meaningful identity. In other words, social desirability taint may be especially salient to the complex identity construction processes undertaken by dirty workers. Indeed, such taint may be harder to wash away or normalize by strategies adopted by dirty workers and their managers (Ashforth et al., 2007) because it directly counterbalances efforts to reframe the work as desirable or worthwhile. In other words, social desirability taint may prevent workers from constructing an identity in which the necessity of the work exceeds the evil of it (Ashforth & Kreiner, 2014). Broadly put, the pattern of results does not indicate that social desirability taint matters more or to the exclusion of the other forms of taint. Rather, each form of taint is a distinct and meaningful element of the overall experience of dirty work and should be understood and observed in context with one another.

The MANOVA results provide some highly tentative evidence that the measure of the experience of dirty work can discriminate among focal occupations by level and type of taint, and the measure could potentially be adapted to assess and identify occupation-level perceptions of taint. Of note, the occupational industries represented in the samples included only one occupational industry (construction work) that could map onto core dirty work as defined by Ashforth and Kreiner (1999). However, that focal occupation did experience significantly greater

degrees of physical taint on average than several other occupations, consistent with my predictions. However, the high number of occupational industry categories and inconsistent group sizes should relegate these findings to highly tentative. Nonetheless, it is promising that the measure could somewhat distinguish level of work dirtiness between a prototypical dirty work occupation and other occupations, even in a sample that is largely devoid of dirty workers. The measure in question specifically framed the dirty work items in terms of how the respondent believes others outside of the job view the work, so any attempt to aggregate the results up to an occupation-level variable should be paired with a thoughtful redesign (and repeat validity study) of the measure. Namely, the study design, research questions, and measure instructions should be carefully revised to point the respondents toward providing data at the occupation-level.

Improving the Model Fit. In Study 3, I adjusted the model based on the modification indices to improve overall model fit. I covaried most of the error terms for physical taint, and the resulting model demonstrated superior and good fit. In Study 4, I repeated a CFA in a new sample, and once again, the modification indices suggested covarying the physical taint error terms in a similar pattern. However, the superior model fit did not necessarily mean that the measure had improved or was adequate. In fact, the modification indices suggested that something else may have been interfering with model fit. If the error terms should in fact covary, that may suggest that the items themselves are tapping into a shared or similar source of error, and because that source of error persisted across two samples, I inferred that the error covariance may be the result of systematic, rather than random, error. The indicators associated with the physical taint dimension appear to be highly related both in terms of item-level statistics and face validity. Indeed, it may very well be likely that respondents were using terms like “dirty,” “filthy,” and “unclean” interchangeably, or that the more nuanced differences in the usage of

these descriptors did not emerge within the participants' responses. In comparison to the other domains of taint, the constituent indicators appear related but distinct from one another with respect to item-level statistics and face validity of the items themselves. The physical taint domain also demonstrated the highest reliability of the three domains when it included all six items. The reliability estimate might suggest that some of the items were acting as duplicates or near-duplicates of the other items, thereby inflating the reliability estimate. Consequently, the model fit improved once I identified and removed three highly related and overlapping items.

Overall Dirty Work Score versus Dimension Scores. Although Ashforth and Kreiner (1999) conceptualized distinct domains of taint, some subsequent research has emphasized overall or general work dirtiness (e.g., Baran et al., 2012; Lopina et al., 2012) rather than separating the domains of taint in the study design (e.g., Bickmeier et al., 2015). The validity studies herein and the pattern of results among the hypothesis tests suggest that the three domains of taint may operate independently and serve as a better framework through which to understand the experience of dirty work than an overall dirty work score. Indeed, the single-factor or overall dirty work score solution demonstrated notably lower overall fit than the three-factor solution in both Study 3 and Study 4. Relying on an overall score may obscure the actual form of dirtiness that defines the work itself, and it may preclude novel and meaningful findings, such as potential interactions among the domains of taint. Furthermore, individuals may respond differently to the threats posed by different forms of taint, and the occupations in which their experiences are nested may offer access to different strategies or techniques to confront or normalize those threats and the taint from which they arise. Finally, Ashforth and Kreiner (2014) theorized that moral taint may in fact be worse or more problematic to cope with than the other forms of taint because it appears in work that may be viewed as more evil than necessary. In

other words, physically tainted or socially tainted work may serve some societal need that outweighs the perceived taint of the work, whereas morally tainted work does not. To test and appreciate those differences, any such tool or research design must identify and measure those forms of taint separately.

Practical Implications. The measure of the experience of dirty work is an important next step in helping researchers understand how people come to develop pride and a sense of worth through stigmatized or problematic identities. That is, the inferences drawn from study of dirty work could even be extended to provide a foundation for subsequent research of how people may adopt and internalize stigmatized identities to the harm or dysfunction of the societies in which those individuals live and work. For example, the process through which an individual assesses the moral and social desirability taint of work and adapts that as a badge of honor may provide insight into how other individuals flout social responsibility movements (e.g., anti-vaccine proponents).

For employees and managers, this measure can function as a tool to help identify and understand which types of taint to deploy normalization tactics against in the hopes of developing healthy work identities. Findings from this measure could help managers better deploy support to their employees based on the domains of taint that are most relevant to the work at-hand. In addition, managers can use findings from this measure to facilitate job design to address the domains of taint or to shield their employees from those perceptions of taint. Furthermore, the measure provides a means to study how standing on those domains of taint change over time or in response to an intervention. In other words, if the goal of a normalization tactic or job training is to endow an employee with the skills necessary to mitigate the domains of taint they will experience, then this measure can be deployed and redeployed to examine

differences in standings on the domains of taint over time, or put simply, the effectiveness of those tactics to reduce perceptions of work dirtiness.

Contributions to Theory and Research. If the immediate goal of an intervention is to reduce an employee's overall standing on a domain of taint, then the ultimate goal of that intervention is to improve that employee's standing on other work-related variables of interest (e.g., job satisfaction, burnout, intent to quit). Because this measure now provides a means to measure the domains of taint by degree, researchers can test whether changes in perceptions of dirty work produce changes in dependent variables. In other words, do perceptions of dirty work change over time, and do those changes in perceptions correspond to changes in the relevant variables? Can a dirty work intervention reliably improve standing on variables of interest to dirty work research?

Because this research incorporates hypothesis testing in its validity studies, it is thus the first dirty work research to present significance testing of the degree of work dirtiness in its design. That is, previous research either ascribed taint to work by theoretical postulations (typically the postulations of Ashforth & Kreiner, 1999) or approached the study of dirty work qualitatively. That means this research opens the door for supplementing and building upon the foundation of dirty work research by enabling researchers to ask questions and formulate hypotheses about dirty work and dependent variables by degree or magnitude and form of the relationship. Likewise, the model or structure proposed by Ashforth and Kreiner (1999) has largely remained untested, despite its near ubiquity in the theoretical framing of dirty work research. Finally, the measure successfully permitted inferences to be drawn about degree of taint in a relatively low taint sample (physical taint $\bar{x} = 1.80$ and standard deviation = 1.44, moral taint $\bar{x} = 1.78$ and standard deviation = 1.32, social taint $\bar{x} = 2.56$ and standard deviation = 1.55)

of workers. In other words, the measure can detect relationships and differences among the variables even when the degree of work dirtiness may not be readily apparent. Thus, the measure should be able to be deployed to assess the experience of dirty work across varying levels of taint and types of occupations.

Limitations. The measure was designed to detect individual differences in how others outside of a job perceive the dirtiness of that work. It does not necessarily reflect occupation-level degrees of taint, nor does it represent personal views of the taint of work. This approach means that respondents must successfully identify how they believe someone else views their work separately from their own perceptions of the work itself. Consequently, the instructions—“Please [. . .] indicate how you think *your specific job or occupation* is viewed by **others outside of your place of work. . .**”—entail greater cognitive effort on the part of the respondent and may therefore introduce some additional measurement error. Previous stigma measurement validation studies (King et al., 2007; Sayles et al., 2008), however, suggest both that this approach—assessing stigma as a self-report rating of how *others* view the stigmatized—is possible and that it provides valuable insight into an overall understanding of the experience of dirty work. Moreover, Ashforth and Kreiner (1999) argued that dirty work is a social construct, and that the dirty work identity is constructed in relation to and in response to the perceptions of the self, peers, and others (representing the views of the society in which the dirty work is performed).

The samples themselves were broad in the sense that the respondents worked in a variety of occupations. Otherwise, the samples were largely white and educated, and these status characteristics may very well likely mean greater opportunities and access to resources (COR Theory; Hobfoll, 1989) that could help manage that tainted elements of dirty work, or those status characteristics could mean privileges which afford the employee protection or exemption

from dirty work tasks altogether. Likewise, socioeconomic status could represent varying access to such resources, but this study did not collect data on income or socioeconomic status beyond education. Further, the research did not directly measure nor control for access to such resources, nor did the sampling frame specifically include or target dirty workers. The low average taint scores and somewhat low variance may very well be a result of the sampling frame, and the minimal representation of core dirty workers may have shaped the measure into a tool to assess a broad range of occupations at the expense of discriminating among the more granular elements of a core dirty work occupation.

Ashforth and Kreiner (1999) and Lopina et al. (2012) suggest that job tenure may be a proxy for access to different strategies or resources to manage resource loss in the context of dirty work, and Kreiner et al. (2006) suggest that employees may learn new normalization tactics to manage the taint of dirty work. The exact relationship between job tenure, these strategies, and dirty work is still highly speculative. It is unclear if the relationship is simply linear—employees develop more and better strategies as a direct result of tenure—or if there is a critical moment at which employees develop the skills or identity to manage the taint of dirty work. This research did not explicitly examine the relationship between job tenure and the experience of dirty work; however, the samples included a broad range and variance of job tenures. Rather than merely treating job tenure as a control variable or sample descriptive, the aforementioned research suggests that future inquiries should examine job tenure as a focal variable of interest in dirty work research.

In addition, the broad sample of occupations lent itself toward developing a measure suited to a broad variety of occupations. Auspiciously, the goal was to produce a measure that was occupation-agnostic rather than occupation-specific. However, the design of the study and

failure to over-sample dirty work occupations may have resulted in an item-reduction process that favored terms and experiences that associate with many occupations, irrespective of the occupations' inclusion of dirty work. The elements which define dirty work as distinct from other work may have thus been omitted or intentionally removed in favor of those broader experiences. The hypothesis tests, however, produced results that resemble other dirty work findings, as noted above.

Similarly, the design may have disfavored dirty work items and experiences that may have a low base rate or cluster more prominently around specific occupational groups or industries. For example, modern occupational safety standards may limit the presence or occurrence of truly dangerous work, and even dangerous work may occur at such low base rates across occupations that the sample included too few instances to include those indicators as markers of latent variables. In fact, the very initial factor solution by EFA suggested that items such as “dangerous” or “risky” did load on factors explaining some of the variance in the sample. Those items, however, loaded on multiple factors. One factor most closely resembled what would ultimately be labeled physical taint, and the other factor consisted solely of items that loaded on multiple factors but failed to align theoretically with one another (i.e., “degrading,” “dangerous,” “risky,” “embarrassing,” “humiliating”). Ashforth and Kreiner (1999) postulated that physical taint also consists of work performed in close association with death, but such experiences are likely to be fairly occupation-specific, yet predominant among those occupations (i.e., mortician, coroner). Such items are unlikely to be a good fit for an occupation-agnostic measure, and the study design precluded their inclusion. Thus, the final measurement model suggests that physical taint consists only of the filth or dirt associated with such work, but a more

occupation-specific design or measure may detect that dangerous work or work associated with death also loads onto a common factor or explains variance in theoretically relevant variables.

Finally, I incorporated theory to help frame the study and interpret the findings across the many EFAs and CFAs. The theory presented by Ashforth and Kreiner (1999), however, operated as much like a taxonomy describing dirty work experiences and sorting it into categories as it did a description of relationships. On the one hand, a tool that classifies and categorizes different elements of a phenomenon or related phenomena makes for an ideal framework for factor analysis. On the other hand, the classifications can make inferences and judgments more difficult when, for instance, a construct like social taint is defined as two separate and distinct phenomena: work that is done in subservience or a servant position to others and work that is done in proximity to stigmatized others (Ashforth & Kreiner, 1999). Nonetheless, the model converged into three dimensions that appear to operate distinctly.

In addition, the framework presented an obstacle to identifying methods to assess discriminant validity. Ideally, a measure of the experience of dirty work should be distinguishable from occupational prestige (Ashforth & Kreiner, 1999). Occupational prestige ratings, however, are determined by occupation, and the lack of within occupation variance would preclude discriminant validity inferences due to the unit of analysis mismatch between occupational prestige ratings and individual scores on the measure of the experience of dirty work. At the time of this research, no tool or measure exists to assess self-report occupational prestige ratings. It would be highly tentative and even risk a tautological inference to develop, deploy, and gather validity evidence for a novel measure of occupational prestige as a source of discriminant validity alongside the validity studies for the dirty work measure. Instead, I focused the discriminant validity efforts on examining the distinctiveness of the domains of taint included

in the measure. The correlations and pattern of results generally provided convergent validity in how the domains of taint corresponded to theoretically relevant variables, and the regression models demonstrated the distinct pattern of relationships among the domains of taint. In addition, the three-factor model specification demonstrated good fit across two separate samples, supporting the distinction among the domains of taint.

Common method bias should be a concern in any self-report study design. With dirty work, the latent construct of interest resides at the intersection of individual self-perceptions, individual perceptions of how others view the work, and others' perceptions of the work. Dirty work is internally and socially constructed through the meanings attached to the work by the worker and those who observe the work. In addition, the preceding research's emphasis on single-occupation research designs informed this validation study's emphasis on a cross-occupational research design to facilitate the generalizability of future dirty work research designs. As a result, a self-report study design best met the demands of a cross-occupational sampling frame, a set of individual perception variables, and a measurement validation study. As noted in the results section, the design of the study mitigated some of the source of common method bias (i.e., by counterbalancing the presentation of items) and a statistical test (i.e., common latent factor test) calculated the approximate magnitude of common method bias.

Future Directions. First and foremost, the measure enables follow-up research to include questions that examine dirty work by matter of degree or magnitude. Because dirty work is wrapped up in identity construction, the role of dirty work, the magnitude of its dimensions, and the effects thereof may change over time. Indeed, dirty workers are supposed to be normalizing or negating the taint that they experience in an effort to construct their dirty work identities (Ashforth et al., 2007). Ongoing research should examine the domains of dirty work and their

relationship over time to better understand how an individual's relationship with and perception of dirty work changes.

As noted previously, the measure directly taps how a respondent believes others view their work. Ideally, this measure would be coordinated with a self-report measure of one's own perceptions and a community measure (i.e., external raters) of perceived taint as suggested by Sayles et al. (2008). This multidimensional approach should provide greater insight into the dirty work experience and paired with a longitudinal design, such a combined assessment should facilitate inferences into how and how effectively dirty workers negate and normalize the taint they experience. Together these tools should be part of a research program to predict and understand the conditions in which dirty workers thrive or not. Isolation is a significant risk for dirty workers (Ashforth & Kreiner, 1999), and the different identification strategies (Kreiner et al., 2006) associate with varying levels of success in managing taint. As of this study, for context, no research has attempted to identify the antecedent dirty work characteristics (i.e., magnitude and type) that may predict such outcomes.

Largely, dirty work research has focused on attitudes (i.e., euthanasia-related strain, job satisfaction, stress, intent to quit) over behaviors. Future research needs to connect the experience of dirty work to occupationally- and organizationally-relevant variables both to elevate the implications of the findings and to identify important risk factors for dirty work. For instance, Lopina et al.'s (2012) findings could be used as a foundation to predict turnover as a function of dirty work by degree and domain of taint. Work identification positively relates to task performance and organizational citizenship behaviors (van Knippenberg, 2000), and dirty work infiltrates the identity construction process, so a natural course of research should be to examine dirty work's relationship to task performance and contextual performance.

In an earlier publication, Saunders et al (1981) observed that minorities tend to undertake dirty work at a higher rate than other individuals. Tracy and Scott (2006) noted that gender narratives underpin the sense of worth that people assign (or do not assign) to the dirty work that they do. Together, these studies suggest that an intersectional lens to dirty work may be vital to understanding and improving the experiences of people who do dirty work. In more detail, the masculine gender constructions that afford protection against the taint of dirty work may be inaccessible or less effective for individuals who identify as women, or they may fail to activate the same types of protection to ethnic minorities who are stigmatized as different irrespective of the gender- or other narratives they use to construct their work-related identity. On that note, racial narratives may present a fascinating avenue of research. Like masculine and feminine gender narratives about dirty work, white and nonwhite narratives about dirty work may offer greater insights into how people identify themselves with dirty work and develop status shields against the taint they may experience.

Finally, the separate domains of taint presented in this measure provide an opportunity to examine how those dimensions relate to one another in greater specificity than a study design that simply ascribes taint to occupations under study. Namely, the regression results suggest that the domains of taint may moderate the relationship between other domains of taint and dependent variables. Possibly, one or more domain of taint, such as social desirability taint may partially or fully mediate the relationship between one domain of taint and a dependent variable. Future research should thus take care to study and test for nonlinear relationships between the domains of taint and focal variables.

Call to Action. The complexity of the underlying processes through which individuals come to understand the dirty work they perform suggests that this measure should serve as one

tool of many to observe and draw inferences from dirty work phenomena. In short, this largely quantitative tool does not render qualitative inquiry obsolete, nor is it intended to shift the focus of dirty work research toward more quantitative designs. In fact, the tentative state of the literature and “niche” status of the research topic instead should encourage researchers to combine this measure with robust and thoughtful qualitative designs to ask more comprehensive and complex questions, and to address those questions with rich and compelling data. Indeed, future research can pair hypotheses predicting relationships by degree or magnitude with qualitative designs that contextualize those findings within broader explanations.

Conclusion. The studies described herein each represent part of a larger collection of validity evidence in support of a measure to better understand the experience of dirty work. Altogether, these findings suggest that a model of physical taint, moral taint, and social desirability taint fit the data from a broad sample of workers, and scores from the measure relate to theoretically relevant variables. This new measure should act as a stepping stone toward future dirty work research.

Table 1
Study 1. Initial Item Pool

Foul	Impure
Disgusting	Unscrupulous
Dirty	Unprincipled
Immoral	Debased
Shameful	Perverse
Inferior	Crooked
Degrading	Sleazy
Dangerous	Shady
Risky	Devious
Not worth it	Dubious
Undesirable	Underhanded
Nasty	Untrustworthy
Gross	Unclean
Dishonorable	Tainted
Unpleasant	Grueling
Unseemly	Negative
Embarrassing	Unlikeable
Unattractive	Intolerable
Filthy	Bad
Disgraceful	Vile
Humiliating	Evil
Dishonest	The bad guy
Corrupt	Messy

Table 2
Study 1. Initial Exploratory Factor Analysis with Factor Loadings

Item	Factor Loading	Item	Factor Loading	Item	Factor Loading	Item	Factor Loading
Factor 1		Factor 2		Factor 3		Factor 4	
<i>Foul</i>	.419	Inferior	.727	<i>Foul</i>	-.474		
Immoral	.846	<i>Degrading</i>	.581	Disgusting	-.650	<i>Degrading</i>	
Shameful	.574	Not worth it	.799	Dirty	-.868		
Dishonorable	.762	Undesirable	.879	<i>Dangerous</i>	-.604	<i>Dangerous</i>	.319
Unseemly	.448	Unpleasant	.781	<i>Risky</i>	-.452	<i>Risky</i>	.322
Disgraceful	.634	<i>Embarrassing</i>	.450	Nasty	-.642	<i>Embarrassing</i>	-.402
Dishonest	.905	Unattractive	.787	Gross	-.746		
Corrupt	.876	<i>Humiliating</i>	.491	Filthy	-.794	<i>Humiliating</i>	-.318
Impure	.737	Grueling	.371	Unclean	-.825		
Unscrupulous	.796	Negative	.661	Messy	-.767		
Unprincipled	.853	Unlikeable	.786				
Debased	.622	Intolerable	.599				
Perverse	.592						
Crooked	.926						
Sleazy	.701						
Shady	.866						
Devious	.856						
Dubious	.709						
Underhanded	.830						
Untrustworthy	.820						
Tainted	.781						
<i>Bad</i>	.417	<i>Bad</i>	.415				
<i>Vile</i>	.611			<i>Vile</i>	-.333		
Evil	.819						
The bad guy	.801						

N = 386.

Note: Items in italics loaded on multiple factors.

Table 3
Study 1. Factor Correlations for Each EFA

Factor and EFA Step	Moral Taint	Social Taint	Physical Taint	Factor 4 (Unretained after Study 1)
Initial EFA (46 Items)				
Moral Taint	1.000	0.495	-0.503	-0.195
Social Taint	0.495	1.000	-0.517	-0.145
Physical Taint	-0.503	-0.517	1.000	0.164
Factor 4	-0.195	-0.145	0.164	1.000
Reduced EFA (38 Items)				
Moral Taint	1.000	0.495	-0.478	
Social Taint	0.495	1.000	-0.511	
Physical Taint	-0.478	-0.511	1.000	
Reduced EFA (36 Items)				
Moral Taint	1.000	0.479	-0.482	
Social Taint	0.479	1.000	-0.513	
Physical Taint	-0.482	-0.513	1.000	
Reduced EFA (24 Items)				
Moral Taint	1.000	0.490	-0.545	
Social Taint	0.490	1.000	-0.558	
Physical Taint	-0.545	-0.558	1.000	
Final EFA (21 Items)				
Moral Taint	1.000	0.494	-0.544	
Social Taint	0.494	1.000	-0.563	
Physical Taint	-0.544	-0.563	1.000	

Table 4
Study 1. Final Factor Loadings, Explained Variance, Scale Reliability, and Item Statistics of the Reduced Item Pool

Scale and Items	Factor Loadings	% of Total Variance Explained	Reliability Estimate	Mean	Standard Deviation
Moral Taint		52.69	.95		
Immoral	.844			1.62	1.26
Shameful	.629			1.73	1.36
Dishonorable	.789			1.66	1.30
Disgraceful	.664			1.60	1.20
Dishonest	.911			1.81	1.39
Corrupt	.847			1.78	1.38
Underhanded	.827			1.77	1.36
Untrustworthy	.790			1.80	1.34
Tainted	.796			1.69	1.32
Social Taint		10.93	.92		
Not worth it	.772			2.88	1.83
Undesirable	.883			2.76	1.74
Unpleasant	.806			2.65	1.69
Unattractive	.765			2.58	1.67
Unlikeable	.803			2.65	1.75
Intolerable	.610			2.10	1.56
Physical Taint		7.72	.95		
Disgusting	-.746			1.70	1.34
Dirty	-.928			1.97	1.56
Nasty	-.738			1.75	1.36
Gross	-.808			1.79	1.46
Filthy	-.888			1.84	1.51
Unclean	-.880			1.93	1.48

N = 386.

Reliability estimates reported as Cronbach's alpha.

Table 5
Study 1. Factor Cross Loadings and Communalities of the Final Item Pool

Items	Moral Taint Factor Loadings	Social Taint Factor Loadings	Physical Taint Factor Loadings	Communalities
Immoral	0.844	-0.129	-0.172	0.783
Shameful	0.629	0.159	-0.150	0.672
Dishonorable	0.789	0.060	-0.095	0.770
Disgraceful	0.674	0.110	-0.138	0.677
Dishonest	0.911	-0.055	0.002	0.782
Corrupt	0.847	-0.016	0.074	0.643
Underhanded	0.827	0.058	0.027	0.709
Untrustworthy	0.790	0.115	0.126	0.619
Tainted	0.796	-0.042	-0.105	0.699
Not worth it	-0.029	0.772	-0.001	0.576
Undesirable	-0.040	0.883	0.007	0.739
Unpleasant	-0.102	0.806	-0.138	0.707
Unattractive	-0.008	0.765	-0.065	0.639
Unlikeable	0.205	0.803	0.119	0.729
Intolerable	0.155	0.610	-0.088	0.572
Disgusting	0.187	0.014	-0.746	0.756
Dirty	-0.098	0.035	-0.928	0.806
Nasty	0.178	0.065	-0.738	0.789
Gross	-0.001	0.046	-0.808	0.696
Filthy	0.050	-0.007	-0.888	0.832
Unclean	-0.014	0.026	-0.880	0.788

Table 6
Study 2. Factor Correlations for Each EFA

Factor and EFA Step	Moral Taint	Physical Taint	Social Taint
Initial EFA (21 Items)			
Moral Taint	1.000	-0.390	0.444
Physical Taint	-0.390	1.000	-0.541
Social Taint	0.444	-0.541	1.000
Reduced EFA (20 Items)			
Moral Taint	1.000	-0.385	0.425
Physical Taint	-0.385	1.000	-0.527
Social Taint	0.425	-0.527	1.000
Final EFA (19 Items)			
Moral Taint	1.000	0.382	0.421
Physical Taint	0.382	1.000	0.545
Social Taint	0.421	0.545	1.000

Table 7
Study 2. Final Factor Loadings, Explained Variance, Scale Reliability, and Item
Statistics of the Reduced Item Pool

Scale and Items	Factor Loadings	% of Total Variance Explained	Reliability Estimate	Mean	Standard Deviation
Moral Taint		16.89	.94		
Immoral	.868			1.56	1.23
Dishonorable	.768			1.63	1.26
Disgraceful	.511			1.58	1.21
Dishonest	.841			1.63	1.18
Corrupt	.853			1.63	1.25
Underhanded	.808			1.78	1.34
Untrustworthy	.841			1.79	1.33
Tainted	.737			1.67	1.35
Social Taint		8.92	.86		
Not worth it	.676			3.01	1.65
Undesirable	.863			2.80	1.65
Unpleasant	.615			2.78	1.57
Unattractive	.708			2.53	1.58
Unlikeable	.659			2.68	1.57
Physical Taint		47.33	.96		
Disgusting	.861			1.74	1.33
Dirty	.868			1.89	1.53
Nasty	.748			1.74	1.30
Gross	.960			1.84	1.49
Filthy	.887			1.85	1.48
Unclean	.866			1.99	1.58

N = 178.

Reliability estimates reported as Cronbach's alpha.

Table 8
Study 2. Factor Cross Loadings and Communalities of the Final Item Pool

Items	Physical Taint Factor Loadings	Moral Taint Factor Loadings	Social Taint Factor Loadings	Communalities
Immoral	0.118	0.868	-0.137	0.746
Dishonorable	0.004	0.768	0.095	0.663
Disgraceful	0.158	0.511	0.217	0.525
Dishonest	-0.102	0.841	0.046	0.681
Corrupt	-0.014	0.853	0.009	0.725
Underhanded	-0.029	0.808	-0.011	0.629
Untrustworthy	-0.080	0.841	0.055	0.699
Tainted	0.216	0.737	-0.030	0.686
Not worth it	-0.050	0.027	0.676	0.438
Undesirable	-0.067	-0.019	0.863	0.675
Unpleasant	0.145	0.029	0.615	0.516
Unattractive	0.173	-0.095	0.708	0.605
Unlikeable	0.021	0.189	0.659	0.593
Disgusting	0.861	0.036	-0.010	0.757
Dirty	0.868	-0.111	0.123	0.812
Nasty	0.748	0.178	0.014	0.706
Gross	0.960	-0.039	-0.030	0.865
Filthy	0.887	0.060	0.006	0.837
Unclean	0.866	-0.004	0.050	0.796

Table 9
Study 4. Means, Standard Deviations, and Correlations among Study Variables

Variables	Mean	s.d.	1	2	3	4	5	6	7	8
1. Physical Taint	1.80	1.44	.92							
2. Moral Taint	1.78	1.32	.73**	<i>.94</i>						
3. Social Taint	2.56	1.55	.67**	.61**	<i>.93</i>					
4. Job Satisfaction	3.54	1.02	-.10	-.11	-.40**	<i>.89</i>				
5. Burnout (Exhaustion)	3.79	1.66	.30**	.35**	.51**	-.63**	<i>.96</i>			
6. Job Involvement	2.59	0.72	.25**	.25**	-.01	.39**	-.10	<i>.82</i>		
7. Stress in General	2.05	0.52	.27**	.25**	.35**	-.45**	.66**	-.01	<i>.74</i>	
8. Intent to Quit	2.92	1.26	.24**	.30**	.47**	-.71**	.68**	-.22**	.43**	<i>.92</i>

$N = 254$

Values on the diagonal in italics are Cronbach alpha reliability estimates.

** $p < .01$.

Table 10
Final Measure Items, Instructions, and Response Scale

Instructions: Please read each following word or statement, then indicate how you think *your specific job or occupation* is viewed by **others outside of your place of work**. In other words, in your opinion, what are others' impressions of what you do for a living? They would say my specific job or occupation is (rate each word or statement using the following scale):

Response Scale							
	Not at all	Very Slightly	Slightly	Somewhat	Moderately	A Lot	Extremely
1. Dirty							
2. Immoral							
3. Not Worth it							
4. Undesirable							
5. Nasty							
6. Dishonorable							
7. Gross							
8. Unpleasant							
9. Unattractive							
10. Underhanded							
11. Untrustworthy							
12. Tainted							
13. Unlikeable							

Note: The survey platform (Qualtrics) randomized item presentation per participant. Respondents rated items on a 7-point scale from 1 (“Not at all”) to 7 (“Extremely”).

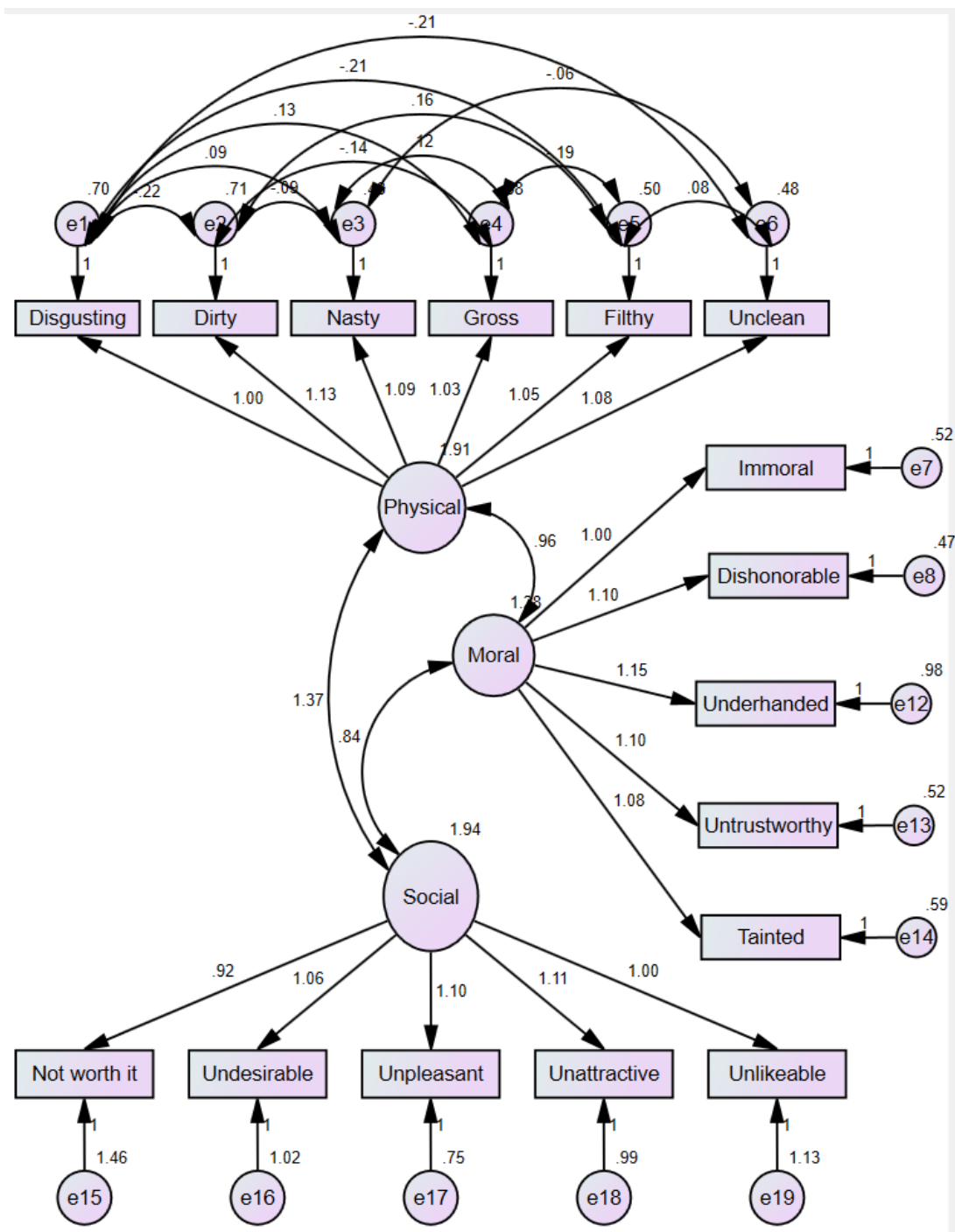


Figure 1. Study 3. CFA with Factor Loadings and Covaried Error Terms

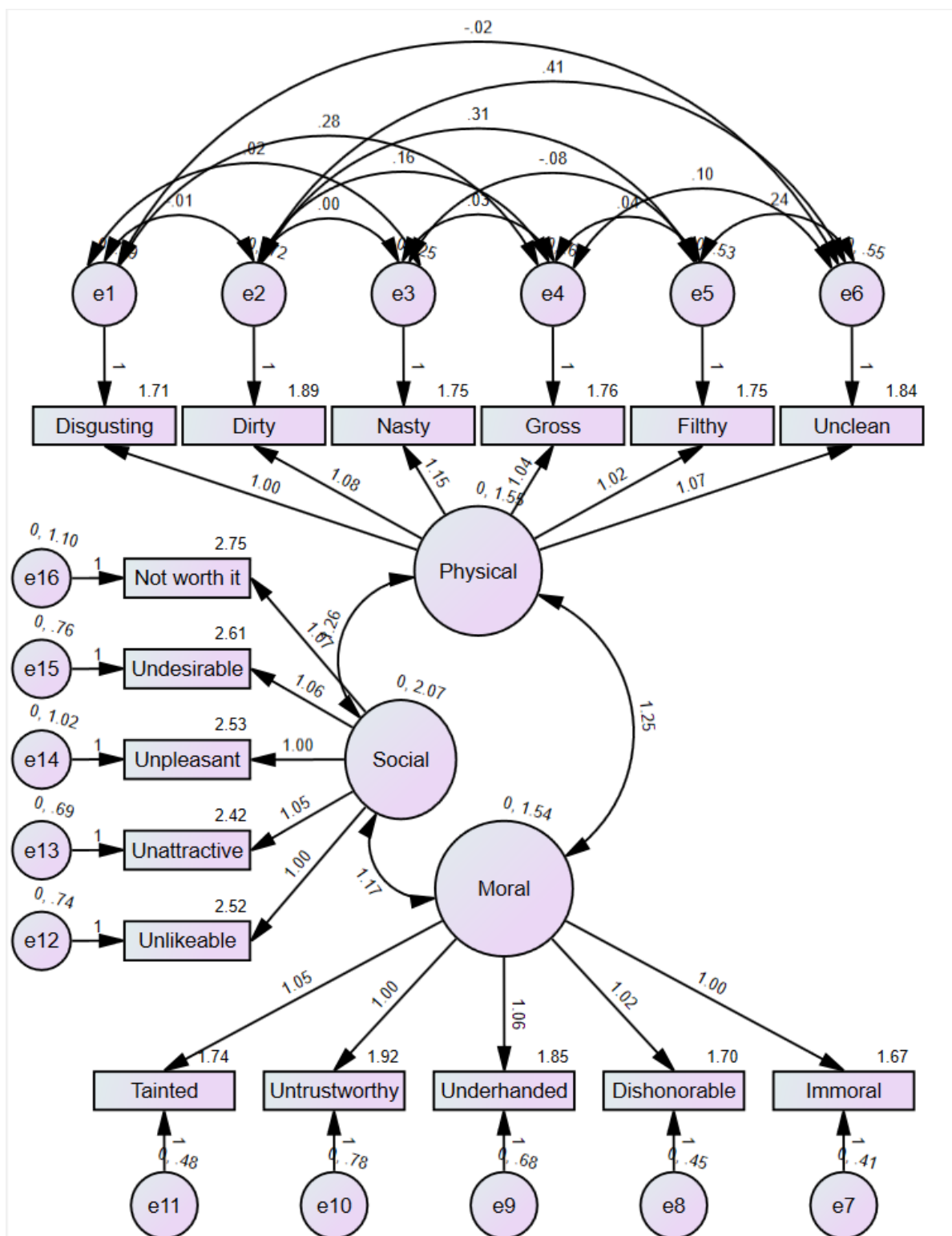


Figure 2. Study 4. CFA with Factor Loadings and Covaried Error Terms

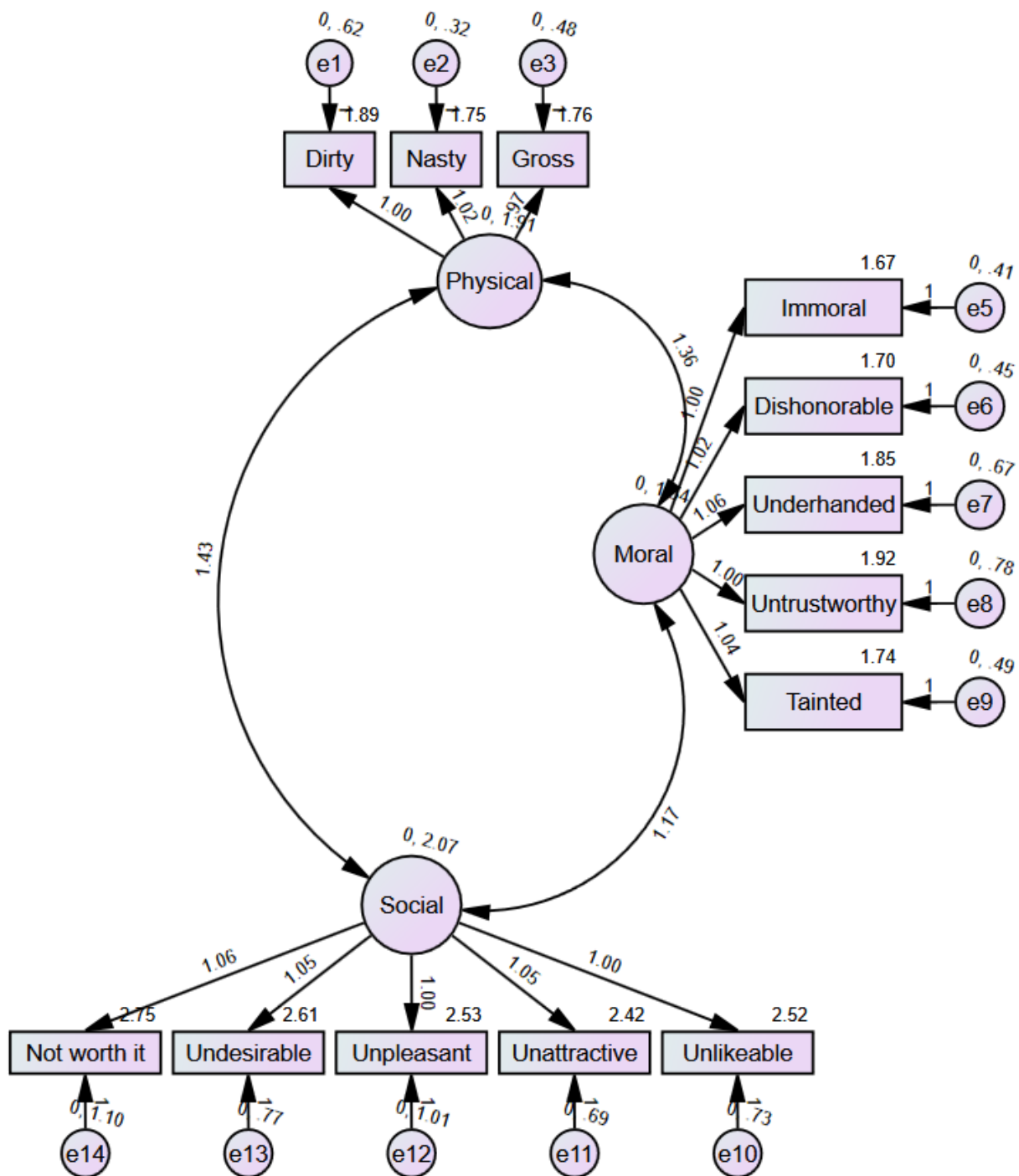


Figure 3. Study 4. Final CFA with Factor Loadings

References

- Ashforth, B. E., & Kreiner, G. E. (1999). "How can you do it?": Dirty work and the challenge of constructing a positive identity. *Academy of Management Review*, 24(3), 413-434.
- Ashforth, B. E., & Kreiner, G. E. (2014). Dirty work and dirtier work: Differences in countering physical, social, and moral stigma. *Management and Organization Review*, 10(1), 81-108.
- Ashforth, B. E., Kreiner, G. E., Clark, M. A., & Fugate, M. (2007). Normalizing dirty work: Managerial tactics for countering occupational taint. *Academy of Management Journal*, 50(1), 149-174.
- Ashforth, B. E., & Mael, F. (1989). Social identity theory and the organization. *Academy of management review*, 14(1), 20-39.
- Ashforth, B. E., & Mael, F. A. (1996). Organizational Identity and Strategy as a Context for the Individual. *Advances in strategic management*, 13, 19-64.
- Baran, B. E., Allen, J. A., Rogelberg, S. G., Spitzmüller, C., DiGiacomo, N. A., Webb, J. B., ... & Walker, A. G. (2009). Euthanasia-related strain and coping strategies in animal shelter employees. *Journal of the American Veterinary Medical Association*, 235(1), 83-88.
- Baran, B. E., Rogelberg, S. G., & Clausen, T. (2016). Routinized killing of animals: Going beyond dirty work and prestige to understand the well-being of slaughterhouse workers. *Organization*, 23(3), 351-369.
- Baran, B. E., Rogelberg, S. G., Lopina, E. C., Allen, J. A., Spitzmüller, C., & Bergman, M. (2012). Shouldering a silent burden: the toll of dirty tasks. *Human Relations*, 65(5), 597-626.
- Batista, A. S., & Codo, W. (2018). Dirty work and stigma: caretakers of death in cemeteries. *Revista de Estudios Sociales*, (63), 72-83.
- Berger, B. E., Ferrans, C. E., & Lashley, F. R. (2001). Measuring stigma in people with HIV: Psychometric assessment of the HIV stigma scale. *Research in nursing & health*, 24(6), 518-529.
- Berkelaar, B. L., Buzzanell, P. M., Kisselburgh, L. G., Tan, W., & Shen, Y. (2012). "First, it's dirty. Second, it's dangerous. Third, it's insulting": Urban Chinese Children Talk about Dirty Work. *Communication Monographs*, 79(1), 93-114.
- Bickmeier, R. M., Lopina, E. C., & Rogelberg, S. G. (2015). *Differentiating the domains of taint in dirty work*. Poster session presented at the meeting of the Society for Industrial & Organizational Psychology, Philadelphia, PA.
- Bliese, P.D. (2000). Within-group agreement, non-independence, and reliability: Implications for data aggregation and analysis. In: Klein KJ and Kozlowski SW (eds) *Multilevel Theory, Research, and Methods in Organizations*. San Francisco, CA: Jossey-Bass, 349-381.
- Brittain, K. R., & Shaw, C. (2007). The social consequences of living with and dealing with incontinence—A carers perspective. *Social Science & Medicine*, 65, 1274-1283.

- Cammann, C., Fichman, M., Jenkins, D., & Klesh, J. (1979). The Michigan organizational assessment questionnaire. *Unpublished manuscript, University of Michigan, Ann Arbor.*
- Cassell, C., & Bishop, V. (2014). Metaphors and sensemaking: Understanding the taint associated with dirty work. *Qualitative Research in Organizations and Management: An International Journal.*
- Clarke, M., & Ravenswood, K. (2019). Constructing a career identity in the aged care sector: Overcoming the “taint” of dirty work. *Personnel Review.*
- Cooper-Hakim, A., & Viswesvaran, C. (2005). The construct of work commitment: testing an integrative framework.
- Corlett, S., & Mavin, S. (2014). Intersectionality, identity and identity work: Shared tenets and future research agendas for gender and identity studies. *Gender in Management: An International Journal.*
- Crocker, J., & Major, B. (1989). Social stigma and self-esteem: The self-protective properties of stigma. *Psychological review*, 96(4), 608.
- Cruz, J. (2015). Dirty work at the intersections of gender, class, and nation: Liberian market women in post-conflict times. *Women's Studies in Communication*, 38(4), 421-439.
- Davis, D. S. (1984). Good people doing dirty work: A study of social isolation. *Social Isolation*, 7(2), 233-247.
- De Camargo, C. R. (2019). ‘You feel dirty a lot of the time’: Policing ‘dirty work’, contamination and purification rituals. *International Journal of Police Science & Management*, 21(3), 133-145.
- Deery, S., Kolar, D., & Walsh, J. (2019). Can dirty work be satisfying? A mixed method study of workers doing dirty jobs. *Work, Employment and Society*, 33(4), 631-647.
- Dobson, R. (2017). Recollection-as-method in social welfare practice: dirty work, shame and resistance. *Qualitative Research Journal.*
- Emerson, R. M., & Pollner, M. (1976). Dirty work designations: Their features and consequences in a psychiatric setting. *Social Problems*, 23(3), 243-254.
- Filteau, M. R. (2015). Go back to Texas, gas bastards! How a newcomer population of itinerant energy workers manage dirty work stigma in the Marcellus shale region. *Society & natural resources*, 28(11), 1153-1167.
- Ford, J. S. (2018). (Dis) identification as resilience in dirty volunteer work. *Corporate Communications: An International Journal.*
- Fuller, A., & Unwin, L. (2017). Job crafting and identity in low-grade work: How hospital porters redefine the value of their work and expertise. *Vocations and Learning*, 10(3), 307-324.
- Gaskin, James. (2012, July 6). *Common method bias using common latent factor* [Video]. YouTube. https://www.youtube.com/watch?v=Y7Le5Vb7_jg

- Goffman, E. (1963). *Stigma: Notes on the management of spoiled identity*. Simon and Schuster.
- Grandy, G., & Mavin, S. (2011). Occupational image, organizational image and identity in dirty work: Intersections of organizational efforts and media accounts. *Organization*, 19, 765-787.
- Clarke, M., & Ravenswood, K. (2019). Constructing a career identity in the aged care sector: Overcoming the “taint” of dirty work. *Personnel Review*.
- Hansen Löfstrand, C., Loftus, B., & Loader, I. (2016). Doing ‘dirty work’: Stigma and esteem in the private security industry. *European journal of criminology*, 13(3), 297-314.
- Hennekam, S., Ladge, J., & Shymko, Y. (2020). From zero to hero: An exploratory study examining sudden hero status among nonphysician health care workers during the COVID-19 pandemic. *Journal of Applied Psychology*, 105(10), 1088.
- Hinkin, T. R. (1998). A brief tutorial on the development of measures for use in survey questionnaires. *Organizational research methods*, 1(1), 104-121.
- Hobfoll, S. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist* 44(3), 513–524.
- Hobfoll, S.E. (2001). The influence of culture, community and the nested-self in the stress process: Advancing conservation of resources theory. *Applied Psychology: An International Review* 50(3), 337–421.
- Huey, L., & Broll, R. (2015). I don't find it sexy at all’: criminal investigators' views of media glamorization of police ‘dirty work. *Policing and society*, 25(2), 236-247.
- Hughes, E. C. (1962). Good people and dirty work. *Social Problems*, 10(1), 3-11.
- Johnston, M. S., & Hodge, E. (2014). ‘Dirt, Death and Danger? I Don't Recall Any Adverse Reaction...’: Masculinity and the Taint Management of Hospital Private Security Work. *Gender, Work & Organization*, 21(6), 546-558.
- Johnston, M. S., Sanscartier, M. D., & Johnston, G. (2018). Dirty Work, Dirty Resistance: Digital Warfare in the Era of Precarious Labor. *Canadian Review of Sociology/Revue canadienne de sociologie*, 55(2), 278-297.
- King, M., Dinos, S., Shaw, J., Watson, R., Stevens, S., Passetti, F., ... & Serfaty, M. (2007). The Stigma Scale: development of a standardised measure of the stigma of mental illness. *The British Journal of Psychiatry*, 190(3), 248-254.
- Konovsky, M. A., & Cropanzano, R. (1991). Perceived fairness of employee drug testing as a predictor of employee attitudes and job performance. *Journal of Applied Psychology*, 76, 698–707.
- Kreiner, G. E., Ashforth, B. E., and Sluss, D. M. (2006). Identity dynamics in occupational dirty work: Integrating social identity and system justification perspectives. *Organization Science* 17(5), 619–674.

- Lai, J.Y.M., Chan, K.W., & Lam, L.W. (2013). Defining who you are not: The roles of moral dirtiness and occupational and organizational disidentification in affecting casino employee turnover intention. *Journal of Business Research* 66(9), 1659-1666.
- Link, B. G., Yang, L. H., Phelan, J. C., & Collins, P. Y. (2004). Measuring mental illness stigma. *Schizophrenia bulletin*, 30(3), 511-541.
- Lodahl, T. M., & Kejner, M. (1965). The definition and measurement of job involvement. *Journal of Applied Psychology* 49, 24-33.
- Lopina, E. C., Rogelberg, S. G., & Howell, B. (2012). Turnover in dirty work occupations: A focus on pre-entry individual characteristics. *Journal of Occupational and Organizational Psychology*, 85, 396-406.
- Mael, F. A., & Ashforth, B. E. (1995). Loyal from day one: Biodata, organizational identification, and turnover among newcomers. *Personnel Psychology*, 48(2), 309-333.
- Major, B., & O'brien, L. T. (2005). The social psychology of stigma. *Annu. Rev. Psychol.*, 56, 393-421.
- Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of organizational behavior*, 2(2), 99-113.
- McCabe, D., & Hamilton, L. (2015). The kill programme: an ethnographic study of 'dirty work' in a slaughterhouse. *New Technology, Work and Employment*, 30(2), 95-108.
- McMurray, R., & Ward, J. (2014). 'Why would you want to do that?': Defining emotional dirty work. *Human relations*, 67(9), 1123-1143.
- Meldgaard Hansen, A. (2016). Rehabilitative bodywork: cleaning up the dirty work of homecare. *Sociology of health & illness*, 38(7), 1092-1105.
- Mikkelsen, E. N. (2021). Looking over your shoulder: Embodied responses to contamination in the emotional dirty work of prison officers. *Human Relations*, 00187267211019378.
- Morriss, L. (2016). AMHP work: Dirty or prestigious? Dirty work designations and the approved mental health professional. *The British Journal of Social Work*, 46(3), 703-718.
- Neuberg, S. L., Smith, D. M., Hoffman, J. C., & Russell, F. J. (1994). When we observe stigmatized and "normal" individuals interacting: Stigma by association. *Personality and Social Psychology Bulletin*, 20(2), 196-209.
- Orupabo, J., & Nadim, M. (2020). Men doing women's dirty work: Desegregation, immigrants and employer preferences in the cleaning industry in Norway. *Gender, Work & Organization*, 27(3), 347-361.
- Ostaszkiwicz, J., O'Connell, B., & Dunning, T. (2016). 'We just do the dirty work': dealing with incontinence, courtesy stigma and the low occupational status of carework in long-term aged care facilities. *Journal of Clinical Nursing*, 25(17-18), 2528-2541.

- Perrott, T. A. (2019). Doing hot and 'dirty' work: Masculinities and occupational identity in firefighting. *Gender, Work & Organization*, 26(10), 1398-1412.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of applied psychology*, 88(5), 879.
- Rabelo, V. C., & Mahalingam, R. (2019). "They really don't want to see us": How cleaners experience invisible 'dirty' work. *Journal of vocational behavior*, 113, 103-114.
- Reeve, C. L., Spitzmuller, C., Rogelberg, S. G., Walker, A., Schultz, L., & Clark, O. (2004). Employee reactions and adjustment to euthanasia-related work: Identifying turning-point events through retrospective narratives. *Journal of Applied Animal Welfare Science*, 7(1), 1-25.
- Reeve, C. L., Rogelberg, S. G., Spitzmüller, C., & DiGiacomo, N. (2005). The Caring-Killing Paradox: Euthanasia-Related Strain Among Animal-Shelter Workers. *Journal of Applied Social Psychology*, 35(1), 119-143.
- Reeve, C. L. & Smith, C. S. (2001). Refining Lodahl and Kejner's job involvement scale with a convergent evidence approach: Applying multiple methods to multiple samples. *Organizational Research Methods*, 4(2), 91-111.
- Rivera, K. D., & Tracy, S. J. (2014). Embodying emotional dirty work: A messy text of patrolling the border. *Qualitative Research in Organizations and Management: An International Journal*.
- Rogelberg, S. G., DiGiacomo, N., Reeve, C. L., Spitzmüller, C., Clark, O. L., Teeter, L., ... & Starling, P. G. (2007). What shelters can do about euthanasia-related stress: an examination of recommendations from those on the front line. *Journal of Applied Animal Welfare Science*, 10(4), 331-347.
- Saunders, C. (1981). *Social stigma of occupations: The lower grade worker in service organisations*. Gower Publishing Company, Limited.
- Sayles, J. N., Hays, R. D., Sarkisian, C. A., Mahajan, A. P., Spritzer, K. L., & Cunningham, W. E. (2008). Development and psychometric assessment of a multidimensional measure of internalized HIV stigma in a sample of HIV-positive adults. *AIDS and Behavior*, 12(5), 748-758.
- Scott, C., & Myers, K. (2010). Toward an integrative theoretical perspective on organizational membership negotiations: Socialization, assimilation, and the duality of structure. *Communication Theory*, 20(1), 79-105.
- Shepherd, D. A., Maitlis, S., Parida, V., Wincent, J., & Lawrence, T. B. (2021). Intersectionality in intractable dirty work: how Mumbai ragpickers make meaning of their work and lives. *Academy of Management Journal*, (ja).
- Simpson, R., Hughes, J., Slutskaya, N., & Balta, M. (2014). Sacrifice and distinction in dirty work: men's construction of meaning in the butcher trade. *Work, employment and society*, 28(5), 754-770.

- Simpson, A., Slutskaia, N., Hughes, J., and Simpson, R.. "The use of ethnography to explore meanings that refuse collectors attach to their work." *Qualitative Research in Organizations and Management: An International Journal* (2014).
- Sommerfeldt, E. J., & Kent, M. L. (2020). Public relations as “dirty work”: Disconfirmation, cognitive dissonance, and emotional labor among public relations professors. *Public Relations Review*, 46(4), 101933.
- Stacey, C. L. (2005). Finding dignity in dirty work: The constraints and rewards of low-wage home care labour. *Sociology of Health & Illness*, 27(6), 831-854.
- Stanton, J. M., Balzer, W. K., Smith, P. C., Parra, L. F., & Ironson, G. (2001). A general measure of work stress: The stress in general scale. *Educational and Psychological Measurement*, 61(5), 866-888.
- Tajfel, H., & Turner, J. C. 1986. The social identity theory of intergroup behavior. In S. Worchel & W. G. Austin (Eds.), *Psychology of Intergroup Relations* (2nd ed.): 7-24. Chicago: Nelson-Hall Publishers.
- Tallberg, L., & Jordan, P. J. (2021). Killing Them ‘Softly’(!): Exploring Work Experiences in Care-Based Animal Dirty Work. *Work, Employment and Society*, 09500170211008715.
- Thiel, D. (2007). Class in construction: London building workers, dirty work and physical cultures1. *The British journal of sociology*, 58(2), 227-251.
- Tracy, S. J., & Scott, C. (2006). Sexuality, masculinity, and taint management among firefighters and correctional officers: Getting down and dirty with “America's heroes” and the “scum of law enforcement”. *Management Communication Quarterly*, 20(1), 6-38.
- Tyler, M. (2011). Tainted love: From dirty work to abject labour in Soho’s sex shops. *Human Relations*, 64(11), 1477-1500.
- Van Brakel, W. H. (2006). Measuring health-related stigma—a literature review. *Psychology, health & medicine*, 11(3), 307-334.
- Van Dick, R., Christ, O., Stellmacher, J., Wagner, U., Ahlswede, O., Grubba, C., Hauptmeier, M., Hohfeld, C., Moltzen, K., & Tissington, P.A. (2004). Should I stay or should I go? Explaining turnover intentions with organizational identification and job satisfaction. *British Journal of Management*, 15, 351-360.
- van Knippenberg, D. (2000). Work motivation and performance: A social identity perspective. *Applied Psychology*, 49(3), 357-371.
- Vines, M., & Linders, A. (2016). The dirty work of poker: Impression management and identity. *Deviant Behavior*, 37(9), 1064-1076.
- Visser, M. J., Kershaw, T., Makin, J. D., & Forsyth, B. W. (2008). Development of parallel scales to measure HIV-related stigma. *AIDS and Behavior*, 12(5), 759-771.