

A SUBSTANTIVE VALIDITY STUDY: AN EVALUATION OF WITHDRAWAL,
BURNOUT, BOREDOM, AND CWB ITEM OVERLAP

BY

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THESIS

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ABSTRACT

The purpose of this study was to investigate overlap between items that are intended to measure withdrawal, burnout, counterproductive work behavior, and job boredom. This substantive validity analysis examined the content of items used to measure boredom, burnout, CWB, and withdrawal. We found that 38% of the items were judged to represent multiple constructs. Most of the overlap existed between boredom and burnout items, followed by withdrawal items but each construct had at least one item that was perceived as confounded. The results indicate a need to revisit and resolve conceptual and operational overlap between the constructs, as the empirical relationships among the constructs are likely affected.

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CHAPTER 1: INTRODUCTION

Organizational constructs such as withdrawal, counterproductive work behavior (CWB), burnout, and job boredom represent important work behavior constructs of interest to both organizational researchers and practitioners (e.g., Bruursema, Kessler, & Spector, 2011; Hanisch & Hulin, 1990, 1991; Harrison, Newman, & Roth, 2006; Maslach, 1981). Indeed, each of these constructs are regarded as important behaviors and experiences of employees who are dissatisfied (e.g., Berry, Ones, & Sackett, 2007; Hulin, 1991) or who do not consider their work sufficiently challenging or stimulating (Bruursema et al., 2011). Literature on these constructs specifically on the workplace behaviors such as CWB and withdrawal have established that not only they are highly correlated but also tend to be conceptually and operationally overlapped (e.g., Carpenter & Berry, 2014; Hanisch & Hulin, 1991; Spector, Fox, Penney, Bruursema, Goh & Kessler, 2006). Carpenter, Newman and Arthur (2011) found that 74% items in the withdrawal construct scale represent CWB, task performance and OCB. This indicates confusion related to the different ways these constructs are defined both conceptually and operationally. Furthermore, while CWB entail behaviors intended to harm the organization (Neuman & Baron, 1997, 2005; Robinson & Bennett, 1995; Robinson & Greenberg, 1998; Spector & Fox, 2002), withdrawal behavior are derived by the intent to avoid (Hanisch & Hulin, 1991; Hulin, 1991).

Although, the overlap between CWB and withdrawal has been established, there is no study that assesses this overlap on an item-level (i.e., operationalization of these constructs). There has been very scant literature on the relationship between withdrawal and burnout even though burnout has been found to predict withdrawal (e.g., Schaufeli, Bakker and Van Rhenen, 2009). Furthermore, a review of the items on the scales (i.e., Maslach & Jackson's [1981] and OLBI [Demerouti, Bakker, Vardakou, & Kantas, [2003] for burnout and Hanisch and Hulin's

[1990] scale for withdrawal) used to measure these constructs suggests potential similarity in terms of item-content. Bruursema et al. (2011) found that job boredom and some facets of CWB are correlated, and suggested that there is a need for studying the concept of job boredom further in order to design better interventions to control CWB.

Though these constructs are regarded as conceptually separate or independent, it unfortunately appears that there is conceptual overlap among the constructs as well as operational overlap. This is indicative of a problem that has implications for both researchers and practitioners. For instance, conceptual overlap between constructs implies problems related to construct contamination, wherein one construct is perceived to have similar definition as another. Consequently, this could be reflected in the way these constructs are operationalized or measured. This can create problems for researchers in terms of misleading them in their research pertaining to the aforementioned constructs. For example, this could result in mounds of published literature on withdrawal whereas in reality, its scale could be measuring burnout, boredom or CWB instead. Therefore, in this study, we intend to incorporate these work experiences of employees to better understand the relationship between withdrawal and other related constructs.

One method to evaluate the extent of this operational overlap between these constructs is to use substantive validity analysis (see Anderson & Gerbing, 1991). Substantive validity is a form of content validity and evaluates the extent to which an item is perceived to represent its intended construct, an unintended construct, or multiple constructs (ambiguous). It is based on the inference about whether the construct operationalization represents the construct domain (Binning & Barrett, 1989). In other words, a substantive validity assessment is a direct test of that inference (Anderson & Gerbing, 1991). It is an empirical evaluation of the content of

construct items and demonstrates the extent to which the content of an item is judged to correspond with the construct it is supposed to represent (e.g., Schriesheim, Powers, Scandura, & Gardiner, 1993). This assessment of the item content, entails evaluating each item based on its match with the construct definition that it represents as well as definitions of the other constructs. In order to determine whether an item adequately represents a construct, it is observed whether its match with the given construct's definition is better than it match with the definition of other, non-targeted constructs. For example, the best match will be determined between withdrawal items and the conceptual definitions not only for withdrawal construct but also for the definitions of burnout, boredom and CWB. This method will be used for all the constructs included in the assessment.

As a result, the results of this study are positioned to shed light not only on whether the noted constructs are measured with overlapping content, but also on the specific items that should be used to assess burnout, boredom, withdrawal, and CWB. The items' substantive validity will determine whether the constructs are contaminated or not, with poor substantive validity indicating that the items used to measure the constructs are contaminated. As such, the results of this study have important implications for the future measurement and theoretical understanding of the constructs. The purpose of the current study is to contribute to clarity about construct contamination between the said constructs. To this effect, we will conduct a comprehensive substantive validity for the evaluation of items from the literature on burnout, withdrawal, CWB and boredom.

1.1 CONCEPTUAL AND OPERATIONAL OVERLAP

1.1.1 Construct Definitions

In order to understand the issue of the overlap between constructs, we must understand their definitions as used in the literature. Burnout is conceptually defined as reflecting exhaustion, cynicism, and reduced professional efficacy, (Maslach & Jackson, 1981) which may cause the employee to procrastinate and lose interest in the job. Boredom refers to a state of low arousal and dissatisfaction because of the lack of a stimulating work environment (Bruursema et al, 2011). Boredom is defined as “a pervasive lack of interest... and difficulty concentrating” (Fisher, 1993, p. 396), “subjective monotony and ...frustration (Hill & Perkins, 1985, p. 235), and “low arousal and dissatisfaction” (Mikulas & Vodanovich, 1993, p. 3). Withdrawal is defined as temporarily or permanently separating oneself from their work role, by reducing or withholding inputs (Harrison & Newman, 2013), whereas, CWB refers to “any intentional behavior on the part of the organizational member viewed Rotundo & Sackett, 2002).

1.1.2 Overlap Between Burnout, Withdrawal, CWB and Boredom

Based on psychodynamic theory, boredom is described as a feeling of withdrawn from the environment (Eastwood, Frischen, Fenske, & Smilek, 2012), wherein, an individual who is bored, experiences a state of displeasure and longs to engage in rewarding activity, but is unable to identify that desire (Fenichel, 1951; Greenson, 1953). This illustrates that boredom and burnout are somewhat similar in terms of their conceptual definition as both reflect reduced interest and stimulation, and disengagement on the job. This conceptual overlap is mirrored operationally, in the items used to measure these constructs. Specifically, “getting mentally sluggish during the day” is used to measure boredom but it seems to reflect burnout as well. As another example, the item “tending to think less at work and doing work almost mechanically” is

intended to measure burnout, but it also reflects an employee who is bored and unstimulated by their work. It is also important to note that such items are aligned with withdrawal and CWB, which are considered likely outcomes of boredom and burnout.

When we review the literature on withdrawal and CWB, we find that withdrawal is highly correlated with CWB and is perceived as a facet of CWB (Gruys & Sackett, 2003; Spector et al., 2006; Carpenter & Berry, 2014). On the other hand, there is another stream of research that projects the idea that CWB is a facet of withdrawal (e.g., Hanisch & Hulin, 1990, 1991). Thus, the suspected conceptual and operational overlap is troubling, particularly given the implications for understanding the empirical relationships among the different variables.

We note that withdrawal behavior appears to operationally overlap with burnout and boredom as well. For example, the burnout item “feeling very energetic” could be categorized as an (perhaps reverse-scored) indicator of withdrawal, while the job boredom item “thinking about doing another task during the day” appears aligned with the definition and exemplar items of withdrawal. Furthermore, withdrawal and CWB scales both include items about daydreaming. Therefore, we aim to find the answer to an essential question: is there conceptual consistency between the items and the construct(s) that they claim to measure? Since the current literature does not have an answer to the question, it is critical to determine the extent to which each construct (withdrawal, burnout, CWB and boredom) is measured with minimally overlapping content.

CHAPTER 2: LITERATURE REVIEW

2.1 COUNTERPRODUCTIVE WORK BEHAVIOR AND WITHDRAWAL

According to Robinson and Bennett (1995), CWB refers to behaviors of employees that harm the interests and violates the norms of the organization and other employees such as supervisors and/or coworkers. A closely related concept is that of withdrawal that has been defined as the disengagement of employee from the work environment and/or tasks given to the employee (e.g., Hanisch & Hulin, 1991). This kind of a behavior is detrimental to the interests of the organization and coworkers because it indirectly reduces profits, productivity and general involvement level of employees in work related tasks and activities (Carpenter & Berry, 2014). Since both CWB and withdrawal behaviors lead to same outcomes for the organization and employees, it becomes difficult to ascertain which specific behavior (i.e., CWB or withdrawal) is responsible for those outcomes. Literature on CWB and withdrawal behavior shows that there has been little consensus on how to define these two behaviors conceptually and operationally. For instance, many researchers have tried to determine whether CWB and withdrawal reflect a single overall construct or are they two distinct constructs (Carpenter & Berry, 2014; Hanisch & Hulin, 1991; Lehman & Simpson, 1992; Marcus & Schuler, 2004; Murphy, 1989, 1990; Rotundo & Spector, 2010; Spector & Fox, 2005). The nomenclature for these constructs is confusing as some researchers perceive withdrawal as the higher-order construct and CWB as a facet of withdrawal (e.g., Hanisch & Hulin, 1991) while others perceive CWB as the higher-order construct and withdrawal as one of its facets (Carpenter & Berry, 2014; Rotundo & Spector, 2010; Spector & Fox, 2005). The problem of construct contamination is evident by looking at the literature on these constructs. This leads to serious problems when it comes to understanding the

concept of CWB and withdrawal and more importantly when they are used to measure employees' behaviors at work.

2.2 BURNOUT AND WITHDRAWAL

Schaufeli, Salanova, Gonzalez-Roma & Bakker (2002) describe burnout as a three-dimensional syndrome of emotional exhaustion, depersonalization and lack of personal accomplishment or professional efficacy. (i.e. the tendency to evaluate one's work with recipients negatively). Exhaustion refers to the draining of emotional resources because of demanding interpersonal contacts with others and is measured by items that tap fatigue but do not make direct reference to other people as the source of one's tiredness. Depersonalization or cynicism defined "as a negative, callous, and cynical attitude towards the recipients of one's care or services" reflects and measures the indifference towards work in general. Professional efficacy refers to one's tendency to evaluate one's work with recipients negatively. Closely related to the idea of burnout is the disengagement from work or withdrawal. According to Schaufeli, Gonzalez-Roma, Peiro, Guerts and Tomas (2005), emotional exhaustion is significantly and positively related to absenteeism. They posit that high levels of emotional exhaustion increases the tendency of the workers to go to work despite their loyalties to customers or colleagues (especially in the healthcare industry). Schaufeli and Enzmann (1998) found a correlation of 0.15 between absenteeism and emotional exhaustion. Furthermore, Schaufeli et al. (2005) also found a strong and positive correlation between job demands and cognitive withdrawal. This suggests that burnout or a facet of burnout could be seen as a predictor of withdrawal. They posit that conceptually, both burnout especially the depersonalization facet of burnout, and cognitive withdrawal are different ways by which individuals can distance themselves from the job in order to cope with high demands.

Schaufeli, Bakker and Van Rhenen (2009) studied the relationship between withdrawal and burnout. They looked at the level of burnout in terms of stressful job demands and how it can affect their absenteeism behavior specifically “voluntary” and “involuntary” absenteeism on the job (Schaufeli et al. 2009, p. 896). Voluntary absenteeism is defined as the number of absences during a particular period on the job, without taking into account the duration of those absence spell. They posit that employees could be using absenteeism as a coping mechanism to deal with the distress caused by job demands (i.e. burnout). Therefore, engaging in absenteeism could be used as a strategy to escape from aversive work circumstances. Job stressors such as work overload (Dwyer & Ganster, 1991), high emotional demands (Bakker, Demerouti, & Schaufeli, 2003b) and burnout levels (Iverson, Olekalns, & Erwin, 1998; Parker & Kulik, 1995) are related to higher levels of absenteeism in employees. This also supports the notion of involuntary absenteeism, which refers to the duration of the absence, regardless of absence frequency. In essence, it suggests that employees who experience involuntary absenteeism are unable to perform work tasks due to the strain process at work, unlike the voluntary absenteeism which is associated with the motivational process of an individual. According to the Job Demands-Resources model, employees suffering from job strain (burnout) are likely to report themselves ill as compared to those who are more engaged in their job tasks. Since engagement is not included in the current study, further discussion on the issue of burnout and engagement framework will be included in Chapter 5 of the text.

2.3 BOREDOM, WITHDRAWAL, BURNOUT AND CWB

As mentioned earlier, boredom pertains to the feeling of dissatisfaction, low arousal, lack of interest, and withdrawing from one’s environment (e.g., Eastwood et al., 2012; Fisher, 1993;

Mikulas & Vodanovich, 1993). Whereas the lack of arousal and interest, and disengagement is also an outcome of the burnout experience at work, disengagement and withdrawing from one's environment can be seen as an outcome of the withdrawal experience as well. We observed that the conceptual definition of boredom entails behaviors and experiences that are mirrored in other constructs such as burnout, withdrawal and CWB. In the examples of items from the boredom scale (Lee, 1986) given earlier, we observe that feeling 'mentally sluggish' while performing job tasks, is not only tapping onto the idea of burnout but can also be seen as an outcome of withdrawal behavior. Specifically, in the light of the discussion on absenteeism facet of withdrawal behavior stated earlier, we can see that both voluntary and involuntary absenteeism could be operationally defined by looking at employees' levels of sluggishness and disinterest in the job tasks. Moreover, since CWB includes all negative work behaviors that are targeted towards the organization, we can see the link between withdrawing from work or disengaging from work (by experiencing sluggishness during the day) and CWB by the negative work outcomes it will render. Similarly, another item from the boredom scale, "thinking about doing another task during the day" can be used to measure lack of interest, withdrawal and disengagement from work as well. In other words, such items on the scale could be used to represent withdrawal, boredom and burnout simultaneously.

Another important potential relationship between job boredom, withdrawal, burnout and CWB is that burnout and boredom can be seen as predictors of withdrawal and CWB. Job boredom, burnout, withdrawal, and CWB reflect constructs existing at different temporal stages for an employee. For example, it is likely that an employee experiences boredom and/or burnout prior to enacting outcomes such as CWB and withdrawal. Since an employee's work experiences (whether good or bad) will be reflected into related work behaviors subsequently, it

is pertinent to understand the complex relationship between them. To this effect, we aim to unravel the potential conceptual overlap between these constructs and their scales used in the extant literature. We intend to determine the extent to which job boredom, burnout, withdrawal and CWB are measured with item-content that could be overlapping across these four domains.

Although previous research has explicated some of the overlap issues pertaining to CWB and withdrawal (Carpenter & Berry, 2014), the evaluation of additional places of overlap are missing from the extant literature. As such, the present study is largely exploratory and examines the following general research question: 1

Research Question 1: To what extent are the items used to measure job boredom, burnout, withdrawal, and CWB perceived to (a) represent the intended construct, (b) represent an unintended construct, and (c) be confounded with several constructs?

2.4 SUBSTANTIVE VALIDITY ASSESSMENT

Substantive validity is a type of content-related validity and the objective of a substantive validity analysis is to evaluate whether content in the item represents the theorized construct, a non-theorized construct, or multiple constructs (e.g., Anderson & Gerbing, 1991). This method relies on the judgment of the participants and the extent to which they deem items on a scale as consistent with the constructs' definitions.

2.4.1 Advantages of Substantive Validity Analysis

As mentioned earlier substantive validity refers to the extent a measure or scale is perceived to represent a construct definition (Anderson & Gerbing, 1991). Therefore, the assessment of the substantive validity reveals items with high substantive validity (i.e., item

content is perceived to represent the theorized/intended construct more than the other constructs), low substantive validity (i.e., item content is perceived to represent other constructs more than the theorized/intended construct) and confounded items in a measure (i.e., item content is perceived to be representing multiple constructs). Although very few studies have used the substantive validity assessment for evaluating existing items (e.g. MacKenzie, Podsakoff & Fetter, 1991; Ferris, Brown, Berry & Lian, 2008), this method is essential for assessing content validity before assessing construct validity of a measure.

Although, in general, confirmatory factor analysis (CFA) is used to conduct research on whether item content represents theorized construct or not, it is not without limitations especially in comparison with substantive validity analysis (Carpenter, 2012). The substantive validity analysis study by Carpenter (2012) provided a comparison of the two methods (i.e., substantive validity and CFA), and described the limitations of CFA for assessing whether an item is judged as representing the theorized construct or not. We found some arguments very relevant to our study as well. Firstly, while CFA is a useful method of examining whether there is shared variance among items used to measure a construct in order to determine whether it is a single factor or not, it does not indicate whether the items of the measure/scale actually represent the construct. Results from a CFA could suggest that the items belong to a single factor based on the shared variance between them but that variance could be due to many other reasons, such as common method bias and/or common source used to assess item representation. Therefore, findings based on CFA alone could be misleading. Secondly, CFA may retain items that simply 'hang together' and may be contaminated or deficient in terms of the content that represents the theorized construct (Carpenter, 2012, p. 31). Furthermore, the author posits that there is no way CFA would provide information about whether the item is judged to represent the construct,

which can be acquired through applying substantive validity analysis techniques. Substantive validity analysis helps point out the items that are low, high and confounded in terms of substantive validity. It is a method to ensure that the empirical evidence acquired through CFA is actually representative of the theorized construct or not. Therefore, it is beneficial in evaluating item content in a measure or scale that may perform poorly in CFA later.

CHAPTER 3: METHOD

The purpose of this study was to conduct a substantive validity assessment of the items used to measure job boredom, burnout, withdrawal, and CWB. This process involved recruiting raters who were presented with items from the four constructs (i.e. burnout, withdrawal, CWB and boredom), and their definitions. They were then asked to rate each item on the extent to which it is consistent with each of the four constructs' definitions, which helps to examine the overlap between items from the measures of the four constructs as well as the examination of the extent to which item content is judged to reflect multiple constructs.

The substantive validity assessment required the following steps: (a) locate clear construct definitions; (b) locate items commonly-used to measure each construct; and (c) conduct the substantive validity assessment. We describe each of these steps below.

3.1 PHASE 1: LOCATION OF DEFINITIONS AND ITEMS

First, we conducted a thorough literature review on the four constructs, using Google Scholar to locate commonly used (i.e., highly-cited) definitions of each construct. Then, we located the items that were intended to represent the construct's definition. The items used in the present study were as follows: (a) 39 burnout items (25 from Maslach & Jackson's [1981] scale and 14 from OLBI [Demerouti et al. 2003]); (b) 9 withdrawal items from Hanisch and Hulin's (1990) scale; (c) 17 job boredom items from Lee's (1986) scale; and (d) 14 CWB items from Bennett and Robinson's (2000) scale . Due to an administrative error, five of the 19 CWB items were omitted from the survey. The construct definitions used in this study were as follows:

(a) Burnout:

Burnout is usually defined as a syndrome of exhaustion, cynicism, and reduced personal

efficacy: Exhaustion refers to feelings of strain, particularly chronic fatigue resulting from overtaxing work. Cynicism refers to an indifferent or a distant attitude towards work in general and the people with whom one works, losing one's interest in work and feeling for work has lost its meaning. Reduced professional efficacy refers to reduced feelings of competence, successful achievement, and accomplishment both in one's job and the organization.

(b) Withdrawal Behavior:

Withdrawal includes behaviors that individuals engage in to avoid their work role or minimize the time spent on their specific work tasks, while retaining their current organizational membership. These behaviors could include being late or absent or taking extended breaks.

(c) Job Boredom:

Job boredom is defined as a state of relatively low arousal and dissatisfaction which is attributed to an inadequately stimulating environment.

(d) Counterproductive work behavior:

Voluntary behavior that violates significant organizational norms and, in so doing, threatens the well-being of the organization, its members, or both. The deviance may be directed or targeted at either (a) the organization or (b) members of the organization.

3.2 PHASE 2: SUBSTANTIVE VALIDITY ANALYSIS

3.2.1 Sample

Participants were recruited from Amazon.com's Mechanical Turk (MTurk) online panel, where participants are paid to complete tasks. There were a number of 102 participants recruited

in the study. Of the 102 participants, 46% were male and had an average age of 34.38 ($SD = 11.04$). Participants were required to be currently employed at least part-time (i.e., at least 20 hours per week) and reported working an average of 40.51 hours per week ($SD = 8.19$).

3.2.2 Procedure

Participants responded to a brief online survey regarding the questionnaires used to measure employees' work experiences. Participants were provided step-by-step task instructions with accompanying examples. The participants were instructed to carefully read the construct definitions (which were always present at the top of the screen) and judge the one category (construct) they felt each item best represented.

3.2.3 Analysis

Anderson and Gerbing (1991) noted that assessing the degree to which each item is perceived to represent its intended construct (i.e., substantive validity) over other, unintended ones, requires computation of the substantive validity coefficient (C_{sv}), which is calculated with the following formula:

$$C_{sv} = \frac{n_c - n_o}{N} \quad (1)$$

where n_c is the number of times the item was sorted into the "correct" category, n_o is the highest number of times the item was assigned to a construct that the item is not used to measure, and N is the total number of individuals who sorted the item. C_{sv} values range from -1.0 to +1.0. C_{sv} values that are greater than +/- .30 are considered to be representing the theorized construct whereas values that lie in between +/- .30 range are considered confounded as representing more than one construct.

CHAPTER 4: RESULTS

The overall results of the substantive validity assessment are presented in Table 1 and visually depicted in Figure 1. Of the 79 total items evaluated, 38% (or 30 items) were perceived to be as confounded, or overlapping with multiple constructs, while 56% (or 44 items) were perceived to represent the intended construct, and 6% (5 items) were perceived to represent an unintended construct.

4.1 WITHDRAWAL ITEMS

Of the nine items used to measure withdrawal, 67% (6 items) were perceived to represent the intended construct. One item “using equipment for personal purpose without permission” was judged to represent CWB, while two items were judged to be confounded with multiple constructs. Specifically, “Doing poor quality work” and “letting others do his/her work” were judged as confounded between withdrawal and CWB.

4.2 BURNOUT ITEMS

Of the 39 burnout items that were evaluated, we found that 38% (15 items) were judged to represent the intended construct. Two items, “tending to think less at work and doing my job almost mechanically” and “finding new and interesting aspects in your work,” were judged to represent job boredom, while 56% (22 items) were judged to be confounded. For example, “feeling very energetic” and “usually feeling energized when you work” were judged as confounded with burnout, boredom, and withdrawal.

4.3 CWB ITEMS

Of the 14 CWB items evaluated, 93% (13 items) were judged to represent the intended construct. The remaining item “complaining about insignificant things at work” was judged as confounded across all four constructs.

4.4 JOB BOREDOM ITEMS

Of the 17 boredom items that were evaluated, 59% (10 items) were judged to represent the intended construct. Two items, “becoming irritable on the job” and “often getting tired on the job,” were judged to represent burnout, while 29% (5 items) were judged to be confounded with multiple constructs. For example, “thinking about doing another task during the day” was judged as confounded between boredom and withdrawal.

4.5 TABLE AND FIGURE

Table 1

Summary of Construct-Level C_{sv} Results

Intended Construct	# of items	Perceived Construct ($p < .05$)				
		Job Boredom	Burnout	CWB	Withdrawal	Confounded
Job Boredom	17	59%	12%	0%	0%	29%
Burnout	39	5%	38%	0%	0%	56%
CWB	14	0%	0%	93%	0%	7%
Withdrawal	9	0%	0%	11%	67%	22%

Note. Confounded refers to items with non-significant C_{sv} values ($p > .05$). Results in boldface reflect the percentage of items perceived to represent the theorized construct ($p < .05$).

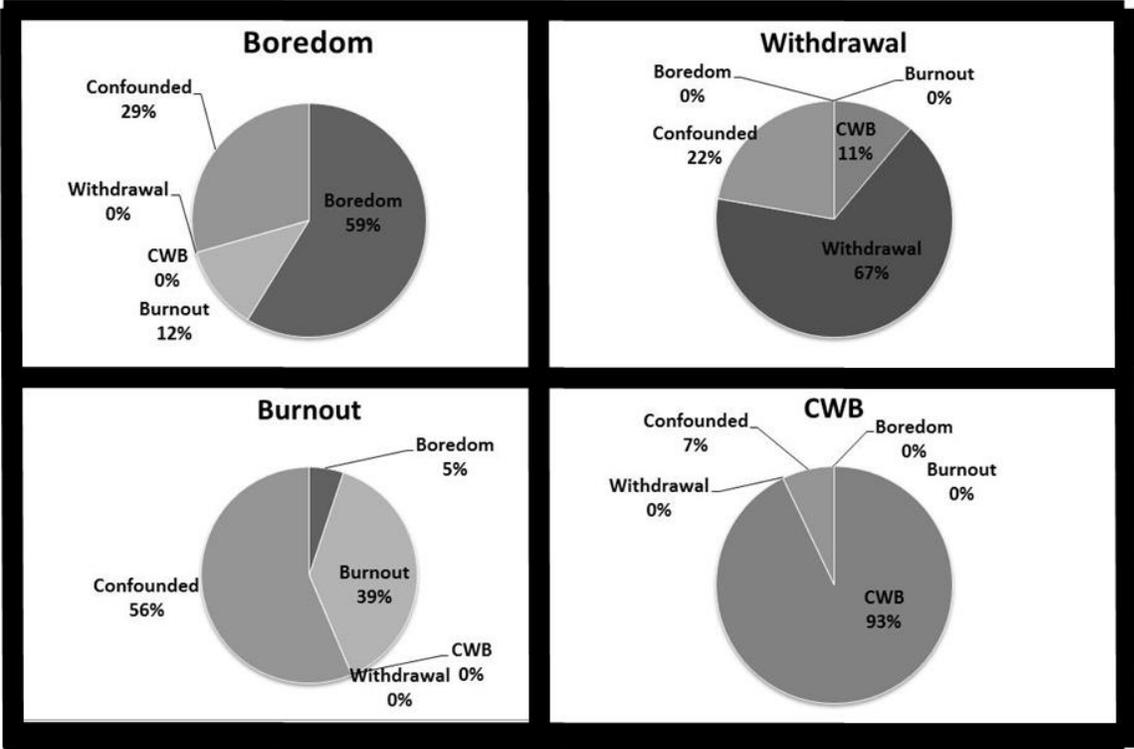


Figure 1. Summary of Results

CHAPTER 5: DISCUSSION

The purpose of the study was to determine the extent to which job burnout, boredom, withdrawal and CWB overlap both conceptually and operationally. We conducted a comprehensive substantive validity for the evaluation of items from the literature on burnout, withdrawal, CWB and boredom, in order to assess the overlapping item-content in each scale for the four constructs. The study empirically evaluated the extent to which the items used to measure each of these four constructs were judged to represent the intended construct or whether they were judged to represent either an unintended or multiple constructs. Given that job burnout, boredom, withdrawal, and CWB are important constructs for understanding employees' experiences and work behavior, it was troubling that some of these concepts appeared to overlap both conceptually and operationally. Our findings demonstrate that while about half of the evaluated items represent the intended construct, the other half of the items were judged to represent an unintended construct (6%) or were judged as confounded with multiple constructs (38%). As such, this study indicates that although burnout, boredom, withdrawal, and CWB are regarded as separate constructs, this separateness is not reflected in their operationalization.

Based on the findings of the present study, it is established that there is a conceptual and operational overlap between job burnout, boredom, withdrawal and CWB. Specifically, we found that the item-content has influenced the instruments used to measure these four constructs. The findings clearly demonstrate that the instruments have been affected by construct clarity issues. However, some constructs were found to have weaker substantive validity than others. For instance, job burnout and boredom items were shown to have poorer substantive validity than withdrawal and CWB. This means that a bigger chunk of the items used to measure job burnout and boredom were judged to represent the non-theorized construct.

Of the 39 items used to measure burnout and 17 items used to measure boredom, only 15 items (38%) and 10 items (59%) were judged to represent theorized constructs respectively. It is interesting to note that even though there are only two items from job burnout and boredom scales each that are judged to represent the unintended construct, there is a big chunk of items from both the scales that are judged to be confounded. A number of 5 items (29%) and 22 items (56%) from job boredom and burnout scales respectively have been found to represent multiple constructs (i.e. confounded). In comparison, 6 items (67%) of the withdrawal scale were judged to represent the withdrawal construct, whereas only one item was judged to represent CWB, and two items were judged to be confounded. Similarly, when we look at the findings for the CWB construct, we see that 14 items (93%) were judged to represent the intended construct, whereas, only one item was found to be confounded.

Using substantive validity analysis, permitted the examination of the item-content of the four constructs in detail. The integrated definitions of these constructs helped us conceptualize the concepts more comprehensively, so as to identify the items that truly match the intended construct. It further helps in clarifying that the items used to operationalize the construct are in part responsible for the observed empirical overlap between the four constructs (e.g., Carpenter, 2012).

5.1 THEORETICAL AND PRACTICAL CONTRIBUTION AND IMPLICATIONS

Our findings that withdrawal, burnout, CWB and boredom are overlapping constructs contribute to literature on these constructs. Management could be misreading the results they get after surveying employees on their levels of withdrawal, burnout and boredom at work. Therefore, there is a dire need to address the issue of construct clarity. Moreover, there is a

misrepresentation of withdrawal and CWB behaviors, and using valid scales is essential in order to understand performance trends and engagement levels of employees at the workplace. The substantive validity provides a comprehensive analysis at the item-level, which has not been used before in extant literature on job burnout, boredom, withdrawal and CWB. So the findings of the study contribute to the literature on construct clarity between these constructs and emphasize the benefits of substantive validity analysis for overcoming problems of construct clarity and overlap in operationalization of constructs.

5.2 FUTURE RESEARCH

Future researchers should aim to develop tests that contain the correct items for measuring these constructs. Developing scales using items that measure theorized constructs would help in studying the relevant relationships adequately, both for the researchers as well as the management. Therefore, another implication is that the management will have to look for scales with high construct validity that truly measure what they claim to measure.

The findings of the study could also be used to further assess the complex relationship patterns between burnout and other constructs. Conservation of Resources (COR) theory (Hobfoll, 1989) has been very popular among researchers to understand the process of burnout in organizational settings (e.g. Hobfoll and Freedy, 1993; Hobfoll and Shirom, 2001; Lee and Ashforth, 1996; Wright and Cropanzano, 1998). Recent research on burnout has also relied on COR to explain the process of burnout as well (e.g. Halbesleben, 2006; Westman, Hobfoll, Chen, Davidson and Laski, 2005). Our findings suggest that future research pertaining to COR and burnout should also include other constructs like withdrawal and boredom so that new potential relationships could be explored.

Moreover, Job Demands-Resource model explain the burnout and work-engagement

framework (Schaufeli et al. 2009). Burnout is defined as a negative work-related state, in terms of emotional exhaustion, cynicism and lack of professional efficacy (Maslach, Schaufeli, & Leiter, 2001). Work engagement is defined as a positive work-related state marked by vigor, dedication and absorption (Bakker & Schaufeli, 2008; Schaufeli & Salanova, 2007b). Though these two concepts are distinct, they are negatively correlated concepts and are a function of two psychological dimensions, that is, energy and identification with one's work (Gonzalez-Roma, Schaufeli, Bakker, & Lloret, 2006). According to the JD-R model, there are two processes that evoke burnout and work engagement states respectively. It explains the strain process, that involves high job demands and thus deplete employees' mental energy and in turn causes burnout and "involuntary" absenteeism (discussed earlier; Schaufeli et al. 2009, p. 896). The second process is the motivational process which involves job resources such as autonomy, social support, opportunities for learning and performance feedback that nurture motivational level of employees, resulting in increase in work engagement and a decrease in "voluntary" absenteeism (Schaufeli et al. 2009, p. 896). The above discussion highlights a new dimension, work engagement, to understand its relationship with burnout and absenteeism or withdrawal. Therefore, future research in this area should include work engagement as an essential construct to be studied alongwith job burnout, withdrawal, boredom and CWB.

We recommend that future researchers should conduct a meta-analytic study on the relationships between withdrawal, CWB, job burnout, boredom and work engagement to further investigate the construct clarity issue more comprehensively. The meta-analytic study should also include some common correlates of the construct to better establish a nomological network of the constructs and their common correlates.

REFERENCES

- Anderson, J. C., & Gerbing, D. W. (1991). Predicting the performance of measures in a confirmatory factor analysis with a pretest assessment of their substantive validities. *Journal of Applied Psychology, 76*, 732-740.
- Bennett, R. J., & Robin Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2003). Dual processes at work in a call centre: An application of the job demands–resources model. *European Journal of Work and Organizational Psychology, 12*, 393–417.
- Bennet, R.J., & Robinson, S. L. (2000). Development of a measure of workplace deviance. *Journal of Applied Psychology, 85*, 349-360.
- Berry, C. M., Ones, D. S., & Sackett, P. R. (2007). Interpersonal deviance, organizational deviance, and their common correlates: A review and meta-analysis. *Journal of Applied Psychology, 92*, 410-424.
- Bruursema, Kessler & Spector, (2011). Bored employees misbehaving: The relationship between boredom and counterproductive work behaviors. *Work and Stress, 25*, 93-107.
- Carpenter, Nichelle, C. (2012). *The substantive validity of work performance measures: Implications for relationships among work behavior dimensions and construct related validity*. (Doctoral dissertation). Texas A & M. Texas, USA.

Carpenter, N. C., & Berry, C. M. (2014). Are counterproductive work behavior and withdrawal empirically distinct? A meta-analytic investigation. *Journal of Management*. doi: 0149206314544743.

Demerouti, E., Bakker, A. B., Vardakou, I., & Kantas, A. (2003). The convergent validity of two burnout instruments: A multitrait-multimethod analysis. *European Journal of Psychological Assessment*, 19, 12–23.

*Eastwood, J. D., Frischen, A., Fenske, M. J., & Smilek, D. (2012). The unengaged mind: Defining boredom in terms of attention. *Perspectives on Psychological Science*, 7, 482-495.

Dwyer, D. J., & Ganster, D. C. (1991). The effect of job demands and control on employee attendance and satisfaction. *Journal of Applied Psychology*, 86, 499–512.

Ferris, D. L., Brown, D. J., Berry, J. W., & Lian, H. (2008). The development and validation of the Workplace Ostracism Scale. *Journal of Applied Psychology*, 93, 1348-1366

Fenichel, O. (1951). On the psychology of boredom, in R. Rapaport (Ed.), *Organization and Pathology of Thought* (pp. 349-361). New York: Columbia University Press.

*Fisher, C. D. (1993). Boredom at work: A neglected concept. *Human Relations*, 46, 395-417.

Greenson, R. R. (1953). On boredom. *Journal of the American Psychoanalytic Association*, 1, 7-21.

Gruys, M. L., & Sackett, P. R. (2003). Investigating the dimensionality of counterproductive work behavior. *International Journal of Selection and Assessment, 11*, 30-42.

Halbesleben, J. R. B. (2006). Sources of social support and burnout: A meta-analytic test of the conservation of resources model. *Journal of Applied Psychology, 91*, 1134-1145.

Hanisch, K. A., & Hulin, C. L. (1990). Job attitudes and organizational withdrawal: An examination of retirement and other voluntary withdrawal behaviors. *Journal of Vocational Behavior, 37*, 60-78.

Hanisch, K. A., & Hulin, C. L. (1991). General attitudes and organizational withdrawal: An evaluation of a causal model. *Journal of Vocational Behavior, 39*, 110-128.

Harrison D. A., & Newman, D. A. (2013). Absence, lateness, turnover, and retirement: Narrow and broad understanding of withdrawal and behavioral engagement. *Handbook of Psychology: Industrial and Organizational Psychology, 262-291*.

Harrison, D. A., Newman, D. A., & Roth, P. L. (2006). How important are job attitudes? Meta-analytic comparisons of integrative behavioral outcomes and time sequences. *Academy of Management Journal, 49*, 305-325.

Hemphill, J. K., & Westie, C. M. (1950). The measurement of group dimensions. *The Journal of Psychology*, 29, 325-342.

Hinkin, T. R., & Tracey, J. B. (1999). An analysis of variance approach to content validation. *Organizational Research Methods*, 2, 175-186.

*Hill, A. B., & Perkins, R. E. (1985). Towards a model of boredom. *The British Psychological Society*, 76, 235-240.

Hobfoll, S. E. (1998). *Stress, Culture and Community. The psychology and philosophy of stress*. New York: Plenum.

Hobfoll, S. E., and Freedy, J. (1993). Conservation of resources: A general stress theory applied to burnout, in W. B. Schaufeli, C. Maslach and T. Marek (Eds.), *Professional burnout: Recent Developments in Theory and Practice* (pp. 115-133). Washington, D.C.: Taylor and Francis.

Hobfoll, S. E., and Shirom, A. (2001). Conservation of Resources Theory, in R. Golembiewski (Ed.), *Handbook of Organizational Behavior* (pp. 57-80). New York, NY: Dekker.

Iverson, I. D., Olekalns, M., & Erwin, P. J. (1998). Affectivity, organizational stressors, and absenteeism: A causal model of burnout and its consequences. *Journal of Vocational*

Behavior, 52, 1-23.

Lawshe, C. H. (1975). A quantitative approach to content validity. *Personnel Psychology*, 28, 563-575.

Lee T. W. 1986, toward the development and validation of a measure of job boredom. *Manhattan College Journal of Business*, 15, 22-28.

Lee, R. T., and Ashforth, B. E. (1996). A meta-analytic examination of the correlates of the three dimensions of job burnout. *Journal of Applied Psychology*, 81, 123-133.

Lehman, W. E. K., & Simpson, D. D. (1992). Employee substance use and on-the-job behaviors. *Journal of Applied Psychology*, 77, 309-321.

Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Occupational Behaviour*, 2, 99-113.

Marcus, B., & Schuler, H. (2004). Antecedents of counterproductive behavior at work: A general perspective. *Journal of Applied Psychology*, 89, 647-660.

*Mikulas, W. L., & Vodanovich, S. J. (1993). The essence of boredom. *Psychological Record*, 43, 3-12.

Murphy, K. R. (1989). Dimensions of job performance. In R. Dillon & J. Pellingrino (Eds.), *Testing: Applied and theoretical perspectives* (pp.218-247). New York: Praeger.

Parker, J. A., & Kulik, J. A. (1995). Burnout, self- and supervisor-rated job performance, and absenteeism among nurses. *Journal of Behavioral Medicine*, 52, 581–599.

Robinson, S. L., & Bennett, R. J. (1995). A typology of deviant workplace behaviors: A multidimensional scaling study. *Academy of Management Journal*, 38, 555-572.

Rotundo, M., & Sackett, P. R. (2002). The relative importance of task, citizenship, and counterproductive performance to global ratings of job performance: A policy capturing approach. *Journal of Applied Psychology*, 87, 66-80.

Rotundo, M., & Spector, P. E. (2010). Counterproductive work behavior and withdrawal. In J. L. Farr, & N. T. Tippins (Eds.), *Handbook of Employee Selection* (pp.489-511). New York, NY, US: Routledge/Taylor & Francis Group.

Schaufeli, W.B., Bakker, A. B., & Van Rhenen, W. (2009). How changes in job demands and resources predict burnout, work engagement, and sickness absenteeism. *Journal of Organizational Behavior*, 30, 893–917.

Schaufeli, W.B., Gonzalez-Roma, V., Peiro, J.M., Guerts, S. A. E, & Tomas, I. (2005).

Withdrawal and burnout in healthcare: on the mediating role of lack of reciprocity. In Korunka, C. ; Hoffman, P. (Eds.). *Change and quality in human service work: dedicated to the work of Andre Bussing*, 205-226.

Schaufeli, W. B., & Enzmann, D. (1998). *The burnout companion to study and research: A critical analysis*. London: Taylor & Francis.

Schaufeli, W.B., Salanova, M., Gonzalez-Roma, V., & Bakker, A.B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3 (1), 71-92.

Schriesheim, C. A., Powers, K. J., Scandura, T. A., & Gardiner, C. C. (1993). Improving construct measurement in management research: Comments and a quantitative approach for assessing the theoretical content adequacy of paper-and-pencil survey-type instruments. *Journal of Management Special Issue: Yearly Review of Management*, 19, 385-417.

Spector, P. E., & Fox, S. (2005). The stressor-emotion model of counterproductive work behavior. In S. Fox, & P. E. Spector (Eds.), *Counterproductive work behavior: Investigations of actors and targets* (pp. 151-174). Washington, DC, US: American Psychological Association.

Spector, P. E., Fox, S., Penney, L. M., Bruursema, K., Goh, A., & Kessler, S. (2006). The dimensionality of counterproductivity: Are all counterproductive behaviors created equal? *Journal of Vocational Behavior, 68*, 446-460.

Westman, M., Hobfoll, S. E., Chen, S., Davidson, O. B., and Laski, S. (2005). Organizational stress through the lens of conservation of resources theory, in P. L. Perrewe and D. Ganster (Eds.), *Research in Organizational Stress and Well-being* (Vol. 4, pp. 167-220). Greenwich, CN: JAI Press.

Wright, T. A., and Cropanzano, R. (1998). Emotional exhaustion as a predictor of job performance and voluntary turnover. *Journal of Applied Psychology, 83*, 486-493.

APPENDIX A-ADDITIONAL TABLE

Table 2
Confounded construct items and their C_{sv} Values

Intended Construct	Items	Perceived Construct	C_{sv}	Intended Construct	Items	Perceived Construct	C_{sv}
Boredom	Thinking about doing another task during the day	Boredom Withdrawal	0.29	Burnout	Feeling very energetic	Burnout Boredom Withdrawal	-0.02
Withdrawal	Letting others do his/her work	Withdrawal CWB	0.27	Burnout	Usually feeling energized when you work	Burnout Boredom	-0.03
Burnout	Feeling that you don't really care what happens to some customers	Burnout Withdrawal CWB	0.25	Burnout	Tolerating the pressure of the work very well	Burnout Boredom	-0.04
CWB	Complaining about insignificant things at work	Withdrawal CWB	0.24	Burnout	Accomplishing many worthwhile things on this job	Burnout Boredom	-0.05
Burnout	Feeling uncomfortable about the way you have treated some customers	Burnout Withdrawal CWB	0.22	Burnout	Feeling that you treat some customers as if they were impersonal 'objects'	Burnout Boredom Withdrawal CWB	-0.08
Burnout	Feeling exhilarated after working closely with your customers	Burnout Boredom	0.21	Burnout	Finding your work to be a positive challenge	Burnout Boredom	-0.09

Table 2
(continued...)

Intended Construct	Items	Perceived Construct	C_{sv}	Intended Construct	Items	Perceived Construct	C_{sv}
Burnout	Feeling that you have become more callous toward people since you took the job	Burnout Boredom Withdrawal CWB	0.19	Burnout	Dealing very effectively with the problems of your customers	Burnout Boredom	-0.13
Burnout	Feeling that your customers blame you for some of their problems	Burnout Withdrawal CWB	0.17	Burnout	Feeling that you're positively influencing other people's lives through your work	Burnout Boredom	-0.13
			0.15	Boredom	Getting drowsy on the job		-0.14
Burnout	Feeling similar to your customers in many ways	Burnout Boredom				Burnout Boredom	
Burnout	Feeling personally involved with your customers' problems	Burnout Boredom Withdrawal CWB	0.13	Burnout	Dealing with emotional problems very calmly in your work	Burnout Boredom Withdrawal	-0.16

Table 2
(continued...)

Intended Construct	Items	Perceived Construct	C_{sv}	Intended Construct	Items	Perceived Construct	C_{sv}
Boredom	Liking the work you do	Burnout Boredom Withdrawal	0.11	Burnout	Being able to create a relaxed atmosphere with your customers easily	Burnout Boredom	-0.17
Burnout	Having enough energy for leisure activities after working	Burnout Boredom Withdrawal	0.06	Burnout	Usually managing the amount of your work well	Burnout Boredom	-0.22
Withdrawal	Doing poor quality work	Withdrawal CWB	0.06	Burnout	Being able to easily understand how your customers feel about things	Burnout Boredom Withdrawal	-0.27
Boredom	Getting apathetic on the job	Burnout Boredom Withdrawal	-0.02	Burnout	Talking more and more often about your work in a negative way	CWB Burnout Withdrawal	-0.28

Note. 28 Confounded items based on C_{sv} Values $< +/- .30$ are listed in the table. The perceived constructs are based on the majority responses for that particular construct.