The Impact of Perfectionism on Work Attitudes and Behavior

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A dissertation submitted to the Graduate Faculty in Industrial and Organizational Psychology in partial fulfillment of the requirements for the degree of Doctor of Philosophy, The City University of New York

2009

This manuscript has been read and accepted for the Graduate Faculty in Industrial and Organizational Psychology in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy

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Abstract

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The two studies presented represent one of the first systematic investigations of perfectionism in the workplace since Burns (1980). In study one, 196 employed students served as participants. Perfectionism was negatively related to facets of job satisfaction and positively related to constructs indicative of negative experiences at work including facets of work strain, burnout, and personal alienation. The second study, which used 52 management consultants as participants, found perfectionism positively related to supervisory-rated OCB conscientiousness. This result was interpreted as illustrating that, rather than serving a satisfaction-reciprocation function, OCB serves an anxiety-reduction function for perfectionists allowing them to compensate for perceived "failures" on the job. Implications for the organizational psychology, perfectionism, and regulatory focus literature are discussed.

Acknowledgements

To my children, Charlotte and Jacob, who teach me daily that real perfection is being who you truly are, and that the real effort in life is remembering that person.

To my father, Francis Xavier Monck, who did not live to see me reach the end of this road but whose kindness and generosity of spirit sustains me in all of my endeavors, even in his absence.

And to my wife, Amy Monck, for her support and love - this work is respectfully dedicated.

Table of Contents

List of Tables

The Impact of Perfectionism on Work Attitudes and Behavior

To the lay person the term perfectionism might conjure up images of the stereotypical successful executive or academic who is highly motivated, achieves excellence in many of his or her endeavors, and derives satisfaction from his or her efforts. This notion, however, is vastly different from the reality experienced by the true perfectionist. The true perfectionist is one who demands from themselves a level of perfection in all aspects of their life. They are distinguishable from the executive and academic described above in that they do not have a healthy pursuit of excellence but rather are driven by an insatiable and compulsive need to be perfect at all times (Burns, 1980). Moreover, the perfectionist is not motivated by a desire to obtain legitimate success but instead by a crushing fear of failure (Hamachek, 1978). This leads to a situation in which the perfectionist is incapable of experiencing true enjoyment form his or her successes. If he or she achieves the gold standard of perfection in one instance he or she has only avoided failure and not actually gained anything. In such a situation the best the perfectionist can hope for is a momentary respite from anxiety associated with task completion, never truly knowing the joy and satisfaction of a job well done. This assertion is supported by the work of Higgins, Shah, and Friedman (1997) who found that individuals motivated to avoid failure rather than approach success experience emotions in response to goal attainment along a quiescence continuum; experiencing anxiety during task failure and quiescence during task success.

While there is a growing body of evidence in the literature that perfectionism is a multidimensional construct comprised of both adaptive and maladaptive components (Hamachek, 1978), in the current investigation this is viewed as a co-opting of the construct. One

assumption of the current investigation is that the present measures of maladaptive perfectionism (Slaney, Mobley, Trippi, Ashby, and Johnson, 1996) more closely mirror the theoretical genesis of the construct as originally conceptualized (Freud, 1960; Horney, 1950; Adler, 1956) than measures of adaptive perfectionism which tend to simply measure high personal standards of performance and organization (Frost, Martin, Lahart, and Rosenblate, 1990; Hewitt & Flett, 1991). As a result, in this investigation the term perfectionism will be reserved for the maladaptive version of the concept. Moreover, special care was taken to explicate the precise operationalization of the construct used in all of the studies discussed herein.

The present investigation sought to examine how perfectionists experience the work environment. To date this will be one of the first systematic studies of perfectionism in the workplace. Two studies are presented. The first was designed to describe the emotional experience of the perfectionist in the work environment by identifying several important work-related correlates of perfectionism. Specifically, it is hypothesized that perfectionism will be related to a host of negative affective responses to the work environment including work stress, job dissatisfaction and burnout. It is theorized that the perfectionist will perceive the work environment as inherently coercive. The perfectionist will perceive that he or she must adhere to exacting standards of performance and concurrently feel that he or she will be unable to achieve these standards. These two simultaneous cognitions, that one must be perfect and that one lacks the ability, resources, etc. to achieve perfection, will lead the perfectionist to experience a high degree of stress on the job. In addition because the perfectionist is not able to derive satisfaction from his or her daily activities due to a preoccupation with impossible standards of performance the perfectionist will also experience low levels of job satisfaction. Finally, the perfectionist

will also exhibit high levels of burnout characterized by emotional exhaustion, disengagement from his or her job.

The second study presented seeks to answer the question: how does perfectionism impact work behavior? This question was raised vis a vis organizational citizenship behavior, a form of spontaneous, extra-role work behavior considered to be critical to organization functioning (Organ, 1988; Karambayya, 1990; Podsakoff, Ahearne, and MacKenzie, 1997). It is hypothesized that both the perfectionists and the non-perfectionist will engage in OCB, but for very different reasons. Past research has indicated that employees engage in OCB to reciprocate for job satisfaction (Bateman & Organ, 1983; Moorman 1993) and perceptions of organizational fairness (Moorman, Niehoff, and Organ, 1993; Skarlicki & Latham, 1996). It is hypothesized that this will be the case for non-perfectionists in this study. However a different model is proposed for perfectionists. Research clearly indicates that part and parcel of perfectionism is a desire to achieve perfection regardless of the domain (Burns, 1980; Pacht, 1984). Consequently it is assumed that perfectionists will desire to be the perfect worker. However, because another critical component of perfectionism is the belief that one is unable to meet their standards of performance (Flett, Hewitt, Blankstein, and Gray, 1998) perfectionists will also likely perceive that they are not achieving this level of perfection at work. It is hypothesized that perfectionists will seek to "make up" for their perceived deficiency by engaging in OCB. This pattern will exist regardless of level of satisfaction on the job.

It is also hypothesized that perfectionists will be attentive to the impressions that they convey on the job and engage in impression management. It is posited that the perfectionist will feel compelled to wear a mask of perfection and desire to be perceived by others in the work environment as perfect. Moreover, it is hypothesized that impression management will covary

with OCB – as both are manifestations of the perfectionist desire to appear perfect. Thus, in terms of work behavior we hypothesize that perfectionism will be related to impression management behaviors designed to enhance their standing in the view of relevant others and OCB, and that among perfectionist these variables will be correlated whereas among non-perfectionist they will not. It is further hypothesized that the dissonance associated with feeling one must act "the good soldier" when one is dissatisfied will lead to manifestations of somatic complaints and alienation at work.

Several studies have found significant relationships between both perfectionism and measures of distress at work (e.g., dissatisfaction, stress, and burnout) and trait negative affectivity, a tendency to experience negative emotional states and interpret events in a negative light (Brief, Burke, George, Robinson, and Webster, 1988; Connolly & Viswesvaran, 2000; Flett et al., 1998). For perfectionism to be a meaningful personality characteristic in the work environment it must predict work attitudes/emotional experience over and above what may be accounted for by the more global negative affectivity trait. That is, it must account for unique variance in the dependent variables of interest. As a result negative affectivity will be measured in both studies. In this way the influence of negative affectivity can be controlled for statistically. It is hypothesized that the zero-order correlations and interactions hypothesized will remain significant after the influence of negative affectivity is controlled for.

The following dissertation is organized as follows. First, the perfectionism construct is explicated and relevant literature is reviewed. Attention is paid to both the theoretical genesis of the perfectionism construct, construct measurement, and empirical research in both clinical and non-clinical settings. Then the hypotheses for the first study are presented and the relevant literature regarding the variables of interest is reviewed. Next, the research methodology which

was followed by the investigator is explained. Finally the results of the statistical analyses used to test the experimental hypotheses are presented and their implications addressed in the discussion section.

The hypotheses for the second study are presented in turn. Because of its importance as a criterion variable in the I/O psychology literature the OCB literature is presented in some detail including a discussion of current thinking on the contextual antecedents of OCB, evidence of dispositional antecedents of OCB, and organizational consequences of the construct. As was done for the first study, the research methodology for the second study is clearly articulated, the results presented and their implications attended to in the discussion.

At the conclusion of the overall paper a general discussion is presented which integrates the findings of both studies and speaks to their ultimate value in expanding our understanding of both the perfectionism construct, as well as job satisfaction, work stress, OCB, and fear of failure. Finally, potential directions for future research are discussed.

Perfectionism Literature Review

Theoretical Framework

To fully understand perfectionism it is helpful to examine the psychoanalytic history of the construct. Freud (1960) postulated that as the individual develops he or she resolves conflicts with his or her parental figures by internalizing their standards, expectations, and role requirements. The result of this internalization is the creation of an ego ideal or super-ego within the individual. This ego ideal serves as the internal benchmark of standards of conduct for the individual. Freud (1960) writes:

> As the child grows up, the role of the father…remains powerful in the ego ideal and continues in the form of conscience, to exercise moral censorship. The tension between the demands of the conscience and actual performances of the ego is experienced as a sense of guilt. (p. 33)

As stated above, Freud believed that the ego ideal not only provided the moral standards of the individual, it also exerted tremendous coercive control over the ego and thus the individual. In normal individuals the ego is strong enough to balance the demands of the ego ideal with other motivations. In these cases deviation from the standards of the ego-ideal results in guilt, but guilt that is appropriate and proportionate. However, Freud noticed that many individuals seemed to exist in a state of constant and overwhelming guilt due to their inability to meet the extremely rigid standards of conduct dictated by the ego ideal. In these cases the individual was consumed with a desire to meet the standards set forth by the ego ideal and yet, due to his or her inability to live up to these expectations, lived in a state of perpetual guilt and neurosis. The situation is analogous to the Greek myth of Tantalous who is trapped in place

starving and thirsty. However, the fruit on the trees above him are just out of his reach, and the water from the spring in which he stands drains away every time he stoops to drink from it.

The seeds sown by Freud regarding the neurotic and maladaptive quest for perfection would blossom some decades later in the works of Karen Horney (1950). Based on her clinical experience with psychoanalysis, Horney believed that all human development tends toward self-realization of one's "true self." This true self being the fulfillment of all of one's potential, and a state in which the individual feels fulfilled and at peace. However, Horney postulated that in many instances this development is hindered by maladaptive forces during childhood resulting in a failure to become one's true self. This failure is experienced by the individual as anxiety and feelings of inferiority. To combat this anxiety, Horney believed, the individual creates an idealized image of him or herself. This idealized image has none of the faults of the individual and is "perfect" in all ways. This ideal self then serves to alleviate the feelings of inferiority by elevating the individual above the people in the external world whom he or she finds threatening. The individual's primary focus becomes the achievement of this idealized self.

Horney catalogued several features of this neurotic drive toward the achievement of perfection that clearly distinguish it from normal adaptive striving for excellence. First, the need for perfection becomes a requirement not a desire. Here the person is motivated to achieve a level of performance or morality not to accomplish some desired goal but to avoid a perceived danger. Thus, it is not a case of the individual thinking: "I want to do X" it is rather "I must do X or else something bad will happen." Thus, for the neurotic perfectionist the quest for excellence is one of anxiety not happiness at the prospect of success. Horney also noticed that in this population the quest for perfection was indiscriminate. The perfectionist desired perfection in all spheres of his or her life. He or she simultaneously wanted to be the best, father/mother,

husband/wife, worker, athlete, student, etc. The actual content of the achievement of perfection was irrelevant. Rather, the state of perfection as a concept is the motivator. Because only through perfection can one be safe from anxiety. Finally, Horney found that in many cases the neurotic's quest for perfection was insatiable. The individuals could never be perfect enough. Consequently they experienced depression and anxiety around their inability to achieve perfection and obtain the safety and freedom from anxiety they craved.

Burns (1980) was the first to investigate the specific construct of perfectionism and catalog several of its negative consequences. First, Burns cited several unpublished studies which demonstrate that the perfectionist may actually pay for his or her dogged pursuit of perfection with *lower* levels of performance compared to non-perfectionists. In a study of successful insurance agents, Burns found that perfectionism was unrelated to financial performance. In addition, those perfectionists who linked self-worth to financial success (a common perfectionist belief) made less money, on average, than non-perfectionists sampled. Additionally, Burns cites a relevant study that compared the thought processes of elite male gymnasts to their less accomplished counterparts. It was found that the elite group underemphasized the importance of past failures, while the less accomplished group tended to ruminate over past failures and experience great distress and self-doubt prior to competitions. Taken together these studies dispel the thinking that the perfectionist is achieving higher levels of performance as a result of their commitment to perfection.

Yet another negative consequence of perfectionism is a high degree of stress and anxiety. Perfectionists often react with panic, anxiety, and depression when they fail to meet their goals. The perfectionist associates goal achievement with self-worth. When he or she fails to achieve the extraordinarily high goals that they have set, they feel that they have demonstrated their lack

of self-worth and they react negatively. This pattern of reaction to perceived failure often leads the perfectionist to withdraw from environments that he or she perceives as threatening. Burns sees the fact that many high achieving perfectionist students drop out of school as evidence of perfectionist withdrawal.

Finally, the perfectionist may also experience poor personal relationships and loneliness. Just as the perfectionist must be perfect in work and school settings, he or she is also motivated to be perfect in personal settings. These irrational desires cause perfectionists to fear rejection and react negatively to criticism. This pattern of behavior leads to a situation is which the perfectionist shuns personal contact and may experience a sense of loneliness and alienation.

At the core, the conundrum of the perfectionist lies in the fact that the level of perfection he or she requires is, by definition, impossible to achieve the perfectionist is destined to experience anxiety and frustration as he or she continually falls short of perfection. Pacht (1984) writes:

> As a group perfectionists have established a "no-win scenario." Their goals are so unrealistically high that they cannot possibly succeed. They are constantly frustrated by their need to achieve and their failure to do so. They see themselves as unlovable and lonely. (p.387)

The fact that the perfectionist ties much of his or her sense of self-worth to outward achievements coupled with the constant subjective experience of failure has obvious implications for the psychological well-being of the perfectionist and goes a long way to explaining the cluster of negative experiences described by Burns and others who have long noted the plight of the perfectionist in clinical contexts.

Although many early psychologists made note of the negative aspects of perfectionism, the notion that the adoption of, and adherence to high standards of performance is not, in itself, always maladaptive for the individual has persisted in the minds of many. This posed a dilemma: how could the striving for personal perfection be a bad thing associated with the host of neuroses identified by clinicians as being part and parcel of perfectionism? Why do some people have high standards of performance and not experience the crushing sense of inferiority and negative emotional and behavioral consequences experienced by perfectionists. Were these former individuals truly perfectionists? If so, are there instances in which perfectionism is beneficial?

Hamachek (1978) was the first psychologist to attempt to address the idea that perfectionism is not a universally negative trait. Through his work with clients in a clinical setting, Hamachek identified two types of perfectionism: so-called "normal" perfectionism and "neurotic" perfectionism. According to this typology, normal perfectionism is characterized by an adoption of high personal standards of performance. The normal perfectionist wants to be perfect and experiences pleasure at a job well done when he or she achieves at a high level. Importantly, however, the normal perfectionist allows him or herself to be imperfect as the situation permits. In contrast, the neurotic perfectionist feels that he or she must be perfect in all situations. Moreover, the neurotic perfectionist feels compelled to achieve at a standard of performance that is impossible to achieve. This results in the neurotic perfectionist constantly experiencing a sense of deficiency. It also makes it impossible for the neurotic perfectionist to experience genuine satisfaction with anything he or she does. The neurotic perfectionist is plagued by feelings that he or she always could have done better.

The traditional theoretical roots of perfectionism identified it as a form of fear of failure (Burns, 1980). Congruent with Hamachek's description of neurotic perfectionism these theorists asserted that the necessary component of perfectionism was the perception that one is performing at a level below what he or she should and the subsequent negative affective and motivational consequences associated with this perception (Blatt, 1995; Slaney et al., 1996). In this view the high standards of the perfectionist are a byproduct of the personality traits that are central to perfectionism – a fear of failure and feelings of inferiority – not the trait itself. Although not explicitly stated by any of the theorists it seems possible that a person could desire perfection for themselves in all things and experience fear of failure and inferiority even when one does not hold especially high personal standards or at least, expect or attempt to attain them. Indeed, due to instances of withdrawal and procrastination perfectionism is often associated with low or substandard performance (Burns, 1980; Ellis, 2002, Ferrari, 1992). The thinking for why perfectionists engage in these counterproductive behaviors is that the fear of not being perfect, not the high standards themselves, causes the individual to avoid the attempt all together.

The often cited article by Hamachek however attended to the semantic aspects of the construct rather than the psychological characteristics and fostered the idea that perfectionism is sometimes a good thing. It is an assumption of this paper that this represents a co-opting of the construct that has led to subsequent confusion regarding the nature and measurement of perfectionism. In the view of the current investigator the perfectionism construct as originally conceptualized is inherently maladaptive, a view which is still held by some psychologists (Blatt, 1995). Any attempt to interpret the perfectionism construct as positive is describing something other than perfectionism. Hamachek himself describes so-called normal perfectionist as those "whom we could just as easily refer to as skilled artists or careful worker, or masters of their

craft." (p. 27). Obviously the above statement does not fit well with the traditional picture of the perfectionist as the brooding, tortured, procrastinator who is unable to obtain enjoyment from what he or she does. As a result in the current investigation the perfectionism construct will be defined as inherently maladaptive and a measurement strategy consistent with this view will be adopted.

Construct Measurement

One area of the perfectionism literature which is particularly illustrative of the evolution of the construct is the development of psychometric measures of perfectionism. As many of the researchers developing scales of perfectionism did so by deductively generating items it is possible to ascertain the assumptions being made about the nature of the construct. In addition, as the measures become part of the literature and are used by other researchers the construct becomes reflective of the assumption behind the measures being employed.

Burns (1980) developed the first measure of perfectionism. The Burns Perfectionism scale (BPS) was derived from the Dysfunctional Attitude Scale (DAS), a measure of several self-defeating attitudes typically seen in people suffering from anxiety and depression. While Burns asserted that it is not pathological to set high standards and expectations for oneself, per se; he distinguished between the setting of high personal standards in a healthy and adaptive manner and perfectionism. For Burns, perfectionism was inherently pathological and destructive. As a result the BPS is essentially a unitary measure of maladaptive aspects of perfectionistic attitudes. For example, items on the BPS measure whether the respondent ties his or her self esteem to the attainment of unrealistic goals ("If I don't set the highest standards for myself I am likely to end up a second-rate person"), engages in inflexible thinking ("If I cannot do something really well

there is little point in doing it at all"), and experiences negative affect in connection with the failure to attain perfection ("I should be upset if I make a mistake").

The BPS is a 10-item measure that requires the respondent to describe his or her level of agreement with each item along a 5-point continuum ("I agree very much" to "I disagree very much"). The measure results in a score between -20 and +20 with higher scores indicating a tendency toward perfectionism and negative scores being indicative of a "non-perfectionist mindset." Hewitt and Dyck (1986) conducted some of the earliest research using the BPS. They found that the measure had good test-retest reliability (r=.63) at a two-month interval. Moreover, the Hewitt and Dyck study provided modest evidence of the construct validity of the BPS with scores on the measure being positively correlated with identification with perfectionistic adjectives. Hewitt, Mittlestaedt, and Wollert (1989) also provided support for both the reliability and validity of the BPS. First, the researchers found both convergent and divergent validity evidence. Convergent validity was established in that the BPS was found to be highly and positively correlated with two other measures of constructs similar to perfectionism: the High Standards subscale of the Attitudes Toward Self Scale (Carver & Ganellen, 1983) and the High Self-Expectations subscale of the IBT (Jones, 1968). In addition, smaller but significant correlations were found between the BPS and related but not identical constructs: self-blame and depression, relationships which Hewitt and Dyck interpreted as demonstrating divergent validity.

The perfectionism construct has been conceptualized as encompassing several different facets including extraordinarily high standards of performance (Burns, 1980; Blatt, 1995), feelings of inferiority (Horney, 1950), a tendency to perseverate about past failures (Burns, 1980), and poor self-image due to connecting performance with self worth (Pacht, 1984) among others. This wide variety of definitions of perfectionism led some researchers to hypothesize

that the construct was not one-dimensional, as suggested by the BPS, but actually a multidimensional. Moreover, while there is ample theoretical support for the contention that perfectionism is a maladaptive psychological variable this view is by no means universal (Hamachek, 1978). In the alternative view, any definition of perfectionism omitting the positive or adaptive components could be precluding an exhaustive explication of the construct.

Frost et al., (1990) noted the non-specific definitions of perfectionism as confirming the need for a more stringent definition of the construct and a more precise measurement instrument. Using the BPS, the Eating Disorder Inventory (Garner, Olmstead, & Polivy, 1983) as well as their own unique items Frost and colleagues set about to create a multidimensional perfectionism scale composed of the following subscales they felt underlay the perfectionism construct: high personal standards, concern over mistakes, doubts about personal performance, parental expectations, an emphasis on order, and organization. Through two separate factor analyses the researchers found support for six distinct factors. These factors resulted in the six subscales of the Frost Multidimensional Perfectionism Scale (FMPS): Concern over Mistakes, Personal Standards, Doubts About Actions, Parental Criticism, Parental Expectations, and Organization. These subscales were then summed (with the exception of Organization which had a low correlation with the other subscales) to create a total perfectionism score. It is important to note that two of the subscales of the FMPS measured facets of perfectionism that are adaptive. Personal Standards measures the endorsement of high personal standards of performance (e.g., “I set extremely high goals for myself”) but does not tap the negative correlates of those cognitions frequently associated with perfectionism (i.e., I am no good if I do not achieve these high standards). Likewise Organization measures the tendency to be organized and to prefer order in ones life (e.g., “neatness is very important to me”) but does not tap potentially maladaptive

features of the desire for order (e.g., If I am not completely organized I cannot function). Frost et al., (1990) also provided evidence of the construct validity of the FMPS by demonstrating positive correlations with several conceptually related variables. Specifically, total FMPS scores were positively related to pathological symptoms including self-criticism and guilt.

Evidence has also been presented to suggest that the distinct subscales of the FMPS measure distinct facets of perfectionism and add value by differentiating between positive and negative aspects of perfectionism. Frost, Heimber, Holt, Mattia, and Neubauer (1993) found that scores on the FMPS were positively correlated to both depression and negative affectivity. When the correlation matrices for the individual subscales were examined three of the maladaptive subscales Concern Over Mistakes, Parental Criticism, and Doubts About Actions were all positively related to depression and negative affectivity. In contrast, the two adaptive subscales Personal Standards, and Organization; were found to be unrelated to depression and negative affectivity but were positively related to positive affectivity.

One recent study lends support to the notion that the FMPS measures factors of both adaptive and maladaptive perfectionism. Using two separate non-clinical samples (one undergraduate; one high school) Stumpf and Parker (2000) factor analyzed the six subscales of the FMPS in an attempt to find factors underlying the scale. In the first analysis four first-order factors were found. The first factor consisted of items from the Concern over Mistakes and Doubts about Actions subscales of the FMPS. This factor which reflects doubts about the appropriateness of one's behavior was termed "concerns and doubts." The second factor found was characterized solely by the items on the organization subscale of the MPS solely. Quite appropriately it was termed "organization." The third factor was comprised of items from the personal standards subscale only. Again, this factor was called "personal standards." Finally the

fourth factor was made up of items from both the parental criticism and parental expectations subscales and called “parental pressure.”

Subsequent to the first-order factor analysis the authors also conducted a factor analysis on the second-order level. This procedure resulted in two second-order factors. The first factor was composed of the items from factor one and four of the first-order factor structure, concern and doubts and parental pressure. The researchers interpreted this factor as embodying unhealthy or maladaptive perfectionism. The second factor was made up of the items from factor two and three of the first-order solution: personal standards and organization. This factor was construed as representing healthy of adaptive perfectionism.

Stumpf and Parker (2000) also administered several measures of personality to the sample and correlated these measures with the FMPS. Among the subscales of the FMPS Concern over Mistakes, Parental Criticism, and Doubts about Actions were negatively related to the Rosenberg (1965) Self-Esteem scale. The Doubts about Actions scale was also positively correlated with maladjustment and neuroticism. Personal Standards and Organization were positively related to conscientiousness. For the two-factor second-order model, the healthy perfectionism factor was found to be positively related to self-esteem, achievement, adjustment, and order scales of the ACL and the judging-perception scale of the MBTI. The unhealthy perfectionism factor was negatively related to self-esteem and positively associated with maladjustment.

The researchers interpreted the results of the second-order analysis as support for the theoretical conceptualization of perfectionism existing in two forms: unhealthy/maladaptive and healthy/adaptive. Furthermore, the fact that the factors were unrelated and had different patterns of correlations with the personality variables investigated was interpreted as reflecting the fact

that healthy and unhealthy perfectionism are not in fact different ends of a continuum of the same construct but two distinct and unrelated constructs.

The Frost Multidimensional Perfectionism Scale is not the only multidimensional measure of perfectionism. Nor is it the only measure known as the Multidimensional Perfectionism Scale. Hewitt and Flett (1991) conceptualized perfectionism as both an intrapersonal and interpersonal construct. They contend that perfectionism exists in three varieties that differ "not in the behavior pattern per se, but in the object to whom the perfectionistic behavior is directed" (Hewitt and Flett, 1991, p. 457). The three constructs developed by the authors were self-oriented, other-oriented, and socially prescribed perfectionism. Self-oriented perfectionism encompasses what can be thought of as the "traditional" facets of perfectionism reflecting excessively high personal standards and discomfort with any perceived failure to achieve these standards. Other-oriented perfectionism is the holding of unrealistic expectations and standards for others. The other-oriented perfectionist will hold very high expectations of others and stringently appraise their performance. Hewitt and Flett assert that this constrict is virtually identical to self-oriented perfectionism except that the target of the perfectionism is someone else rather than oneself. Socially-prescribed perfectionism involves the perception that significant others in one's life hold extraordinary high expectations for oneself and judge one's performance stringently. The socially-prescribed perfectionist is then similar to the self-oriented perfectionist in that both are concerned about falling short of performance expectations. However, in the former case those expectations are one's own; whereas in the latter those expectations are others'.

Hewitt and Flett (1991) generated the Multidimensional Perfectionism Scale (MPS) which is composed of three, 15-item, scales corresponding to the three dimensions of

perfectionism. In a series of experiments the researchers demonstrated that the scales had both acceptable internal consistency and a replicatable factor structure across disparate samples. More importantly Hewitt and Flett found evidence of both convergent and divergent construct validity for the three scales. It was hypothesized that self-oriented perfectionism would be strongly related to measures of self-related constructs, while other-oriented perfectionism would be related to other-directed constructs, and socially-prescribed perfectionism would be strongly associated with perceptions of social information. These hypotheses were supported. Self-oriented perfectionism was positively correlated to such self-related measures as high standards, self-blame, and self-criticism but unrelated to conceptually distinct constructs such as demand for the approval of others, fear of negative evaluation, and other-directed blame. In contrast, other-oriented perfectionism was positively related to other-directed blame, dominance, and authoritarianism. Finally socially-prescribed perfectionism was found to be positively related to demand for approval of others, fear of negative evaluation, and locus of control. Taken together this pattern of correlations was interpreted as reflecting the viability of the three perfectionism constructs.

Still other researchers conceptualize the perfectionism construct as multidimensional, but offer different dimensions than previously proposed by either Frost and colleagues or Hewitt and Flett (1991). Johnson and Slaney (1996) reviewed the literature on perfectionism and concluded that the perfectionism construct included both positive and negative aspects. They identified six dimensions of perfectionism found both in the literature and in their clinical experience with perfectionist patients. They were: high standards, order, anxiety, tendency to procrastinate, problematic interpersonal relationships, and problematic therapeutic relationships. They created a scale of perfectionism comprised of these subscales called the Almost Perfect Scale (APS).

Subsequent factor analysis of the initial measure yielded four factors: Standards and Order, Anxiety, Interpersonal and Counseling Relationships, and Procrastination; which would become the subscales of the initial version of the APS.

In their original research, Johnson and Slaney provided ample evidence of the reliability of the APS achieving internal consistency scores ranging from .71 to .85 on each of the subscales. Moreover temporal reliability was established in that test-retest correlations ranged from .79 and .86. Initial validity was established by the fact that the Standards and Order and Anxiety subscales were found to successfully distinguish between self-described perfectionists and non-perfectionists, with perfectionists having significantly higher scores on the two subscales.

Noting several studies that found two (Procrastination and Relationships), and in some cases three (Procrastination, Relationships, and Anxiety) of the APS subscales were unrelated to either self-identified or other-identified perfectionism in both clinical and non-clinical contexts (Johnson and Slaney, 1996; Slaney et al., 2000), Slaney and colleagues were forced to re-examine their conceptualization of the maladaptive aspects of perfectionism. The researchers amended their original thinking to reflect the position that while anxiety, procrastination, and problematic relationships may be causes or consequences of perfectionism, they do not reflect the essence of negative perfectionism. Based on their experience with perfectionists, the researchers concluded that the distinguishing characteristic of maladaptive perfectionism is the concept of discrepancy. In this view perfectionism becomes maladaptive to the extent that the individual perceives that he or she consistently fails to meet the high standards he or she sets for him or herself. This conceptualization harkens back to the writings of Burns (1980) and Pacht

(1984) who asserted that the plight of the perfectionist stems from his or her inability to achieve at a level that he or she obsessively feels they must.

This re-examination of the APS subscales led Slaney et al., (1996) to recreate the scale and create the Almost Perfect Scale – Revised (APS-R). The APS-R consists of three subscales: Standards, Order, and Discrepancy. The revised measure was investigated using confirmatory factor analysis across several cross-validation samples (Slaney et al., 2001). The results of the CFA consistently supported the three-factor solution reflecting the proposed three subscales. Moreover, the subscales demonstrated both internal consistency (coefficient alphas between .85 and .92) and validity. Validity was evidenced in that the subscales of the APS-R were related to several other scales of psychological constructs in the expected directions. Specifically, the Standards and Order scales were unrelated to depression but were positively related to self-esteem and GPA in a university sample. In contrast, Discrepancy was positively related to depression and negatively related to both self-esteem and GPA. The above results provide support for both convergent and divergent validity of the APS-R.

From the perspective of this investigation the Discrepancy subscale of the APS-R is the measure that most closely reflects the true perfectionism construct. The notion that it is not necessarily the standards of the perfectionist but rather the perception of constantly falling short of those standards that leads to the maladaptive outcomes posited to be associated with perfectionism is central to the theoretical genesis of the construct. Use of this scale allows researchers to differentiate between individuals who simply hold high personal standards of performance from those that have a neurotic fixation on unattainable perfection. For these reasons the APS-R and specifically the Discrepancy scale will be employed in this investigation.

Empirical Research

Perfectionism and Depression

The advent of the measures of perfectionism that could reliably measure the construct among non-clinical populations allowed researchers to conduct empirical research to identify the psychological correlates of perfectionism that had previously been identified through theoretical and qualitative/clinical research. One main avenue of research has been the investigation of the relationship between perfectionism and depression. Pirot (1986) conducted some of the first empirical work on perfectionism using non-clinical populations. Pirot used survey methodology on a sample of university students to research the correlates of perfectionism. Perfectionism, as measured by the BPS (Burns, 1980) was found to be negatively related to the Berger (1952) Acceptance of Self Scale. In addition, the BPS was found to be positively related to the Zung Scale (1965) of self-rated depression (although the relationship was relatively weak).

The Pirot study was significant in that it empirically demonstrated the somewhat anecdotal relationships asserted by Burns (1980) and Pacht (1984) between perfectionism and depression. Although the relationship was weak, Pirot suggested that the measures used may explain the weakness of the observed relationship. Specifically, the Zung depression scale measures feeling of confusion, emptiness, hopelessness, indecisiveness, irritability and suicidal thoughts. Pirot suggested that if another depression inventory was used, one that taps feelings of self-directed negative thoughts and emotions; it may have demonstrated a more robust relationship with perfectionism.

In addition, the demonstrated negative relationship between perfectionism and acceptance of self supports the theoretical notion that the perfectionist is someone who not only has high

personal standards and/or goals but also believes that he or she is unable to achieve at an acceptable level. These beliefs lead the perfectionist to have difficulty accepting him or herself.

More recent research into the relationship between perfectionism and depression has sought to explore the possibility that the relationship is not characterized by a simple main effect. Hewitt and Flett (1993) proposed a model for explicating the relationship between perfectionism and depression. They asserted that life stress moderates the relationship between perfectionism and depression. Central to this assertion is the notion that the perfectionist is concerned with achieving his or her inflated accomplishment expectations. If the perfectionist is successful in this endeavor then he or she should not experience depression. However, if the perfectionist experiences frustration in this quest through the introduction of stressors or hassles he or she is likely to experience depression associated with achievement/goal discrepancy. Here again one can note that the earliest theorist on perfectionism conceptualized discrepancy from one's goals and aspirations as being part and parcel of true perfectionism. Thus, the construct is not concerned with the objective goals or standards of the perfectionist but rather the ever present belief that one is failing. Indeed, the APS-R explicitly identifies perceived performance/goal discrepancy as being at the heart of maladaptive perfectionism.

In addition to the stress moderation hypothesis Hewitt and Flett (1993) also posited a specific vulnerability hypothesis that states that for a stressor to lead to depression the stressor must involve frustration of a life goal that is ego-relevant for the individual. Thus, for a perfectionist who is more focused on professional achievement a stressor stemming from interpersonal family conflict would not result in depression, while a professional stressor would likely result in depression for that individual. In order to test this hypothesis Hewitt and Flett (1993) utilized the MPS (Hewitt and Flett, 1991) which classifies perfectionism along three

dimensions: self-oriented, other-oriented, and socially prescribed on two clinical samples (one composed entirely of depressed participants, the other of mixed diagnosis participants). By using this measure the researchers were able to classify the participants in terms of their dominant area of perfectionism, and presumably their area of ego-involvement. The researchers also administered the Delongis, Folkman, and Lazarus (1988) Hassle Scale in which stressors were classified into either achievement focused or interpersonally focused. Finally the Barnett and Gotlib (1988) Self-Criticism-Dependency Scale was used to measure depression. Thus, it was hypothesized that among self-oriented perfectionists who are concerned with achieving self-relevant goals, stressors that reflect achievement frustration would interact with self-oriented perfectionism to predict depression. Conversely, among socially prescribed perfectionists who are typified by a high need for approval and acceptance, socially prescribed perfectionism would interact with interpersonal stressors to produce depression.

The results of the study generally supported the hypotheses. In both samples self-oriented perfectionism interacted with achievement hassles (but not interpersonal hassles) to predict depression. The results for socially prescribed perfectionism were mixed with the measure interacting with interpersonal stressors to predict depression in one sample but interacting with achievement stressors in the other sample. This pattern of results led the researchers to support the notion of specific vulnerability but only in terms of self-oriented perfectionism.

In order to truly test the specific vulnerability hypothesis it is necessary to determine whether perfectionism predicts depression longitudinally. Thus to for the hypothesis to be fully supported it must be shown that perfectionism measured at one time predicts depression at a later date when the specific stressors are present. This need in the literature was addressed by Hewitt,

Flett, and Ediger (1996). The researchers had a sample of unipolar/bipolar adults complete the Hewitt and Flett (1991) MPS; then four months later had the same sample complete the Beck Depression Inventory (BDI) (Beck, Steer, & Garbin, 1988), and the Cochrane and Robertson (1973) Life Events Inventory (LEI) which measures stress experiences.

Results supported the specific vulnerability hypothesis for self-oriented perfectionism. It was found that perfectionism at time one was predictive of depression at time two only for individuals experiencing high levels of achievement stress measured at time two. In contrast, the specific vulnerability hypothesis was not supported for socially prescribed perfectionism. While this form of perfectionism was a significant main effect predictor of depression, the interaction between socially prescribed perfectionism and interpersonal stress was not significant.

In an effort to gather more external validity for the specific vulnerability hypothesis Hewitt, Caelian, Flett, Sherry, Collins, and Flynn (2002) again tested the model, this time using a non-clinical sample of children. Strong support was found for specific vulnerability in terms of self-oriented perfectionism. Self-oriented perfectionism and achievement stress were found to be significant predictors of depression, but more relevantly the interaction between perfectionism and achievement stress was also significant. Analysis of the regression slopes indicated that, as expected, perfectionism was related to depression only for children with moderate and high levels of achievement stress. For children with low levels of achievement stress there was no relationship between perfectionism and depression.

Perfectionism and Anxiety

Another fruitful avenue of research has been the establishment of the relationship between perfectionism and anxiety. Saboonchi and Lundh (1997) lent empirical support to the contention that perfectionism is related to anxiety. Using a non-clinical sample of university

students, the researchers found significant correlations between facets of perfectionism and several anxiety scales. The study used two sets of perfectionism measures - the Concern Over Mistakes and Doubts About Actions subscales of Frost et al.'s (1990) FMPS and the Socially Prescribed Perfectionism Scale of Hewitt et al.'s (1991) MPS. The researchers hypothesized that these measures of perfectionism would be most strongly related to forms of social anxiety insofar as they revolve around personal concerns about making mistakes and being publicly "found out" vis a vis those mistakes. The hypothesis was supported as the relationship between all three perfectionism scales and the three measures of social anxiety used in the study – the Social Anxiety scale of Wolpe and Lang's (1964) Fear Survey Schedule III (FSSIII), and Matick, Peters and Clark's (1989) Social Interaction Anxiety scale and Social Phobia scale – were significant. Furthermore, these relationships remained significant when partially out the influence of self-consciousness. Perhaps the most interesting result of the study was the less intuitive relationship found between the three perfectionism scales and other forms of anxiety. For instance, all three perfectionism scales were significantly related to agoraphobia. In addition, the Concern Over Mistakes scale correlated significantly with the Fears of Bodily Injury, Death and Illness, and Sexual and Aggressive Scenes scales of the FSS III. And, Socially Prescribed Perfectionism was correlated with the Death Anxiety scale.

The results of Saboonchi and Lundh (1997) are significant in that they indicate a deeper relationship between perfectionism and anxiety. Indeed, rather than perfectionism being related to domain-specific forms of anxiety stemming from the perfectionist's anxiety over not achieving his or her desired goal of perfection or the perceived consequences of that failure, the relationship between perfectionism and anxiety seems to be more global in nature. The authors posit that anxiety could possibly cause perfectionism in that individuals who have experienced

an anxious childhood may turn toward perfectionism in an attempt to pursue safety and security through the achievement of perfection. This line of reasoning suggests that the perfectionist may view the world in general as hostile and threatening and that perfection is seen as a panacea for this global threat. It stands to reason then that if the security associated with perfection was threatened (i.e., by the notion that one is not or cannot achieve perfection) the perfectionist would respond very negatively indeed.

In an example of an investigation of the relationship between perfectionism and domain-specific anxiety Walsh and Ugunba-Agwunobi (2002) investigated the link between Hewitt et al.'s MPS and statistics anxiety in an undergraduate sample. The researchers sought to identify the relationship between perfectionism and statistics anxiety while controlling for trait anxiety and procrastination. Statistics anxiety was measured using Cruise and Wilkins (1980) Statistics Anxiety Rating Scale (STARS) which is comprised of six sub-scales: worth of statistics, interpretation anxiety, test and class anxiety, computational self-concept, fear of asking for help, and fear of statistics teachers. Using a multiple regression with the MPS, trait anxiety, and procrastination as predictors, the study found that socially-prescribed anxiety was a significant predictor of interpretation anxiety along with both trait anxiety and procrastination. In addition, self-oriented perfectionism added to the prediction of fear of statistics teachers along with procrastination and other-oriented perfectionism (which was negatively related) and was the sole predictor of computational self-concept. The researchers posited that the link between self-oriented perfectionism and fear of teachers may be explained in terms of the unrealistic performance expectations held by perfectionists. As the perfectionist's expectations of his or her statistics performance begin to mount he or she may begin to doubt the teacher's ability to support this level of performance. This loss of faith then leads to anxiety associated with that

instructor. In contrast, the relationship between self-oriented perfectionism and computational self-concept (lack of faith in one's computational ability) was explained in terms of the perfectionist's focus on past failures. Because the perfectionist tends to ruminate over past failures and believes he or she is likely to experience future failures he or she experiences a loss of self-efficacy around his or her computational skills.

The literature clearly indicates that perfectionism is associated with a host of negative psychological variables including decreased performance (Burns, 1980), depression (Pirot, 1986; Hewitt and Flett, 1993; Hewitt, Flett, and Ediger, 1996; Hewitt et al., 2002), and both general (Saboonchi and Lundh, 1997) and domain specific anxiety (Walsh and Ugunba-Agwunobi, 2002).

Study #1 – Perfectionism, Stress, Burnout and Job Satisfaction

While there is wealth of empirical literature describing the emotional and motivational consequences of perfectionism among student and clinical populations there is a relative dearth of literature using non-clinical working populations. More importantly there have been virtually no systematic investigations of the consequences of perfectionism in the work environment. One early exception, although somewhat anecdotal, is the work of Burns (1980) who investigated the work behaviors of perfectionists and found that perfectionism was negatively related to job performance. Given that the average person will spend the vast majority of his or her life at work and the central role that work plays in the psychological and emotional lives of people in our culture it is important to understand the impact of this personality characteristic in the work environment.

Stress

As stated elsewhere, perfectionism is associated with the perception that one must achieve perfection in all endeavors. This notion leads the perfectionist to put a tremendous amount of pressure on him or herself regarding personal performance. For the perfectionist achieving the absolute gold standard of performance is not an option but a requirement. Moreover, it is an ethical imperative as the perfectionist equates perfection with goodness and the only way in which one can be a valuable or worthwhile person is through the achievement of perfection. In the present investigation it is hypothesized that the perfectionist will certainly apply this world view to the world of work. Specifically, the perfectionist will require absolute perfection of themselves at work and the achievement of anything less (an all but certainty) will be met with extreme disappointment and job dissatisfaction. It is due to these virtually impossible standards of performance that it is hypothesized that the perfectionist will also

experience a high degree of work stress. This prediction will be explicated in the context of Karasek's (1979) demand-control model which has many conceptual linkages to perfectionism.

Work-related stress is often cited as one of the largest problems facing workers and managers in modern industrialized society (Baba, Jamal, & Tourigny, 1998). In a study of Canadian managers Tillson (1997) found that 88% of respondents reported elevated levels of stress. Indeed work stress, the perception that one is overwhelmed with the demands of his or her job and the organization in particular appears to be part and parcel of the work world (Allcorn, 2004). A recent article by Peterson and Wilson (2004) focusing on American workers suggests that stress is a direct result of the unspoken cultural assumptions, beliefs, and values so ingrained in American culture that they exist below the level of consciousness (Schien, 1996). The authors cite several culture features that they hypothesize predispose Americans to work stress.

One belief posited to be central to the culture of America is the value of work and wealth which is rooted in the Puritan/Protestant notion that work is central to moral righteousness. This belief states that work is not only a necessary endeavor of one's life but a moral necessity to be a good person. Furthermore, the rewards associated with work (material wealth, creature comforts, etc.) serve as markers for moral righteousness. Therefore, for one to be a truly good person he or she should accumulate wealth. Conversely, those who have not accumulated wealth suffer from a moral character flaw. In addition American culture endorses a belief in the perfectibility of man whereby a person should constantly be striving for self-improvement toward the goal of perfection. Lastly, there is also a belief in equality of condition. Specifically that all people enjoy the same opportunity to be successful and obtain the rewards of hard work.

The result is that the American worker feels that he or she must be successful and accumulate the most material wealth possible. Moreover, he or she acknowledges that they are as able to achieve these goals and if they have not it is evidence of their own moral defect. The result is a frantic effort by American workers to accumulate as much as possible through Herculean amounts of work. If the worker fails to accumulate this elusive level of work and wealth the result is stress.

In assessing these cultural beliefs one hears echoes of the perfectionist way of thinking. Specifically, the perfectionist too believes that his or her moral standing is contingent on performance and the achievement of perfection. Additionally, the perfectionist also believes in the illusion (at least on some level) that perfectionism is possible and therefore continues to strive for this illusive goal even in the face of evidence of its impossibility. If such conscious beliefs are indeed at work in modern society one can see how they could potentially exacerbate the natural tendencies of the perfectionist.

In contrast to investigating the cultural assumptions underlying stress, Karasek and his colleagues (Karasek, 1979; Karasek, Brisson,, Kawakami, Houtman, Bongers, & Amick, 1998) have developed one of the most widely used models of work stress conceptualizing work stress in terms of the psychosocial aspects of the work environment that lead to stress. Firstly Karasek and Theorell (1990) distinguish between the constructs of stress, which is a natural psychological and physical arousal response to stimuli in one's environment; and strain which is the negative response (anxiety, depression, illness, etc.) to stress manifested in situations in which the individual lacks the ability or resources to adaptively react to the stressor. According to this view, it is not the presence of aversive stimuli at work (high productivity quotas, disagreeable

managers or co-workers) that causes what is commonly referred to as work stress but rather the lack of an effective response to these stressors.

Based on numerous studies conducted both in American and Sweden, Karasek (1979) proposed the demand-control theory of work stress. This theory states that from a psychosocial perspective the work environment can be deconstructed into two meta-dimensions. The first dimension is work demands. Work demands describe the physical and psychological demands placed on the individual in a specific job. Psychological demands include: high production demands, necessity of quick decisions, criticality of decisions (i.e., the scope of the impact of one's decisions), and socially demanding managers/co-workers. Based on the above descriptions factors along this dimension are characterized as stressors. However, they are not in and of themselves sufficient to cause the negative outcomes associated with strain. The second dimension in the demand-control model is decision latitude. Decision latitude is segmented into two categories – skill discretion and decision authority. Skill discretion describes the breadth of skills employees both possess and are allowed to use on the job. Decision authority describes the authority the employee has to make decisions regarding how tasks are accomplished on the job. The demand-control theory theorized that when decision latitude is low it severely truncates the ability of the worker to adaptively react to work the stress associated with job demands. Thus, when job demands are high and decision latitude is low the result will be job strain (more commonly, and hitherto, referred to as job stress).

Several studies have identified a host of negative psychological, physical, and behavioral consequences of stress as operationalized by the demand-control model. From a psychological perspective high job demands and low decision latitude has been associated with depression (Karasek, 1979), exhaustion, and job dissatisfaction (Kauppinen-Toropainen, 1981; Braun and

Hollander, 1988). Physiologically, the model has been associated with higher levels of coronary heart disease for individuals experiencing high demands and low decision latitude on the job (Karasek, 1981). Behaviorally, high demands and low decision latitude has been found related to absenteeism on the job and avoidance behaviors such as pill consumption (Karasek, 1979).

While most of the early research on the demand-control model used self-report measures of both independent and dependent variables under study, Dwyer and Ganster (1991) obtained support for the demand-control theory using objective measures of job demands of physical and psychological demands on the job. The researchers hypothesized that conditions of high work demands and low perceptions of control would result in increased withdrawal behaviors. Withdrawal behaviors were obtained by organizational records of sick days and tardiness. Thus, both the independent and dependent variables under study were measured using objective rather than subjective self-report measures.

Results indicated that, consistent with demand-control theory, there was a significant interaction between objectively-measured psychological demands on the job and perceptions of control on sick days and tardiness. Specifically, high levels of demand had no main effect on tardiness or sick days. However, when high psychological demands occurred with low perceptions of control the result was increased tardiness and sick days on the part of employees.

In later research Karasek expanded the demand-control theory to include a third dimension the psychosocial work environment believed to be pivotal to the experienced of work stress - social support at work. Social support is defined as “overall levels of helpful social interaction available on the job from both co-workers and supervisors.” (Karasek and Theorell, 1990, p. 69) and is theorized to mitigate the impact of work stress and enhance overall well-being on the job.

While there is substantial evidence that social support does influence the experience of job strain (Karasek and Theorell, 1990; Vagg & Spielberger, 1998) the exact mechanisms with which social support influences strain at work is somewhat in dispute. Some researchers suggest a buffering hypothesis which implies that social support moderates the influence of job stressors on job strain whereby the relationship between stressors and experienced strain is stronger for those with low social support and weaker for those with high levels of social support (Karasek et al., 1982; Wilcox, 1981). However, still other researchers have found only direct effects and no interaction that would suggest buffering (Ganster, Fusilier, and Mayes, 1986).

A more recent wrinkle added to the demand-control model is the concept of job insecurity. Many have noted the fact that structural changes in the labor market have resulted in less job security for employees (De Witte & Naswell, 2003). More recent research has demonstrated that these changes have translated into the perception by employees that jobs are less secure and certain (Kinnunen, Mauno, Natti, & Happonen, 1999). Strazdins, D'Souza, Lim, Broom, and Rodgers (2004) extended the concept of job strain to include the notion of job insecurity. They hypothesized that the perception that one is at risk for losing one's job acts in combination with job strain (which is described as high demands and low control) to create job stress. The authors write:

> Uncertainty about the future, the personal and financial ramifications of job loss, and perceptions that one's job is on the line could erode employees' capacity to cope with job strain and constrain their ability to negotiate better conditions. (p. 297).

A large sample study of over 2,000 working Australian adults employed across a variety of professional and managerial jobs were placed into categories based on their perceptions of job

strain (high demands; low control) and job insecurity. Job pressure was measured by a four item scales measuring perceptions of both extent of job demands and control over one's job. Job insecurity was measured by a single item that assessed the degree to which participants felt secure in their job. A measure of job pressure was created by classifying participants into five categories ranging from low pressure (lowest scores on both strain and insecurity) and extremely high pressure (highest score on both strain and insecurity). Results indicated that the combination of job strain and job insecurity increased the accuracy of prediction for mental health outcomes (depression, anxiety, self-rated health) and physical health problems. The highest incidence of these negative outcomes was associated with job strain when it occurred in addition to job insecurity.

Taken as a whole, the demand-control theory theorizes that high job demands, low decision latitude, and low levels of social support are associated with higher levels of work stress. When one superimposes the theoretical and empirical findings from the perfectionism literature onto this model the potential impact of perfectionism as an individual difference variable that influences the experience of work stress becomes apparent. In terms of job demands perfectionism is hypothesized to exacerbate the perception of job demands. Because the perfectionist feels that he or she must achieve perfection, and because the consequences of "failure" are so much more severe for the perfectionist it is expected that job demands such as heavy workloads, short deadlines, etc. will be more severely experienced by perfectionists. This will lead to a heightening of the perceptions of job demands. In addition to this first-order perceptual hypothesis it is possible that the behavioral correlates of perfectionism will impact the perception of job demands. For example, perfectionism has been linked to procrastination and self-handicapping (Ferrari, 1992) as well as withdrawal behaviors, and lower job performance

(Blatt, 1995; Burns, 1980). Consider the situation in which a perfectionist responds to a short deadline at work by procrastinating due to fears that any action he or she takes will be wrong. In such a case, the job demands may be objectively higher as the deadline looms closer and the perfectionist has taken no actions to achieve the task.

There is also some reason to believe that perfectionism may be negatively related to decision latitude as defined as skill discretion and decision authority. There is a wealth of evidence to suggest that perfectionism is associated with rigid "all or nothing" thinking (Hollander, 1965; Campbell and DiPaula, 2002). It is possible that this cognitive inflexibility extends to the work environment such that the perfectionist feels constrained against using his or her skills in novel ways in order to address work tasks. Because they are always searching for a "perfect" solution they do not have confidence, or engage in the type of ingenuity suggested by skill discretion (i.e., using a wide variety of skills on the job to address various problems). All else being equal the perfectionist will prefer programmatic solutions to work problems that produce the "perfect" results. It is also possible that this rigidity of thinking extends to the perfectionists thoughts about organizational hierarchy. The perfectionist may prefer instances in which roles and role requirements are clearly articulated and adhered to. The fear of overstepping and making a mistake as well as the belief that he or she should stay within the confined of his or her formal role may reduce the likelihood that the perfectionist will engage in significant decision authority (i.e., taking the initiative to make decisions to organize one's work, address work issues, etc.). Of the perfectionist at work, Ellis (2002) writes:

> When stressful conditions – such as business difficulties – occur, they may demand that they have the 'perfect' solution for them. They not only greatly prefer these conditions of solutions to them but require that they are easily and

> quickly available – which they normally are not. Therefore…perfectionists 'find' more stress, less satisfactory solutions, and more prolonged difficulties than nonperfectionists find. (p. 227)

Thus the perfectionists may objectively have the latitude to use a wide breadth of skills and abilities on the job however he or she may impose internal obstacles to such behavior as a result of fear or failure, rigid thinking, and an insistence on "perfect" rather than "good enough" solutions to problems that arise at work. These internal obstacles, in turn, could result in low levels of decision latitude as described by the demand-control model. In short, the perfectionist will feel that he or she has very little control, indeed, over his or her work environment.

Finally, there is much anecdotal and empirical evidence to suggest that perfectionists have difficulties in interpersonal contexts (Habke & Flynn, 2002). One way in which perfectionism is theorized to negatively impact interpersonal relationships is through personality trait clusters with known implications for interpersonal functioning. For example, Hewitt and Flett (1991) found that socially-prescribed perfectionism (perfectionism stemming from the belief that others in the social environment have extremely high standards by which they judge the individual) was related to anxious and fearful personality traits. All else being equal these traits will lead the perfectionist to be hesitant and avoidant in social interactions thus limiting the likelihood of the formation of rewarding social relationships. Other studies have found more direct links between perfectionism and interpersonal problems. In one such study Hill, Zrull, and Turlington, (1997) found that, among men, all three of Hewitt and Flett's (1991) perfectionism subscales – self-oriented, socially-prescribed, and other-oriented were related to interpersonal problems stemming from control issues, vindictiveness, domination, suspicion, and the inability

to empathize. Among women a less clear pattern emerged although socially prescribed perfectionism was found to be related to a host of interpersonal problems. This inability to form and maintain meaningful interpersonal relationships may hinder the perfectionist from forming bonds with individuals in his or her work environment. Lacking these bonds it is unlikely that the perfectionist would have the social support that has been found to mitigate the experience of work stress in the demand-control model.

Germane to the experimental hypothesis, a recent study by Hsieh (2004) found that employees with high standards of performance at work perceived *lower* levels of work stress. While on their face these findings seem antithetical to the hypothesis that perfectionists will experience more stress in part because of their need to achieve perfection, when one digs deeper the findings do not contradict the stated hypothesis. Specifically, the reason the perfectionist is expected to experience work stress is not because he or she wants to achieve perfection. Rather the stress results from perception of the perfectionist that the work environment is a place in which he or she is destined to fail due to excessive demands coupled with their own substandard abilities. The issue is analogous to the discussion around adaptive vs. maladaptive perfectionism (Hamachek, 1978). Adaptive perfectionism is associated with a rational desire to achieve high standards; while maladaptive perfectionism (the perfectionism under investigation here) is associated with an irrational and neurotic need for perfection and fear of failure.

While there are no empirical investigations in the literature addressing the relationship between perfectionism and work stress, several studies have established a relationship between perfectionism and general life stress. As explicated elsewhere in this investigation, Hewitt and Flett (1991, 1993) have compiled evidence of their specific vulnerability hypothesis that suggests that perfectionists are at least especially vulnerable to the effects of stress. The hypothesis states

that perfectionists react negatively to stressors that are relevant to their perfectionistic proclivities. Specifically self-oriented perfectionists, who place high importance on personal achievement, react to achievement associated stressors in their environment. These results were recently extended by the work of Dunkley et al., (2003) who found that perfectionists were especially reactive to stress that implied personal failure. Moreover the perfectionists in the study were less effective in utilizing stress coping strategies than the nonperfectionists.

Trait negative affectivity has been found to be related to both perfectionism and work stress (Brief et al., 1988; Flett et al., 1998). Brief et al., (1988) found that trait negative affectivity was positively associated with measures of both stress (total, job, and work) and distress or strain (job dissatisfaction, somatic complaints at work, life dissatisfaction, and depression). Moreover when the influence of trait negativity was partialed out of the relationships between stress and strain the magnitude of those relationships dropped to near zero. These results suggest that negative affectivity has a strong influence on stress and strain variables especially when those variables are measured subjectively.

For perfectionism to be a meaningful predictor of job stress it must do so over and above the shared variance accounted for by negative affectivity. It is hypothesized that perfectionism is especially germane to specific features of the work environment in general (emphasis on personal performance, possible negative outcomes associated with failure), and the demand-control model of work stress in particular (perceptions of high demands, low control, and lack of social support) and thus will influence work stress even controlling for trait negative affectivity.

Perfectionism #1 – Perfectionism will be positively related job stress when controlling for the influence of negative affectivity

Job Satisfaction

The research with perfectionists has demonstrated that individuals with perfectionist tendencies have difficulty in deriving satisfaction from their experiences due to an insatiable need to achieve perfection in every aspect of their lives (Burns, 1980; Pacht, 1984). These individuals create unattainable standards of performance and behavior and, when these standards are ultimately not met, suffer from the emotional and cognitive repercussions of not having obtained that which was very important to them (Slaney, Rice, and Ashby, 2002).

In the present investigation it is hypothesized that due to the fact that perfectionism is associated with a tendency to ruminate about high personal standards of performance and one's failure to meet those standards (Flett et al., 1998), individuals scoring high on perfectionism will be less able to derive satisfaction from their work experiences. In effect, by constantly worrying about being the best the perfectionist will be unable to get any enjoyment out of what he or she does. It was also theorized that certain aspects of the work context will be especially likely to create dissatisfaction among perfectionists. Specifically, the work environment is obviously one in which one's personal performance has important repercussions on the outcomes and rewards he or she receives. This fact will serve as a salient cue to the perfectionist and he or she is likely to view the work context as threatening rather than an arena in which he or she can experience pleasure from work.

There is a growing body of work in the industrial organizational psychology literature that supports the notion that personality characteristics such as perfectionism are influential in the experience of job satisfaction. Staw and Ross (1985) hypothesized that "as yet unspecified individual characteristics may indeed account for a substantial proportion of variance on job satisfaction" (p.470). Citing the fact that personality characteristics are stable over time and situation and that these characteristics are predictive of attitudes across time and situation the

authors speculated that such characteristics could predispose an individual to respond positively or negatively to his or her work environment. Such evidence would suggest that job satisfaction is as much a result of one's personality as it is a response to organizational or job characteristics.

In order to test the hypothesis Staw and Ross (1985) obtained longitudinal job information and job satisfaction data for a large sample of 5,000 adult men at three time periods across five years. Results indicated that job satisfaction was significantly correlated for the sample across all three measurement times. Moreover, these correlations remained significant among participants who *changed* their jobs or employer between measurement periods. In a secondary test of the hypothesis the researchers regressed job satisfaction at the third measurement period on satisfaction at the first time period (five years prior), change in pay, and change in job status. Regardless of whether the individual changed employer or occupation during the time period, satisfaction at time one was the strongest predictor of satisfaction at time three. These results suggest that job satisfaction was stable over time regardless of the job characteristics or employer experienced by the participants suggesting a personality component at least in part influences the experience of job satisfaction.

Keller, Bouchard, Arvey, Segal, and Dawis (1992) used monozygotic (MZ) and dizygotic (DZ) twins who had been separated at birth to assess differential influences of genetic and environmental factors on work values. The study used the Minnesota Importance Questionnaire (MIQ) (Gay, Weiss, Hendel, Dawis, Lofquist, 1971) which measures preferences for 20 job outcomes resulting in six scale scores: achievement value, comfort value, status value, altruism value, safety value, autonomy value. The inclusion of both MZ and DZ was significant in that MZ twins are genetically identical whereas DZ twins are not. Because both types of twins were given the same measures this disparity in genetic make-up allowed the researchers to parse out

the relative contributions of genetic and environmental factors on the value placed by the participants on certain work factors.

Analysis of the interclass correlation of the six MIQ scales for MZ and DZ twins indicated that there was a strong correlation across MZ twin pairs; while there was a very weak correlation across DZ pairs. Among MZ pairs there were significant correlations across twin pairs for achievement value, comfort value, status value, safety value, and autonomy value. In contrast across DZ twin pairs there was only a significant correlation on achievement value. These results were interpreted as suggesting that genetic factors are at least partially responsible for the importance people place different factors in their work environment.

A recent meta-analysis conducted Judge, Heller, and Mount (2002) lends strong support to the notion that personality characteristics influence job satisfaction. Using the Big Five (Goldberg, 1990) model of personality (Agreeableness, Extraversion, Neuroticism, Conscientiousness, Openness to Experience) the authors reviewed the psychological literature on personality and job satisfaction. Results indicated that Neuroticism was the strongest predictor of job satisfaction ($p = -.29$) with higher levels of Neuroticism being associated with lower levels of job satisfaction. The authors noted that past research indicates that neurotic individuals are predisposed to experience negative life events (Magnus, Diener, Fujita, & Pavot, 1993), and may actually self-select into negative situations (Emmons, Diner, & Larson, 1985). As such it is not surprising that this state of affairs would also exist in the work environment and ultimately result in job dissatisfaction. The next strongest predictor of job satisfaction was Conscientiousness ($p=.26$), with high levels of the trait being associated with high levels of job satisfaction. The authors asserted that this relationship could be explained by the fact that high Conscientiousness individuals are predisposed to being actively involved in work environments, industrious, and

generally good workers. It follows then that these individuals would be more likely to obtain satisfying work rewards (both formal and informal) which would result in job satisfaction. The final personality factor found to be positively related to job satisfaction was Extraversion (p = .25) which represents a predisposition for positive emotions (Costa and McCrae, 1992). Obviously if an individual is more likely to experience positive emotional states that tendency should translate into increased job satisfaction.

Another recent meta-analysis investigated the link between personality and job satisfaction using a different model of personality. Connolly and Viswesvaran (2000) investigated the connection between positive and negative affectivity and job satisfaction. Because individuals high in positive affectivity tend to view their environment positively, it was expected that they would tend to experience high levels of job satisfaction. Likewise, due to the fact that negative affectivity is associated with a tendency to perceive one's environment negatively it was expected that there would be a negative correlation between this construct and satisfaction on the job. Consistent with expectations, they found that both positive affectivity was positively associated with satisfaction and negative affectivity were negatively associated with satisfaction. Positive affectivity exhibited the largest adjusted correlation (p = .49) accounting for almost 25% of the variance in job satisfaction scores. The correlation for negative affectivity was somewhat smaller but still considerable (p = -.33) prompting the researchers to conclude that the importance of stable individual difference correlates of job satisfaction relative to situational factors "does appear to be substantial" (Connolly and Viswesvaran, 2000, p.273).

Taken together the results of the two aforementioned meta-analyses provide both general and specific support for the notion that perfectionism is negatively associated with job

satisfaction. General support is provided by the consistent findings that personality factors are associated with job satisfaction across a wide variety of studies. More specific support is found in the findings of Judge et al., (2002) that trait Neuroticism was negatively related to job satisfaction and the findings of Connolly and Viswesvaran (2000) that negative affectivity is also negatively related to job satisfaction. Both of these constructs have been found to be empirically linked, but conceptually distinct from the concept of perfectionism. Thus, to the extent that the three constructs covary and may occur as a cluster of maladaptive attitudes and experiences within the same individual we might expect them to be associated with dissatisfaction in the work context.

A recent empirical study (Monck, 2003) found that perfectionism was negatively related to both satisfaction with pay and satisfaction with opportunity for promotion but not related to other facets of job satisfaction. This pattern of results was interpreted as demonstrating the relative importance of extrinsic aspects of the job as indicators of success for perfectionists. The study concluded that extrinsic factors were important to perfectionists because these factors allowed them to gauge their progress toward their perfectionist goals and aspirations. Because the perfectionist is unlikely to perceive that he or she is meeting their goals, they experience dissatisfaction with the indicators of progress against those goals. It is worthwhile to mention that the Monck study was conducted with a small sample size using student participants and many of the relationships between perfectionism and other facets of job satisfaction were in a negative direction but did not achieve statistical significance. The present investigation can help to elucidate those findings and further clarify the relationship between perfectionism and job satisfaction.

As mentioned above both positive and negative affectivity has emerged as a predictor of job satisfaction across a number of studies. Likewise, negative affectivity is also linked to trait perfectionism (Flett et al., 1998). For perfectionism to be an important predictor of job satisfaction it must account for variance in job satisfaction not already accounted for by both positive and negative affectivity. Thus, it is hypothesized that perfectionism will influence job satisfaction when the influence of affectivity is controlled for statistically. .

Hypothesis #2 – Perfectionism will be negatively related to job satisfaction over and above the influence of affectivity

Burnout

In the current investigation it is hypothesized that the perfectionists will be inundated with negative emotions and cognitions on the job. The constant experience of job dissatisfaction and stress should have a tremendous impact on the perfectionist at work. One way in which these negative experiences may influence the perfectionist is through job burnout. Burnout is defined as "a prolonged response to chronic emotional and interpersonal stressors on the job" (Maslach, Schaufeli, & Leiter, 2001) and is typically conceptualized as having three dimensions: emotional exhaustion, depersonalization or cynicism, and feelings of inefficacy (Lee & Ashforth, 1990, 1996; Maslach et al., 2001). Emotional exhaustion has been thought of as the central feature of the burnout phenomenon (Maslach et al., 2001). It refers to the response by individuals to prolonged excessive psychological and physical demands on the job. Emotional exhaustion is characterized by emotional and physical fatigue, tension, and somatic complaints (Maslach and Jackson, 1981). The experience of emotional exhaustion leads the individual attempting to distance him or herself cognitively and emotionally from the overload experienced at work. Because the first work on burnout was conducted exclusively in healthcare settings

(Maslach, 1982), this distancing took the form of depersonalization whereby care providers would begin to depersonalize the recipients of their care, failing to see them as individual people in order to obtain emotional distance. As the burnout construct was enlarged to include other work settings the depersonalization construct was enlarged. It was found that creating an indifferent or cynical attitude about one's work environment was another way in which cognitive and emotional distance could be obtained (Maslach & Jackson, 1984). The final dimension of burnout is feelings of inefficiency. In situations in which the individual prolonged feelings of overload accompanied by exhaustion and cynicism it is postulated that they will begin to doubt their own ability to accomplish key objectives on the job (Maslach & Jackson, 1984). The result is a feeling that they have lost their effectiveness to do their jobs.

Empirical evidence has borne out the proposed relationship between stress experiences on the job and burnout. Russell, Altmaier, and Van Velzen (1987) found in a study of school teachers found that the amount of stress experienced on the job was a significant predictor of both emotional exhaustion and depersonalization. Interestingly those teachers who reported social support, in the form of a supportive supervisor were less likely to experience burnout. These results were later replicated by Ross, Altmaier, and Russell (1989) who found that the number of stressful events experienced by college mental health counselors was a significant predictor of both emotional exhaustion and personal accomplishment with higher stress levels being associated with higher levels of emotional exhaustion and lower levels of personal accomplishment. Here again, supervisor support was associated with lower levels of all three burnout dimensions.

Research also suggests that burnout has important implications both for the individual job holder as well as the functioning of the organization in general. In a meta-analysis of

antecedents and consequences of burnout Lee and Ashforth (1996) found significant relationships between burnout and both individual and organizationally-relevant variables. Specifically, emotional exhaustion was positively associated with turnover intentions and negatively associated with organizational commitment. In addition, depersonalization was negatively associated with both organizational commitment and job satisfaction. In two illustrative studies on the consequences of burnout, Jackson et al., (1986) found that burnout was related to several types of organizational withdrawal behaviors among elementary and secondary school teachers while Leiter and Harvie (1998) found that the three dimensions of burnout had a significant negative impact on staff acceptance of change

Recent work in the field of burnout has sought to identify a unifying model that accounts for the divergent work on the antecedents of burnout. Demerouti, Bakker, Nachreiner, & Schaufeli (2001) proposed a parsimonious model that is applicable across work settings: the job demand resource (JD-R) model of burnout. The JD-R model states that all aspects of the work environment can be categorized as either job demands or job resources. Furthermore the model states that these two types of work characteristics are the antecedents of two separate processes that lead to burnout.

Job demands refer to "those physical, social, or organizational aspects of the job that require sustained physical or mental effort and are therefore associated with certain physiological and psychological costs (exhaustion)." (Demerouti et al., 2001, p. 501). According to the JD-R model all job demands require the mobilization of sympathetic activation and subjective effort on the part of the individual. Prolonged exposure to this response results in a draining of the individual's energy leading eventually to exhaustion. Appropriately the JD-R predicts that job demands will be positively associated with the emotional exhaustion factor of burnout.

In contrast, job resources refer to the physical, social, and organizational aspects of the job that allow the individual to accomplish three objectives: (1) functionally achieving job-related goals, (2) mitigating the physiological and psychological costs of job demands, (3) achieving personal growth and development. Job resources can be categorized as internal resources (e.g., personality characteristics, coping styles, cognitive capacity) and external resources. External resources can be further distinguished as either social or organizational resources. Social resources refer to support one may receive from colleagues, supervisors, family, and friends that allow them to mitigate the impact of job demands. Organizational resources are any aspects of the organization or job that likewise allow the individual to cope with job demands. Examples of organizational resources are: participation in decision-making, access to training, access to organizational resources, and task variety. The JD-R model asserts that in situations in which job resources are limited individuals will lack the resources necessary to cope with job demands. The result will be a belief that they cannot successfully engage their jobs which will lead to reduced motivation and withdrawal. This withdrawal will take the form of disengagement from the job.

The two processes proposed by the JD-R model are suggestive of an interaction between job demands and job resources on exhaustion and disengagement. Specifically, that the relationship between job demands and exhaustion should be stronger when job resources are scarce. Likewise, that the relationship between job resources and disengagement should be stronger when job demands are high. However, drawing on the lack of empirical support for an analogous interaction effect predicted by Karasek's (1979) job demand control model of work stress, the Demerouti and colleagues stop short of predicting such an interaction based on the JD-R model.

In their first test of the JD-R model Demerouti et al., (2001) found it well supported. The researchers employed the Oldenburg Burnout Inventory (OLBI; Demerouti, 1999) which measures the two dimensions of burnout suggested by the JD-R model: exhaustion and disengagement. The authors assert that this measure is psychometrically superior to the often used MBI in that it employs both positively and negatively-worded items whereas the MBI uses only negatively worded items for the exhaustion and cynicism scales and only positively worded items for the efficacy scale leading to inflated correlations between scale items and maximizing the likelihood that the scales will load on the same factor.

Results of confirmatory factor analysis revealed that the two-factor factor structure of the OBI was the optimum solution across four different job types (teachers, nurses, production workers, and air traffic controllers). In addition, separate measures of job demands and job resources were administered to the samples and structural equation modeling was used to test the JD-R model. Analysis revealed that all job demands loaded on a latent job demand factor; while all job resource items loaded on a latent job resource factor. Moreover, the job demand factor was positively related to emotional exhaustion; while the job resource factor was negatively associated with disengagement. Importantly the SEM analysis was replicated and similar results were obtained, this time using objective measures of job demands and job resources as assessed by outside raters, thus limiting the possibility that the results obtained were due to common method variance.

In a more recent study of the JD-R model Bakker et al., (2003) found support for the model whiling linking it to Maslach's conceptualization of the burnout construct. The researchers theorized that the disengagement factor of burnout identified in the JD-R subsumes Maslach's original burnout factors of cynicism and reduced efficacy. Two obvious ways in

which one can disengage from one's job is through emotionally withdrawing by becoming cynical and motivationally disengaging by believing that one can no longer do their job. Thus, the JD-R should hold true when using Maslach's almost universally used scale: The MBI. Using several separate measures of job demands and job resources the study found strong support for the JD-R. Using SEM the researchers found that all measures of job demands loaded on one latent job demands factor; whereas all job resource measures loaded on a latent job resources factor. More importantly, results of the SEM found a positive and significant path between job demands and emotional exhaustion as measured by the MBI. Likewise there was a negative and significant path between job resources and cynicism and a positive and significant path between job resources and professional efficacy (suggesting higher levels of job resources were associated with higher levels of professional efficacy; that is, lower levels of perceptions of inefficacy).

In addition to the main effects found, Bakker, Demerouti, Taris, Schaufeli, & Schreurs (2003) also found the interactions that Demerouti and colleague were reticent to endorse. In two of the three organizations which were used in the study there was a significant interaction between job demand and job resources on emotional exhaustion. Thus the relationship between high job demands and emotional exhaustion was most pronounced in situations in which job resources were limited. The results for the other two measures of burnout were not as clear.

A strength of the JD-R model is its ability to explain the different antecedents and models of burnout which have been found in the literature. Lee and Ashforth (1996) conducted a meta-analysis of the correlates of burnout and found a large number of variables significantly associated with the three burnout dimensions of exhaustion, depersonalization, and personal accomplishment. The JD-R accounts nicely for the pattern of results obtained in the study. For

instance, for the exhaustion dimension of burnout Lee and Ashforth found significant positive relationships with such variables as role conflict, stressful events on the job, workload, and work pressure. In contrast, negative relationships were found for variables such as social support, supervisor support, participation in decisions, and team cohesion. These results are well summarized by the JD-R model. Specifically, the former variables (e.g., role conflict, workload, etc.) can be easily re-conceptualized as job demands as they require the worker to expend mental or physical energy in order to successfully negotiate them on the job. JD-R predicts that prolonged exposure to such demand (and the associated emotional, psychological, and physical cost) results in emotional exhaustion. Likewise the second set of variables for which Lee and Ashforth found to be negatively related to exhaustion (e.g., social and supervisory support) can be readily interpreted as resources vis and vis the JD-R model in that they are social and organizational factors that mitigate the impact of demands by increasing the ability of the individual to cope with those demands.

In terms of the present investigation the JD-R provides a useful model to explicate the process by which perfectionism is hypothesized to be related to burnout. As explained elsewhere, perfectionism is associated with the neurotic endorsement and maintenance of extraordinarily high personal standards of performance. More importantly, central to the perfectionism construct is the belief that one is consistently unable to achieve the desired level of performance. It has been posited in this paper that these features of perfectionism will translate into a work experience for the perfectionist whereby he or she will be plagued by feelings that they are falling below performance expectations on the job. It is now hypothesized that perfectionism will be positively related to burnout. The process by which these two variables are related can be explained using the JD-R model. It is hypothesized that, all else being equal, the

perfectionist will perceive higher levels of work demands, and lower levels of resources than the non-perfectionist. More precisely the perfectionist will adopt higher personal standards at work. These higher personal standards will create higher work demands (higher workloads, greater time pressure, etc.) among perfectionists. In effect the perfectionist will be making the job "harder than it has to be" by perceiving work demands which may not objectively exist but are rather caused by their own personal standards which, by definition, are higher than what would be considered typical. Furthermore the perfectionist believes that he or she is consistently unable to achieve the desired level of performance. In the current investigation it is hypothesized that this belief will motivate the perfectionist to improve their performance and thus obtain a level of performance consistent with their own inflated standards. This re-doubling of one's efforts on the job will further exacerbate the job demands of the perfectionist as he or she struggles ever harder to achieve the unattainable gold standard of performance.

In terms of resources on the job we can hypothesize that perfectionism will be negatively associated with a least some resources that could mitigate the impact of job demands. Specifically, Demerouti et al., (2001) identified three classes of resources that could be used in the service of alleviating stress associated with job demands: internal, social, and organizational. Internal resources include the persona characteristics that allow and individual to deal with job demands. Examples of relevant internal resources are personality characteristics, coping styles, cognitive capacity, etc. According to this line of thinking one could postulate that certain other internal characteristics could negatively influence one's ability to cope effectively with job demands. Elsewhere in this volume the personality correlates of perfectionism have been enumerated. They include: feelings of inferiority (Ashby and Kottman, 1996), low self-esteem (Rice et al., 1998), depression (Hewitt et al., 1996), and general and performance anxiety (Walsh

and Ugumba-Agwunobi, 2002). Taken together, this cluster of personality characteristics suggests an individual who is less rather than more able to effectively manage job demands. Thus we might expect that perfectionist to possess less internal resources as interpreted by the JD-R model compared to non-perfectionists and consequently be more prone to burnout.

While there is not a concrete rationale to believe that the perfectionist may have less social and organizational resources at their disposal, the notion is not without merit. Especially with respect to social resources it is possible that the perfectionist's intense search for perfection in all things results in the alienation of others in their social world. It is ironic that in the pursuit of perfection the perfectionist may neglect personal relationships that could provide social resources that would alleviate some of the stress associated with the demands they put on themselves. There is some anecdotal evidence that the perfectionist is indeed socially isolated. Referring to perfectionists Pacht (1984) writes, "…they see themselves as unlovable and lonely. For them being perfect is the magic formula for success." (p. 387). Thus the perfectionist may feel that he or she is unworthy of social resources due to their apparent inability to obtain an acceptable level of performance.

The JD-R model states that prolonged exposure to high levels of job demands coupled with low levels of resources will result in burnout in the form of emotional exhaustion and cynicism. Due to the fact that the perfectionist will experience high job demands and low internal and social resources, it follows that perfectionism will be related to burnout on the job. Furthermore, the third dimension of burnout not predicted from the JD-R model decreased efficacy, should also be impacted by perfectionism. In a very straightforward way, the belief among perfectionists that they are unable to perform at an acceptable level of performance should result in lower levels of personal efficacy. Thus, perfectionism is hypothesized to be

positively related to emotional exhaustion and cynicism and negatively related to feeling of personal efficacy – the three dimensions of burnout.

While there have been no studies that specifically address the relationship between perfectionism and burnout, the burnout literature does suggests that personality characteristics influence the experience of burnout. For example, Elliott, Shewchuk, Hagglund, Rybarczyk, and Harkins (1996) found that among rehabilitation nurses a positive problem solving orientation, a form of positive affectivity described as a tendency "to maintain a sense of competency on daily tasks, and is capable of staving off prolonged periods of negative mood, and may even experience a positive emotional tone under stressful conditions" (Elliott et al., 1996, p.269) was associated with reduced levels of burnout. Conversely, a negative problem solving orientation, a form of negative affectivity, was associated with higher levels of burnout.

In a more recent study, Riollo and Savicki (2003) found that the personality characteristics of optimism and pessimism both demonstrated significant main effects on all three dimensions of burnout with optimism being associated with lower levels of emotional exhaustion, and depersonalization and higher levels of personal efficacy. In contrast, pessimism was associated with higher levels of emotional exhaustion and depersonalization and lower levels of personal efficacy. Moreover, pessimism moderated the influence of resources on burnout. When resources were low, individuals with higher levels of pessimism experienced even higher levels of all three dimensions of burnout (personal efficacy reverse scored) than when resources were plentiful.

Taken together the above results suggest that personality characteristics do have an important influence in the propensity to experience burnout. More importantly, negative personality traits such a negative affectivity and pessimism have been found to increase the

likelihood of burnout among individuals in the work environment. As perfectionism can be linked both theoretically and empirically to these types of negative traits there is support for the current experimental hypothesis that perfectionism is related to burnout.

Because the present investigation seeks to establish perfectionism as a personality trait that is predictive of important work-related attitudes and behaviors, it is essential to establish its predictive ability over and above more common and well researched organizational psychology variables. Thus, it is hypothesized that perfectionism will influence burnout over and above trait negative affectivity.

Similarly, burnout is typically conceptualized as the result of extended periods of stress and strain on the job (Maslach et al., 2001). It the present investigation it is hypothesized that perfectionism will be related to work stress. However, it is also hypothesized that perfectionism will exert unique influence on burnout over and above the influence it exerts through work stress. Hypothesis #3 – Perfectionism will be positively related to burnout over and above the influence of work stress and trait negative affectivity.\

Method

Participants

One hundred and ninety seven undergraduate students participated in this study (127 women and 70 men). The mean age of the participants in the sample was 23.7 years. Consistent with the student body from which it was drawn, the sample was ethnically diverse. One hundred and six participants (54%) reported their country of origin to be abroad. In addition, a third of the sample (64 participants) indicated that the majority of their education was received outside of the United States. The sample was also linguistically diverse, with less than half of the

participants (43%) reporting speaking English at home (see Table 2 for complete distribution of languages reported to be spoken at home by student participants).

All participants were employed at the time of the study and working 20 hours or more per week. The largest plurality of participants (39%) reported working between 20-30 hours per week, with the next largest group (27%) reporting working exactly 20 hours. The remaining participants reported working 30-40 hours per week (19%), or greater than 40 hours per week (15%). The average job tenure of participants was 2.3 years (SD = 3.17).

Participants reported being employed in a variety of job categories (Table 3). The largest single job categories being Sales and Related jobs (28% of they sample), Business and Financial Operations (17%), and Office and Administrative Support (14%).

Materials

To measure perfectionism the Almost Perfect Scale Revised – Short Form designed by Slaney et al. (1996) was employed (Appendix C). The APS – R is divided into three subscales. The first scale, Order measures the extent to which the respondent is orderly and organized. The second scale, Standards measures the extent to which the respondent has high personal standards of performance. The third and final scale, Discrepancy measures the extent to which the respondent perceives he or she falls short of his or her performance standards. Because the present investigation was designed to assess the negative aspects of perfectionism in the work environment, and because the Discrepancy subscale of the APS – R was specifically designed to assess the negative or maladaptive aspects of perfectionism (Slaney et al., 2001) this scale was used as the perfectionism measure for all of the analyses in the study. All of the scales require the respondents to rate to self-descriptive statements in terms of the extent to which the statement

describes them. The measure uses a Likert-scale (1 = Strongly Disagree; 7 = Strongly Agree) and the measure is delivered in a pencil and paper format.

To measure job satisfaction, the Abridged Job Descriptive Index (AJDI) originally created by Smith, Kendell, and Hulin (1969) was used. The scale presents the respondent with 25 items which are divided into six subscales. The subscales measure satisfaction with the following aspects of the work environment: work on job, pay, opportunities for promotion, supervision, people at work, and the job in general. Each item on the subscales is a single word adjective and the respondent indicates the extent to which the descriptor describes his or her job (yes, no, or cannot decide).

Work stress was measured using the Job Content Questionnaire (JCQ) (Karasek, 1979; Karasek et al., 1998) (Appendix D). The core subscales were employed as measures: Decision Authority, Skill Discretion, Psychological Workload, Supervisory Support, Coworker Support; as were several subscales measuring the emotional consequences of work stress: Job Dissatisfaction, Physical/Psychosomatic Strain, Depression, and Sleep Problems. All of the subscales, with the exception of the Job Dissatisfaction and Depression scales, require the respondent to rate the extent to which a particular characteristic is present in his or her work environment. The measure uses a Likert-scale anchored from one to five. The Job Dissatisfaction measure requires the respondent to answer several questions that gauge satisfaction with one's job (e.g., Would you advise a friend to take this job?). The Depression measure has a respondent describe his or her life along several continuum which are anchored by one positive and one negative adjective (e.g., enjoyable and useless, full and empty, etc.)

The burnout construct was measured using an English translation of the Oldenburg Burnout Inventory (OLBI) (Demerouti, 2003) (Appendix H). This version of the measure was

obtained by the PI, from the author, and has been used in with several English-speaking samples and across a wide range of occupations (Demerouti, 2003). The OLBI contains two subscales – Exhaustion and Disengagement. The items on both of the scales require the respondent to indicate the extent to which they agree with self-descriptive statements that describe how they feel at work. Items are scored on a Likert-type scale (1 = Strongly Agree; 4 = Strongly Disagree).

Negative Affectivity was measured using the Positive and Negative Affectivity Scale (PANAS) (Appendix E). The measure consists of 20 self-descriptive adjectives (e.g., interested, upset, etc.). The respondent reports the extent to which each adjective describes his or her emotional state. Response are keyed using a Likert format (1 = Very slightly; 5 = Extremely).

Design and Procedure

This study employed a cross-sectional correlational design. Data was collected at one time period (administrative issues not withstanding) using the measures described above. While this type of correlational research makes it impossible to infer causation between the variables of interest (Cook & Campbell, 1979) it allows for statistically significant relationships to be identified. Further, possible third variables that could influence the relationships observed (demographics, negative affectivity, etc.) were measured and accounted for statistically so that, at least, some possible third variables can be ruled out.

Participants for this study were obtained from the student body of a metropolitan college in the Northeastern United States The participants were undergraduate and enrolled in introductory and upper-level psychology courses and participating in the Subject Pool in their psychology department. Due to the fact that the investigation is interested in work attitudes, involvement was limited to students who were currently employed and working more than 20

hours.

Participants were solicited through the sign-up sheet process established by the students' psychology department. This process allows for establishing criteria for inclusion in the study (i.e., limiting participation to students who possess certain characteristics) before students sign up for a study. In this way, the PI was able to limit participation to only those students who were working more than 20 hours per week.

Because psychological variables can be influenced by many situational and demographic factors, data was obtained on the following personal characteristics to identify whether they influenced any of the experimental variables either as main effects or in moderating the relationships between variables: job type, shift (day/night), number of hours worked per week (20-30, 30-40, >40), tenure, age, gender, native language, country of origin (US or abroad) location of education (US or abroad). Job type was operationalized by using the 22 job categories used by the Bureau of Labor Statistics. Participants identified to which of the 22 job categories their current job corresponds.

Actual data collection was accomplished using an on-line survey methodology. Participants used a universal password supplied by the PI to access the URL on which the measures were placed. The on-line survey compiled a database of responses in which each respondent had a unique identifier. These values were generated randomly and the process was totally transparent to the participants (i.e., they did not provide any identifying information other than the demographic characteristics previously described).

Upon completion of the on-line survey, each participant was presented a message thanking them for their participation. The URL also contained a statement that the PI would make a full debriefing document available to all participants upon request. Because data

collection occurred over the course of a semester and a similar follow-up study was planned by the PI, the debriefing document requested that the participant not divulge the study's hypotheses to other students in order to mitigate "hypothesis guessing" by potential, future participants.

At the end of the study, the data was downloaded using a encryption software similar to the one used by financial institutions for wire transfers and the URL was closed.

Results

Descriptive Statistics

For each of the five measures employed in this study several descriptive statistics were obtained to ensure that the sample used in the investigation responded as expected. First, for each measure, measures of central tendency were established (mean, median, and mode). Second, measures of variability were obtained (variance and standard deviation). Third, histograms were created for each of the measures to graphically represent the distribution of data. By combining the information from these three sources it was possible to identify outliers in the sample that might have exerted undo influence on the final data set. Finally, for each measure employed reliability statistics in the form of coefficient alpha were obtained. Descriptive statistics are presented in Table 1.

Inferential Statistics

Hypotheses one and two were tested in two ways. First the Pearson Product-Moment Correlation between perfectionism and the subscales of work stress and job satisfaction were obtained separately. Next, the partial correlation between perfectionism and the work stress/job satisfaction scales were calculated removing the influence of trait positive and negative affectivity from both the predictor and criterion variables. If the magnitude of the correlations

were reduced, it was concluded that trait affectivity accounted for shared variance across perfectionism and the dependent variable. If the correlations remained significant it was concluded that perfectionism accounted for unique variance in the dependent variable when the influence of affectivity was removed from both variables.

The second tests of hypothesis one and two were conducted using hierarchical regression analysis predicting the dependent variable. In this analysis the following demographic variables : tenure, education, country of education, job category, sex, shift, number of hours worked per week, country of origin, and age. were entered into the regression as the first block. The second block entered consisted of the trait affectivity measures. Finally, perfectionism was entered into the regression equation. The experimental hypothesis was confirmed if the F test of the regression coefficient for perfectionism was significant at the .05 level. Furthermore, the change in R-square with the inclusion of perfectionism in the model was observed to determine the new variance accounted for in work stress/job satisfaction by perfectionism over and above the influence of demographic variables and affectivity.

Hypothesis three was tested in an analogous manner to hypotheses one and to with one exception. For the burnout regression models four blocks of variables were entered as predictors. In the first block the demographic variable set was entered. In the second block, both positive and negative affectivity were entered. In the third block the complete list of work stress variables, excluding stain variables, were entered as predictors (skill discretion, decision authority, psychological demands, supervisor support, and co-worker support). Finally, perfectionism was entered as a single predictor in the fourth block. As previously noted, work stress variables have been found to be empirically related to burnout. Should perfectionism continue to be a significant predictor of burnout after their inclusion in the regression model of

work stress the case for the meaningfulness of perfectionism as a predictor of work attitudes will be strengthened.

Work Stress

In the first test, the Pearson correlations between perfectionism and the nine subscales of the JCQ (skill discretion, decision authority, psychological demands, supervisor social support, coworker social support, job dissatisfaction, physical/psychosomatic strain, depression and life dissatisfaction, and sleeping problems) were obtained (Table 4). In general, the hypothesis that perfectionism is related to work stress was supported as seven of the nine correlation coefficients were significant and in the expected direction.

As expected, perfectionism was found to be positively related to facets of the JCQ that measure negative emotional response to one's work. Specifically, perfectionism was found to be positively related to job dissatisfaction ($r = .188$, $p = .009$), physical/psychosomatic strain ($r = .329$, $p = .000$), depression and life dissatisfaction ($r = .468$, $p = .000$), and sleeping problems ($r = .199$, $p = .005$). Contrary to hypothesis one, however, no relationship was found between perfectionism and the psychological demands of one's work.

Also consistent with expectations, perfectionism was found to be negatively related to three of the four JCQ facets that mitigate the perception of work stress. Perfectionism was found to be negatively related to decision authority ($r = -.199$, $p = .006$), supervisor support, ($r = -.175$, $p = .015$), and coworker support ($r = -.221$, $p = .002$). No relationship was found between perfectionism and the fourth mitigating facet: skill discretion.

The correlation matrix between perfectionism and work stress was obtained again, this time after partialling out the influence of positive and negative affectivity (Table 4). Analysis of

the correlation matrix revealed that, after controlling for the influence of positive and negative affectivity, perfectionism was still related to four of the nine facets of the JCQ.

Specifically, of the nine aforementioned significant relationships between perfectionism and work stress four remained significant in the expected direction. Perfectionism remained significantly associated with: coworker support ($r = -.174$, $p = .023$), job dissatisfaction ($r = .156$, $p = .042$), physical/psychosomatic strain ($r = .247$, $p = .001$), and depression and life dissatisfaction ($r = .384$, $p = .000$).

The results of the hierarchical regression analyses generally supported the relationships revealed in the partial correlation matrix. In four of the nine regression equations the inclusion of perfectionism as a predictor in the regression equation, over and above demographic variables and trait affectivity, resulted in an improved model as measured by the significance of the perfectionism predictor as well as the increase in the variance for which the model accounted. The four variables for which this was the case were: co-worker support, physical/psychosomatic strain, depression and life dissatisfaction, and sleep problems.

Work Stress - Coworker Social Support

The inclusion of perfectionism into the regression equation predicting co-worker support regression resulted in a more predictive model, evidenced by the fact that the f-value for the overall model increased (Table 5). For the model with the demographics entered in block one and affectivity entered in block two, $f = 2.22$, $p = .015$; however for the model including perfectionism in block three these values increased to $f = 2.55$, $p = .004$. Additionally, the variance for which the model accounted (R^2) increased from $R^2 = .126$ to $R^2 = .153$ with the inclusion of the perfectionism predictor. Finally, perfectionism proved to be a significant

individual predictor even after the demographic variables and trait affectivity were entered into the regression (t = -2.343, p = .020) (see Table 6).

Work Stress – Physical/Psychosomatic Strain

The model predicting physical/psychosomatic strain also improved as a result of entering perfectionism as a predictor (Tables 5 and 6). The f-value for the entire model improved from f = 3.79, p = .000 to f = 4.55, p = .000. The R^2 for the two models increased from R^2 = .193 to R^2 = .240. The individual perfectionism predictor was also significant (t = 3.25, p = .001).

Work Stress – Depression and Life Dissatisfaction

The regression model predicting depression and life dissatisfaction improved when perfectionism was entered as a third block into the equation (Tables 5 and 6). The f-value for the overall model increased from f = 6.66, p = .000 with demographic and affectivity variables included to f = 9.32, p =.000 for the model including perfectionism. Within the model the perfectionism predictor was individually significant (t = 5.21, p = .000). The variance with depression and life dissatisfaction for which the model accounted increased with the addition of perfectionism as evidenced by an increase in R^2 from .304 to .401.

Work Stress – Sleep Problems

The model predicting sleep problems also improved with the inclusion of perfectionism (Tables 5 and 6). The f-value for the model increased from f = 2.47, p = .007; to f = 2.64, p = .003. Moreover, the individual perfectionism predictor proved to be significant (t = 2.00, p = .047), and the R^2 for the model improved from .134 to .154.

<u>Job Satisfaction</u>

Analysis of the regression coefficients between perfectionism and the facets of the JDI revealed that, consistent with the hypothesized relationships, perfectionism was significantly

and negatively correlated with satisfaction with supervision (r = -.145, p = .043), people at work (r = -.233, p = .001), and one's job in general (r = -.275, p = .000). Contrary to these experimental hypotheses, however, there was no significant relationship between perfectionism and satisfaction with: one's present job (r = -.059, p = .412), present pay (r = -.097, p = .179), and opportunities for promotion (r = .072, p = .316). Moreover, when the influence of affectivity was partialled out of the perfectionism/job satisfaction correlations only two of the above relationships remained significant: the relationships between perfectionism and satisfaction with people at work (r = -.189, p = .013). and one's job in general (r = -.216, p = .005) (Table 7).

Job Satisfaction – People at Work

A hierarchical regression analysis similar to the one performed for both the work stress and burnout variables was performed on the job satisfaction variables. In these regressions, the models consisted of three blocks entered in a step-wise fashion. The aforementioned demographic variables were entered into the equation as the first block. Next, positive and negative affectivity were entered into the equation as the second block. Finally, perfectionism was entered as a predictor in the third and final block of the regression.

Consistent with the findings from the partial correlation matrix, inclusion of perfectionism in the regression predicting satisfaction with people at work improved the fit of the model. Specifically, the variance accounted for by the model was increased when the final block including perfectionism was added to the equation (R^2= .130 with perfectionism included versus R^2 = .092 without perfectionism). In addition, the overall fit of the regression equations improved as demonstrated by the F-value for the model (f = 2.16, p = .016 with perfectionism in the model; versus f = 1.619, p = .097 without). Finally the individual perfectionism predictor value was also significant within the equation (t = -2.731, p = .007) (see Table 8). These results

suggest that perfectionism is negatively associated with satisfaction with the people in one's work over and above the influence of both demographic variables and trait affectivity.

Job Satisfaction – Job in General

The model predicting satisfaction with one's job in general was also significantly improved by the inclusion of the perfectionism variable in the equation. The variance accounted for by the model improved from $R^2 = .151$ to $R^2 = .187$. Additionally, the f-value for the model improved from f = 2.284 ,p = .001 to f = 3.33, p = .000 after the inclusion of perfectionism in the regression. Consistent with these data, the perfectionism predictor was also individually significant in the regression equation (t = 2.77, p = .006) (see Table 8). Here again, it appears that perfectionism is significantly and negatively related to satisfaction with one's job in general even after controlling for the influence of demographics and affectivity.

Burnout

Analysis of the correlation coefficients between perfectionism and the two facets of burnout revealed a mixed picture (Table 9). As hypothesized, perfectionism was positively related to the exhaustion sub-scale of the OLBI (r = .302, p = .000). However, contrary to the hypothesized relationship perfectionism was unrelated to the disengagement subscale (r = .061, p = .395). When the influence of trait affectivity was partialled out of the relationship between perfectionism and the two burnout dimensions the relationship between perfectionism and exhaustion remained significant (r = .238, p = .002); while the relationship between perfectionism and disengagement remained statistically insignificant.

The results of the hierarchical regression analyses mirrored the relationships revealed in the partial correlation matrix. For the burnout regression models four blocks of variables were entered as predictors. In the first block the demographic variable set described in the explanation

of the work stress equation was entered. In the second block, both positive and negative affectivity were entered. In the third block the complete list of work stress variables, excluding stain variables, were entered as predictors (skill discretion, decision authority, psychological demands, supervisor support, and co-worker support). Finally, perfectionism was entered as a single predictor in the fourth block. Because the perfectionism was entered in a subsequent block of predictor compared to work stress, for it to remain a significant predictor of burnout it must do so over and above the influence of work stress. As a result, the hierarchical regression represented a more stringent test of the experimental hypotheses.

Results indicated that the regression model predicting exhaustion was improved by the inclusion of perfectionism as a predictor. The overall model improved from $f = 6.07$, $p = .000$ to $f = 6.45$, $p = .000$ as did the proportion of variance accounted for by the model ($R^2 = .379$ for the model without perfectionism versus $R^2 = .410$ for the model with perfectionism). The individual perfectionism predictor within the model also proved to be significant ($t = 2.87$, $p = .005$) (see Table 10).

For the regression predicting disengagement, the fit of the model was not enhanced by the inclusion of perfectionism as a predictor.

Discussion

To date this study is the first systematic investigation of the impact of perfectionism on one's experience at work. The results of this study suggest that perfectionism is related to a specific pattern of work attitudes characterized by experiences of work stress and stain (and lower levels of stress mitigating job characteristics and/or perceptions of those characteristics), job dissatisfaction, and burnout.

Among the sample of working college students perfectionism was found to be positively related to facets of Karasek's JCQ which measures work stress and strain. Specifically perfectionism was found to be related to work strain measures: job dissatisfaction, physical/psychosomatic strain, and depression and life dissatisfaction. In addition, perfectionism was negatively related to coworker support, a job characteristic postulated in Karasek's demand-control model to mitigate the impact of work stress by providing social support to workers. Interestingly, no significant relationships were found between perfectionism and the work characteristics theorized by Karasek to drive work stress (demands, control, and support variables). It had been hypothesized in the current investigation that perfectionism would be related to perceptions of greater work demands and lower levels of control on the job. This was not the case. This pattern of results provides a picture of the working perfectionist as someone who is negatively impacted by the pressure of the work in which he or she engages but does not necessarily feel that their work is "harder" in terms of demands and control than the non-perfectionist. Rather, he or she appears to have differential levels of strain, or the negative experience of work. The one significant relationship with a job characteristic variable was the negative relationship between perfectionism and co-worker support. It is unclear whether this relationship is the result of a perceptual difference (i.e., perfectionism is related to lower perceived social support) or whether perfectionism drives behaviors which result in the withdrawal of co-worker support. Interesting future research might be focused on obtaining data from the co-workers of perfectionists to gain their insights on the potential reasons for these negative social perceptions among perfectionists.

Also consistent with expectations, this study found a negative relationship between perfectionism and two-facets of job satisfaction: satisfaction with co-workers and satisfaction

with one's job in general. These results can be interpreted as consistent with the aforementioned work stress/strain relationships insofar as there does not seem to be many differences in how perfectionists view the objective aspects of work (i.e., opportunity for promotion, supervisors, pay, etc.). However, there is a difference in perceptions of the emotional experience of work (as evidenced by the negative relationship between perfectionism and the job in general scale) and perceptions of co-workers. These facts, when interpreted in the context of the work stress/strain results provide a picture of the perfectionist as accurately perceiving the aspects of the work environment, but having a negative emotional reaction to them. This reaction is undoubtedly due to the enduring perceptions on the part of the perfectionist that he or she is failing to live up to their desired level of performance. The anxiety associated with these perceptions likely drive a prevailing negative emotional response to the work environment.

Finally, this study found perfectionism to be positively associated with the emotional exhaustion facet of burnout but not the disengagement facet. This pattern of results is consistent with the findings vis-s-vis work stress/strain and job satisfaction. It suggests that the perfectionists negative emotional response at work is associated with a level of emotional fatigue. Interestingly there was no relationship between perfectionism and disengagement from one's work. This suggests that although the perfectionist is in psychic pain as a result of his or her experiences at work, this pain does not cause him or her to remove themselves from the source of their pain. Perhaps the desire to remain "perfect" override the motivation to avoid the negative feeling associated with work. That is, that the perfectionists rigid standards include remaining on the job and doing one's best regardless of one's emotional state. Follow up research might focus n determining whether or not there is a "breaking point" beyond which the

perfectionists will, indeed, disengage from the emotionally taxing work environment. For this work, a longitudinal study might be best suited.

This study has two obvious limitations. First, the sample obtained was made up entirely of college students. Although participation was limited to students who were working more than 20 hours per week, it is possible that this sample is systematically different than a sample of individuals who are employed full-time and no longer pursuing their education. It is likely that participants status as students who have probably not found their first "real job" or embarked upon their first chosen career path is more psychologically relevant (and potentially makes their perception, attitudes, etc. more divergent than a traditional working sample) than the number of hours they work. In the context of the current investigation, it is possible that the participants in this sample perceive work stress, job satisfaction, and burnout differently because their employment is more "temporary" (i.e., they are aware of the fact that they will have the option to leave their job at the completion of their education). Future research should address this potential short-coming of the current study by conducting research with a traditional working sample. Barring that, screening questions could be asked of subsequent student samples to determine whether or not students actually perceive their employment as "temporary" or disposable. This latter option may be a fruitful avenue to pursue as many colleges and universities have large non-traditional student populations (i.e., part-time, adult students who are employed full-time). Indeed, in the current investigation the mean age of respondents was 23.7 years old, and 73% of the sample was employed 20 hours or more per week, which is not indicative of a traditional student population. Thus, it may not be necessary to throw the baby out with the bathwater vis-à-vis investigating work attitudes and behaviors among college student populations, especially in light of the changing profile of student populations.

The more serious limitation of the current study is that it uses self-report measures exclusively. As such it's results are open to alternative interpretations. Two important alternative interpretations are: (a) that the relationships observed are largely due to a mono-method bias, and/or (b) self-report bias (e.g., the desire to provide self-serving responses or responses consistent with the experimenter's expectations) is influencing the observed relationships. Future research in this area should address this methodological limitation by employing other-report measures of the target individual and/or obtain behavioral measures.

Study #2 Perfectionism, Impression Management, and Organizational Citizenship Behavior

Study one was designed to identify attitudinal correlates of perfectionism on the job. Study two, in contrast, was designed to identify behavioral correlates of perfectionism on the job. In this study it was hypothesized that perfectionism would be related to organizational citizenship behavior but, contrary to prior theory and research, perfectionists will be motivated to engage in OCB not to reciprocate for job satisfaction but as an impression management campaign to make up for perceived performance shortfalls. In addition, it was hypothesized that perfectionism would be related to maladaptive reactions to the work environment including alienation and somatic complaints on the job.

This study was also designed to address the two major limitations of study one. Specially, in order to demonstrate the external validity of perfectionism as a relevant construct of study in organizational psychology, this study used working professionals as its sample. Furthermore, the study attempted to measure behavior using other-reported behaviors rather than self-report measures. Although the final sample size of interpretable self-report and other-reported behavior data pairs was limited, some interesting and promising finding did result.

Theoretical Framework of Organizational Citizenship Behavior

Katz and Kahn (1966) were among the first to recognize that there are many situations in organizations where effective functioning is dependent on supra-role behavior on the part of organizational members. In fact, they contended that an organization in which members strictly adhere to the exact letter of their job description is a fragile system that is rife with difficulties. However, many times such necessary behaviors cannot be specified or required in advance of a given job. These behaviors include actions that lubricate the social machinery of the organization but are not included in the tasks specified for a given job.

Smith, Organ, and Near (1983) posited that it is these types of proactive, spontaneous actions that "provide the flexibility needed to work through many unforeseen contingencies [and]; they enable participants to cope with the otherwise awesome condition of interdependence on each other." In other words, organizational functioning requires a combination of individual efforts that often call for employees to act outside of their formal function in the organization and identify with the goals of the larger entity and act on it's behalf. Evidence of this is that certain instances of extra-role behavior, such as helping out a fellow employee who has been absent from work, may negatively effect one's personal output in the short-run but benefit the operation of the organization in the long-run.

Organ (1988a) was the first to term these types of extra-role behaviors, Organizational Citizenship Behavior (OCB). Organ defined this construct as: "individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization" (Organ, 1988, p.4). Further, he believed that an individual could behave outside of their formal role, with the effect of enhancing the organization, in a variety of ways. Organ identified five dimensions of OCB thought to contribute to organizational effectiveness. (1) Altruism is the tendency of an employee to help others on the job. An example of altruism would be aiding a fellow employee who has temporary fallen behind on their performance output. (2) Courtesy reflects the extent to which one checks with co-workers before engaging in actions that would effect them. An example would be advising one's work group before scheduling one's vacation. (3) Sportsmanship concerns abstention from negative behaviors at work. This dimension is usually characterized as avoiding excessive gripping about minor inconveniences that occur on the job. (4) Conscientiousness is the dutiful respect for the rules that govern the organization. An example

of this is adherence to the *spirit* of the regulation as well as the letter. Finally, (5) Civic Virtue concerns the responsible participation in the political life of the organization. One could exhibit civic virtue by attending optional meetings and representing the organization positively when away from work.

Although perhaps not specified by the job description, there is good reason to believe that one's organization and supervisors value such behaviors. Bateman and Organ (1983) felt that supervisors value employees engaging in OCB because it frees them to devote their efforts toward more important issues that presumably they are most qualified to attend to. One can further assume that such behaviors would be especially valued by an employer since they are often both hard to measure exactly, and difficult, if not impossible, to require. This position is supported by Smith et al., (1983) who created their scale measuring OCB by conducting semi-structured interviews with managers and asking them to report instances of subordinate behaviors that were helpful but not absolutely required.

Organizational Consequences

More recent research has attempted to provide empirical evidence for the assertion that OCB is positively related to organizational functioning. Karambayya (1990) tested the hypothesis that citizenship behaviors would be positively related to both work-unit level performance and individual performance using a sample of white-collar workers. Supervisors provided data on both individual performance as well as citizenship behavior for their subordinates. In addition, each employee's work unit performance was sampled using ratings provided by upper level managers.

The dimensions personal industry (measuring self-discipline on the job) and loyal boosterism (efforts to promote the image of the organization) had significant positive effects on

work unit performance, while, contrary to expectations individual initiative had a negative effect on performance of the unit. It was hypothesized that this unexpected result was due to the nature of the individual initiative construct, which is composed of items that describe creative attempts to change the status quo. These behaviors may have negative effects on the short-term performance of the unit since they disrupt routine operations of the organization, while in the long-term they enhance the effective functioning of the organization.

Building on the research of Karambayya (1990a), Podsakoff, Ahearne and MacKenzie (1997) assessed the effects of OCB on objective measures of work-unit performance in a single organization. It was felt that obtaining the data from one organization rather than multiple organizations allowed for greater control over differences that may be attributable to product, service, industry, or work performed. Further, the use of quantitative measures insured that the same metric was used in assessing work-unit output. Results indicated that work-unit OCB (which was obtained by aggregating individual group members assessments of the level of OCB in their respective groups) was predictive of both quantity and quality of work group outcomes. More specifically, measures of sportsmanship and helping were found to be related to quantity of outputs while, helping was found to be related to product quality. It was theorized that the compensation system in the organization in this study, which dictated that a portion of one's pay was contingent on the output of one's group would create a situation in which helping a fellow employee overcome difficulties on the job would be the likely arena for OCB to surface.

In another study, Podsakoff and Mackenzie (1994) used objective measures of performance (as measured by quantitative archival data) to assess the effect of OCB on performance at the organizational level. Supervisory-rated measures of sportsmanship, civic virtue and helping were obtained for insurance agents to assess their contribution to the

functioning of their respective agency. Results obtained presented an unclear picture of the effect of OCB on organizational functioning. Certain types of OCB (sportsmanship and civic virtue) were found to be positively related to agency performance whereas other forms of OCB (helping) were found to be negatively related to this criterion variable. This pattern of results is inconsistent with the findings of Podsakoff et al (1997) and might be due to several factors specific to the context of the study. In the insurance business, helping behaviors might be beneficial to the organizational bottom line only to the extent that the employee being helped "makes up" in their personal productivity the monetary cost of more experienced agent taking time to help them. Further, because the compensation system tends to be competitive in such organizations it is possible that the helping exhibited by employees is tempered by the fact that they do not want their fellows to do "too well".

Taken together the above results are supportive of the contention that OCB in the aggregate promotes the effective functioning of an organization. Although the data on the efficacy of OCB in promoting individual performance is less than clear, there seems to be strong evidence of OCB promoting both group-level and organizational-level performance. These findings underscore the importance of identifying the antecedents of OCB in order to promote its occurrence in organizations.

Contextual Antecedents

Satisfaction

Although intuitively appealing, empirical evidence has failed to bear out the causal link between worker satisfaction and performance (Vroom, 1964; Iaffaldano & Muchinsky, 1985). However, Organ (1977) warned against prematurely rejecting a notion that, although consistently disconfirmed in the literature, persists in the minds of mangers and those more in tuned with the

facts on the ground in organizations. Organ felt that the traditional performance construct (typically, quantity and quality) is too narrow and does not include much of the behaviors being attended to by those who cling to the belief that a happy worker is a productive worker. Further, he endorsed the view that allowing the performance construct to be expanded will lead to evidence of a much stronger relationship between satisfaction and performance.

Bateman and Organ, (1983) posit two distinct conceptual bases for feeling that OCB could be influenced by satisfaction. The first is based on social exchange theory (Blau, 1964). Drawing on research concerning the norm of reciprocity, it is asserted that individuals who are satisfied in an organization can be expected to be motivated to act in ways that benefit the organization. On a very base level this prediction is based on the assumption that human beings are motivated to do good things to those who do good things for them. Since an individual's ability level may limit the latitude they have in improving their quality or quantity of performance output, the worker may be motivated to reciprocate the organizations benevolence, efforts, etc by engaging in behaviors outside of their formal job description. Similarly, the technology of production may also limit the instances of in-role performance where one can attempt to "pay back" their manager or organization (Motowidlo, Borman, & Schmit, 1997). For example, a worker on an assembly line cannot speed up production to react to their positive appraisals of the work situation. Rather, they would most likely be forced to reciprocate, to the extent that they were motivated to do so, using extra-role behaviors. For the above reasons OCBs are more likely the in-role behaviors to be under the direct control of the individual and, thus, more likely to be the avenue upon which one reciprocates the satisfaction felt on the job.

In addition, researchers (Organ, 1988a; Van Dyne & Ang, 1998) attending to the discretionary nature of OCB, have asserted that citizenship behaviors would be the avenue of

choice for reciprocation of satisfaction because employees are not specifically required to do them. Specific in-role requirements are part of the formal job description and, as such, are governed by the incentive system of the organization. As such, they are also appropriate bases of sanction if not completed properly. OCBs, on the other hand, fall outside this formal organizational authority system and are not directly linked to such consequences in an one to one correspondence (Organ, 1997). Thus, an individual could withhold OCBs when unsatisfied without the threat of sanction and confer them and "exceed the minimum requirements of their jobs by helping others in the organization" (Van Dyne & Ang, 1998, p.694) at their discretion when they are satisfied. Organ, (1988b) also points out that to withhold in-role performance may be very painful to some "professional s and skilled artisans whose egos and self-esteem are closely bound to pride in performance." (p.553)

The second bases for believing that OCB may be the missing piece in the satisfaction causes performance hypothesis is rooted in the research on pro-social behavior. Pro-social gestures are more likely to occur when a person experiences a generalized mood state characterized by positive affect (Clark & Isen, 1982). To the extent that job satisfaction reflects a positive affective state, it is likely that persons who are more satisfied at work would be more likely to display instances of helping behavior falling under the rubric of OCB (Bateman & Organ, 1983; Smith et al., 1983).

Satisfaction Empirical

Bateman and Organ (1983) sought to renew the interest in the satisfaction causes performance hypothesis by way of expanding the construct of performance to include such "citizenship behaviors" as: compliance, altruism, dependability, housecleaning, cooperation, punctuality and the absence of complaints, waste, cynicism and arguing with others. Measures

of job satisfaction were obtained from a sample of primarily administrative workers, using the Job Descriptive Index (JDI) developed by Smith et al. (1969). In addition, each respondent's direct supervisor was made to complete a 30-item tapping the citizenship behaviors displayed by the target individual. The process was repeated approximately six weeks later in an attempt to establish causality via a cross-lagged regression analysis.

Results indicated significant positive static correlations at both administrations between citizenship and the dimensions of job satisfaction as well as the summed measure of overall satisfaction. While all satisfaction components were significantly related to citizenship in at least one occasion (either at time one or time two), two facets, satisfaction with supervision and satisfaction with promotions were most strongly related at both administrations. Further, correaltions between overall satisfaction and citizenship ($r=.41$ at time one, $p<.01$; $r=.41$ at time two, $p<.01$) were "particularly substantial when compared to most previous studies of the satisfaction-performance relationship" (p.591). Contrary to the expectations of the experimenters, however, cross-lagged correlations failed to establish causality in either direction.

In an attempt to clarify and expand on the work of Bateman and Organ (1983) Smith, Organ, and Near (1983) used path analysis to investigate the question of satisfaction causing citizenship behavior. Three alternative models were proposed and tested. The first model, consistent with the previously discussed mood explanation of citizenship, predicted a direct causal path between job satisfaction and citizenship behavior. In this model contextual and dispositional variables related to citizenship only indirectly, through satisfaction. The second model, consistent with the spuriousness explanation, posited relationships between contextual and dispositional factors and both satisfaction and citizenship but left them unrelated to each other. The third model accounted for citizenship by both direct effects from contextual and

dispositional factors as well as indirect effects via satisfaction.

This study was also significant in that it utilized factor analysis to model behaviors, supplied by supervisors as describing citizenship, into a coherent picture. Two distinct factors of OCB emerged from the analysis. Items that loaded on the first factor, labeled altruism, were interpreted as measuring behaviors that are aimed at helping a specific individual or group of individuals in the working environment. These behaviors involve face to face interactions and the eliciting stimulus was assumed to be someone needing aid. The second factor, in contrast, involves behaviors in which no specific person is the beneficiary of aid rather the organization as a whole is benefited. This factor was postulated to involve internalized norms of how good employees behave and was termed, generalized compliance. Thus, was Organ's contention of the multi-dimensional nature of OCB empirically supported.

Since altruism and generalized compliance emerged as two independent factors, each was analyzed separately using separate path analyses. Results indicated that two distinct models emerged for the two factors. For altruism, significant main effects were found for job satisfaction, as well as the demographic variables, education level and urban/rural background. The environmental variable leader supportiveness was indirectly related to altruism through satisfaction, as was the personality variable neuroticism (which was negatively related). For the generalized compliance factor, satisfaction had no direct path to the dependent variable. Rather direct paths were found for leader supportiveness, urban/rural background, and interestingly, the lie scale for the Eysenck Personality Inventory (1958). In terms of the altruism factor, these results were interpreted as consistent with the notion that in at least one type of citizenship behavior the positive affect or mood (in this case measured by job satisfaction) of the individual may predispose them to pro-social helping behavior. Given the nature of the factor this

interpretation is consistent. Further, the path analysis showed environmental and personality antecedents behaving in a manner consistent with the third model proposed. Specifically, that satisfaction has a direct effect on citizenship behavior with environmental and personality variables exerting indirect effects through their effects on satisfaction.

Other research has attempted to distinguish whether it is the cognitive or affective component of job satisfaction that motivates individuals to engage in OCB. Organ and Near (1985) have suggested that cognitive appraisals predominate measures of job satisfaction, and if this is the case, it would seem to follow cognitions rather than affect drive OCB. This would seem to be inconsistent with the Smith et al. (1983) suggestion that mood drives the pro-social, helping component of their OCB scale, Altruism. The significance of the cognition/affect distinction lies in that if OCB is affectively driven it can be expected to be a function of mainly stable individual traits. If this is the case, administrators in organizations could hope to influence OCB mainly at selection. If on the other hand, OCB follows from cognitive appraisals of job characteristics then it could be influenced by administrator's ability to change organizational realities.

To investigate the contributions of cognitions and affect on OCB, Organ and Konovsky (1989) administered the Watson and Tellegen (1985) positive and negative affect index to employees at metropolitan hospitals. A 12-item scale was administered, as well, to measure cognitive appraisals of job outcomes. The Smith et al. (1983) OCB scale was completed by each of the respondent's direct supervisors. Hierarchical regression analysis was used to determine the incremental variance explained by both set of predictors on both factors of OCB. Usefulness analysis indicated that the cognition scales were uniquely associated with both Altruism and Compliance. In contrast, the affect scales were not uniquely associated with either OCB factor

over and above the variance accounted for by the job cognition scales.

Moorman (1993) also found support for the contention that the cognitive component of job satisfaction measures exerts the strongest influence in the relationship between satisfaction and OCB. Taking as his point of departure the fact that different measures of job satisfaction have differing ratios of cognitive and affective content (Brief & Roberson, 1987), Moorman hypothesized that job satisfaction measures characterized by a relatively high cognitive influence will be more strongly related to OCB than job satisfaction measures characterized by a relatively high affective content.

Moorman employed two measures of job satisfaction, completed by the employees and an OCB scale, which was completed by each employee's direct supervisor. The two measures of job satisfaction were selected for their established representation of cognitive and affective content as established by previous empirical investigation (Brief & Roberson, 1987). The Minnesota Satisfaction Questionnaire (MSQ) was used to measure cognitive satisfaction. This measure is two-dimensional in that it taps both intrinsic and extrinsic factors of the job. It consists of a list of job conditions the respondent is required to appraise. Conditions include working conditions, pay, quality of supervision, degree of autonomy, and importance of the job. The Brayfield-Rothe Job Satisfaction Scale (Brayfield & Rothe, 1951) was used to measure affective satisfaction.

Moorman reported results consistent with the aforementioned hypothesis. The MSQ extrinsic predicted OCB more strongly than the Brayfield-Rothe. The MSQ extrinsic explained significant incremental variance over and above the variance explained by the Brayfield-Rothe for four of the five dimensions of OCB tested (Altruism, Courtesy, Sportsmanship, and Contentiousness).

Fairness

The findings that cognitive measures of job satisfaction predict OCB better than affective measures suggests that employees are actively evaluating their employment situations in some way, and deciding to contribute beyond their formal role requirements based on the results of their evaluation. Organ (1988b) and others (Konovsky & Pugh, 1994) have suggested that the cognitive element being tapped in the measures that successfully predict OCB are "an appraisal or comparison of the situation with a standard of fairness." (Organ, 1988b, p.552).

Moorman (1991) sought empirical evidence for the contention that fairness governed the relationship between satisfaction and OCB. It was hypothesized that perceptions of organizational justice (in the form of distributional and procedural justice) would positively influence both job satisfaction and OCB. Further, when the effects of organizational justice perceptions were controlled for, it was expected that job satisfaction would not influence the dimensions of OCB.

Distributive justice was measured by having respondents complete the Distributive Justice Index (DJI) developed by Price and Mueller (1986). Procedural justice was assessed using a two-factor scale developed for the study. The first dimension assessed the perceived fairness of the organizations formal procedures. The second dimension, interactional justice, assessed the extent to which procedures were construed as fair as they were enacted in the organization. Satisfaction was measured using the Brayfield-Rothe JSS (1951) and OCB was assessed for each respondent by their direct supervisor completing the five-factor OCB scale developed by Podsakoff & MacKenzie (1989).

Utilizing structural equation modeling, it was found that the model in which perceptions of organizational justice caused both satisfaction and OCB best fit the data. In other words,

controlling for perceptions of justice, satisfaction was unrelated to OCB. Individual paths indicated that all dimensions of organizational justice influenced job satisfaction. In contrast, the relationship between organizational justice and OCB was best described in terms of the procedural justice dimension of interactional justice, with this dimension predicting four of the five OCB dimensions in the study (all but Civic Virtue). Since most of the items on the interactional justice scale involved perceptions of one's supervisors behaviors these results were interpreted as suggesting that when employees believed their supervisor treated them fairly, they were more likely to exhibit OCB.

Konovsky and Pugh (1994) attempted to further clarify the findings of Moorman (1991). They found that procedural justice in the decision making of one's direct supervisor was a significant predictor of OCB. Further, it was found that trust in one's supervisor mediated the relationship between supervisory procedural justice and OCB, suggesting that fairness in procedures is not enough to promote OCB, the context in which they occur is also important. These results were interpreted to support the social exchange model of OCB as trust is a key component in the maintenance of the relationship necessary for social exchange.

Moorman, Niehoff, and Organ (1993) expanded on the findings of Moorman (1991). In this study, structural equation modeling was used to measure the relative contributions of job satisfaction, organizational commitment (as measured by an affective commitment scale and a continuance commitment scale), and perceptions of organizational justice on OCB. Once again, procedural justice was found to significantly influence both the antecedent variables (job satisfaction and organizational commitment) and OCB. In addition, no significant relationships were found between the two antecedents and OCB once the relationship between procedural justice and OCB were controlled for statistically.

A study by Skarlicki and Latham (1996) used quasi-experimental methodology to provide evidence of the causal relationship between organizational justice and OCB. The first study sought to assess whether an organizational intervention in which labor union leaders were trained in the techniques of implementing organizational justice (procedural and interactional) would have a positive impact on the instances of OCB exhibited by the rank and file union members. This study is significant because the contention that organizational justice is related to OCB has traditionally been supported by cross-sectional research that does not lend itself to inferring causality. Such a quasi-experimental design establishes the directionality of the relationship between the two variables with more confidence.

Results indicated that union members whose leaders underwent training in organizational justice rated their unions higher on fairness than their fellow union members in the control group. In addition, peer assessments revealed higher levels of OCB among the union members whose leaders underwent justice training. This increase in OCB in the experimental group was found across both factors of OCB (OCBI, analogous to altruism; and OCBO, analogous to generalized compliance) indicating that both behaviors aimed at helping individuals and behaviors aimed at aiding the organization were positively effected by the leader being trained in the techniques of organizational justice. In addition, the union members' perceptions of fairness mediated the effects of training on OCBO, but not on OCBI. Indicating that if the members' perceived the training as increasing the level of fairness in the organization, they were more motivated to engage in helping behaviors aimed at the organization. However even if there was no perceived change in fairness, simply training their leaders in organizational justice was enough to increase interpersonal helping.

The use of peer-assessed measures of OCB in this study is also significant. It has been

suggested that interactional justice is related to OCB not because it predisposes individuals to reciprocate to managers evaluated as being fair but because individuals rated high on OCB by their managers were part of an in-group, who, in turn, rated their managers highly on interactional justice (Moorman, 1991). The results obtained by Skarlicki and Latham (1996) clarify the direction of the causal relationship between justice and OCB, thus disproving the in-group hypothesis offered by Moorman (1991). Finally, the results obtained by Skarlicki and Latham (1996) were further supported when the exact same pattern of results were found in a replication using a separate sample of union employees (Skarlicki and Latham,1997).

Summarizing the literature concerning contextual antecedents is a formidable task. Research has clearly illustrated the importance of satisfaction as well as fairness in predicting OCB. However, a clear picture has not emerged as to whether these variables behave independently or whether fairness governs the relationship between satisfaction and OCB as has been previously suggested. To further complicate matters the meta-analysis by Organ and Ryan (1995) found that, contrary to expectations, fairness was not associated with OCB any more than any other contextual variable. In fact, satisfaction, fairness, organizational commitment, and leader supportiveness were all related to both the altruism and generalized compliance dimensions of OCB at about the same magnitude suggesting that a number of contextual variables may be valid antecedents of OCB.

Dispositional Antecedents

Conscientiousness and Agreeableness

Citing evidence that job attitudes are stable over time and may, thus, be at least partly attributable to dispositional factors (Staw & Ross, 1985; Staw, Bell, & Claussen, 1986) some researchers have suggested that the relationship found between job attitudes (most frequently

measures of job satisfaction and fairness perceptions) and OCB may be spurious (Organ, 1994; Organ & Lingl, 1995; Konovsky & Organ, 1996). Specifically, it has been suggested that the relationship observed is a function of one or more personality or dispositional factors that are underlying both job attitudes and the propensity to engage in OCB. Two factors from the McCrae and Cotsa (1987) five-factor model of personality, Agreeableness and Conscientiousness, have been singled out for consideration because of their intuitive relationship with both job attitudes and occurrence of OCB.

The Agreeableness personality factor encompasses the following behavioral descriptors: courteous, selfless, helpful, good-natured, sympathetic, and generous. This factor relates most directly to the Altruism factor of OCB, which involves behaviors directed at aiding other individuals in the work environment. In addition, a case could be made for such a factor being related to satisfaction. Agreeableness suggests a dimension of personality that is concerned with getting along well with others. One can suspect that this factor would be related to those aspects of job satisfaction that have to do with one's relationship with others on the job.

The Conscientiousness personality factor can be described using the adjectives: neat, punctual, careful, self-disciplined, well organized, and scrupulous. This factor is closely related to the OCB factor of Generalized Compliance, where one is concerned about exceeding minimum standards on the job as well as complying to the spirit rather than the letter of organizational rules and regulations. It can also be postulated that individuals high on Conscientiousness, to the extent that they are either comfortable with rule-governed behavior, or more likely to be admired/complimented on the job, would be more satisfied on the job.

To test the validity of the relationship between satisfaction and OCB, Organ and Lingl (1995) tested the degree to which the relationship could be explained by personality factors. It

was hypothesized that the "Big Five" (McCrae & Costa, 1987; Barrick & Mount, 1991) dimensions of Conscientiousness and Agreeableness would account for the commonly shared variance between satisfaction and OCB.

Their findings indicated that the personality measures were significantly related to measures of job satisfaction. Agreeableness predicted all forms of job satisfaction (overall satisfaction, satisfaction with co-workers, and satisfaction with pay). While Conscientiousness predicted satisfaction with co-workers, however the beta weight was negative indicating that individuals high on Conscientiousness were *less* satisfied with their co-workers. Regressing OCB on both the personality measures and job satisfaction measures revealed that adding the personality measures to the equation did not increase the incremental variance on any of the OCB dimensions. Overall satisfaction, however, did contribute incremental variance to the Altruism dimension of OCB, whereas, satisfaction with co-workers contributed significantly to the variance explained in Compliance. Interestingly, when satisfaction with co-workers was added to the equation for the Compliance dimension of OCB the beta weight for Conscientiousness became significantly positive. This pattern of results was interpreted as indicating that although there seems to be a relationship between the Conscientiousness personality trait and the more impersonal organization-directed OCB dimension of Compliance, "satisfaction might account uniquely for variance in OCB net of the influence of two more plausible personality determinants." (p.349)

Konovsky and Organ (1996), likewise, tested the hypothesis that certain dispositional variables could account for the relationship between contextual work attitudes and OCB. Using the five-factor scale of OCB developed by Podsakoff, et al. (1990) they found that for Generalized Compliance factor, Conscientiousness predicted significant variance over and above

measures of satisfaction and fairness perceptions. Moreover, analysis of individual beta weights indicated that Conscientiousness was significantly related to Generalized Compliance, Civic Virtue, and Altruism. Finally, Conscientiousness was significantly correlated to both fairness and satisfaction suggesting the possibility that it is, indeed, the third variable dictating the observed relationship between measures of job attitudes and OCB, at least on the Generalized Compliance factor.

A recent meta-analysis by Organ and Ryan (1995) concluded that Conscientiousness is the best dispositional predictor of OCB yet to be investigated. In their analysis of 55 studies, Conscientiousness was found to be associated with OCB dimensions tapping Generalized Compliance (the more impersonal form of OCB) at roughly the same level as situational factors such as satisfaction, fairness, and organizational commitment.

Perfectionism and OCB

In the current investigation a new personality trait is posited to be related to OCB. It is hypothesized that perfectionism is positively related to specific types of OCB. Specifically it is hypothesized that perfectionism will be positively related to the OCB factor conscientiousness. This factor consists of behaviors that can be described as demonstrating a dutiful respect for the rules that govern the organization, an example of which is adherence to the *spirit* of the regulation as well as the letter. It is further hypothesized that perfectionism will be negatively related to the OCB factor of altruism. This factor is best described as the tendency of an employee helps others on the job. An example of altruism would be aiding a fellow employee who has temporary fallen behind on their performance output.

The differential predictions across the two OCB factors are due to the motivation theorized to be behind the behavior. It is hypothesized that the perfectionists will not engage in

OCB for the reasons most readily suggested by the literature (i.e., to reciprocate satisfaction with the organization or due to a personality style predicated on order, self-discipline, etc.). Rather it is hypothesized that the perfectionist will engage in OCB in order to compensate for what he or she perceives as failure to meet in-role job expectations by engaging in behaviors that go above and beyond what is normally expected of an employee. In this way, the perfectionist may be using OCB as a form of impression management whereby he or she believes that a favorable impression can be created by adhering to a high standard of extra-role behavior. This extra-role behavior can be used to "make up for" the perfectionist's inability to obtain desired performance standards. Of course in the case of the perfectionist it is likely that, objectively speaking, there is no performance shortfall to make up for. However, part and parcel of the perfectionist personality trait is an unshakeable perception of personal failure despite all evidence to the contrary.

If a perfectionist was looking to make-up for perceived failures it is much more likely that he or she would elect to do so through conscientiousness than through altruism. First, it has been suggested in the OCB literature that conscientiousness is the facet of OCB most similar to in-role performance (Motowidlo et al., 1997). If so, then someone seeking to mitigate failures in in-role performance would most likely want to do so by engaging in behaviors most similar to that in-role performance. Stated another way, the perfectionist is trying to impress upon his or her superiors/co-workers that he or she is making a contribution to the organization despite not having achieved his or her specified performance goals. The best way in which to do so would be to engage in behaviors that are most similar to those performance goals, and presumably of most value to the organization.

Another reason that the perfectionist seeking impression management would tend to

engage in conscientiousness over altruism is the difference in the target of the behaviors and ultimately who gets credit for those behaviors. In the case of conscientiousness, the behaviors engaged in by the employee are directed toward the organization. By coming to work early, by not taking unnecessary breaks, etc. the organization on the whole is the recipient of the largess of the employee. In contrast, altruism is directed at one's fellow employees. By helping employees who are having difficulty on the job the primary beneficiary of those behaviors is the target employee, not the person engaging in OCB. Furthermore, when one is conscientious in the work place it is very likely that he or she will be recognized for this type of diligence by others. When one engages in altruism it is possible that the end result is positive for the target of those altruistic behaviors (the worker who is struggling may overcome their disadvantages and/or achieve more at work) but the altruism itself may go unnoticed. For these reasons it is likely that conscientiousness would be the favored approach of perfectionists engaging in OCB for impression management.

Indeed, there are reasons to suspect that perfectionism may in fact be negatively related to OCB altruism. First, as stated elsewhere perfectionism has been found to be related to personality characteristics and social tendencies that result in negative interpersonal relationships. Specifically, Hill, Zrull, and Turlington (1997) found that, among men, all three of Hewitt and Flett's (1991) perfectionism subscales – self-oriented, socially-prescribed, and other-oriented were related to interpersonal problems stemming from control issues, vindictiveness, domination, suspicion, and the inability to empathize. These findings suggest that the perfectionists may be disinclined or perhaps unable to engage in pro-social helping behaviors directed at his or her co-workers. It is possible that the anxiety associated with perfectionism creates a situation in which the perfectionist becomes distrustful and angry at others in his or her

social environment. This distrust could certainly preclude the perfectionist from engaging in helping behaviors on the job.

It is also possible that the preoccupation with personal standards and personal levels of performance may prevent the perfectionist from engaging in helping behaviors on the job. If the perfectionist must meet his or her self-imposed performance demands, and perceives that he or she is constantly falling short of those demands it is likely that a considerable amount of their time and effort will be directed toward personal performance. This tendency may be so extreme that the perfectionist neglects opportunities to help others in need on the job. In effect the perfectionist is so consumed with improving personal performance that he or she perceives that they do not have the latitude to help others. When one is treading water for one's life, there is no time to stop and try to helping the person drowning next to you.

Hypothesis #1 - Perfectionism will be positively related to OCB conscientiousness but negatively related to OCB altruism

Impression Management

As discussed elsewhere perfectionism is associated with a cluster of behavior and emotions centered on the irrational beliefs that: (a) the individual must be perfect, and (b) the individual continually fails to reach perfection. Thus in a work environment it is likely that the perfectionist will perceive discrepancy between actual performance and the desired level of performance. While the initial reaction of the perfectionist may be to work harder (devote more hours, attempt to concentrate more, etc.) little attention has been paid in the literature to what, if any, alternative methods are used by the perfectionist to close the gap between his or her level of performance and their desired level of performance. In an organizational environment much of one's performance is measured subjectively based on the observations and opinions of others. If

the perfectionist feels that his or her performance is sub-par, and if he or she perceives that they have little efficacy in improving that performance, it is possible they will look to impression management techniques to influence the opinion of others vis a vis their performance.

Impression management refers to the process by which individuals attempt to control and shape the impressions others form of them (Jones, 1964). While this topic has long been a fruitful area of research in other social science fields (Goffman, 1955, Jones, 1964) a growing body of research has emerged in the field of organizational psychology. It is logical to assume that individuals in work settings are keenly aware that the images they portray to supervisors, co-workers, clients, etc. are critical to the successful negotiation of the job environment. Clearly the creation of a positive impression is important to the attainment of positive outcomes across a host of organizational situations including: employment interviews, performance appraisals, training programs, and customer interactions.

Research has indicated that workers do attempt to manage their impressions on the job and that these efforts have some impact on the organizational outcomes experienced by these individuals including: selection interview outcomes (Gillmore and Ferris, 1989), as well as performance appraisal ratings and extrinsic rewards including pay increases, promotions, etc. (Higgins, Judge, & Ferris, 2003; Kipnis and Schmidt, 1988).

Not surprisingly special attention has been paid in the literature to the impact of impression management on performance appraisal outcomes (Lefkowitz, 2000). Performance appraisals are in some ways the currency of organizational life. One's performance rating often impacts many other important organizational outcomes including: pay increases, selection for choice assignments, promotions, visibility to upper management, and the quality of one's reputation. Moreover, performance appraisals are often completed in a subjective manner by

one's supervisor. As such they may be especially vulnerable to manipulation through impression management. The literature seems to bear this out with consistent findings that impression management does influence performance appraisal scores. Using structural equation modeling Wayne and Ferris (1990) found support for the indirect influence of impression management (operationalized as self and other-enhancing communications, opinion conformity, and favor doing) on performance appraisal ratings. The researchers found that while objective ratings of performance did positively influence performance ratings by supervisors, so too did supervisor liking of the subordinate. More importantly, impression management by the subordinate positively influenced the supervisor's liking of them. Thus, impression management did influence performance ratings through the influence of supervisory liking.

Using a longitudinal methodology that measured subordinate impression management and liking at one time interval and then measured performance at a later time, Wayne and Liden (1995) also found support for the impression management/liking/performance rating relationship. In this study subordinate supervisory-focused impression management was positively related to supervisor's liking of the subordinate, and perceptions that the subordinate was similar to the supervisor. Furthermore, supervisory liking of the subordinate and perceived similarity was positively related to supervisor's ratings of subordinate performance.

Attempts have been made to categorize the various types of impression management techniques employed by individuals (Ferris & Judge, 1991). Jones and Pittman (1982) endorsed a complex model of impression management that acknowledges that fact that individuals may attempt to create impressions that are not necessarily positive but still result in the manipulation of the target persons behavior in way that is consistent with the wishes of the actor. They identified five strategies individuals are likely to employ: (1) ingratiation – engaging in flattery

and perform favors in an attempt to curry favor; (2) self-promotion – drawing attention to their accomplishments and abilities to create a favorable image; (3) exemplification – going above and beyond the call of duty to create the image that they are dedicated; (4) supplication – attempting to appear weak or helpless in an attempt to receive help and support from others; and (5) intimidation – where individuals attempt to cultivate an impression that they are dangerous and should not be trifled with by using threats and intimidation.

One glaring aspect of the Jones and Pittman taxonomy is that fact that the dimensions are not unitary in terms of the valence of the image created. Specifically, ingratiation, self-promotion, and exemplification are all positively valenced tactics that should positively enhance the esteem of the actor in the eyes of the target(s). These tactics are, by design, most likely to produce interpersonal liking. Conversely, the remaining two tactics are essentially negatively valenced. Supplication is designed to create pity and induce the target(s) to help the actor, but not especially likely to enhance the esteem of the actor or foster interpersonal liking. Likewise, intimidation may result in the target acting in a way consistent with the wishes of the actor but certainly not through enhanced esteem and/or interpersonal liking. Thus, the tactics described by the taxonomy are in some cases antithetical to each other and likely are not employed together or even by the same individuals.

The notion that the five dimensions of impression management identified by Jones and Pittman are employed in specific combinations by different individuals was examined by Bolino and Turnley (2003) who used student work groups to identify discrete groups of impression managers created by differential use of combinations of impression management tactics. Results of a cluster analysis indicated that there were three basic types of impression managers. One group of impression managers reported high levels of the three positive tactics identified by the

Jones and Pittman, ingratiation, self-promotion, and exemplification, and low levels of the two negative tactics supplication and intimidation. These individuals were labeled "positives." The second group identified in the study had high levels of all five tactics and were labeled "aggressives." The final group had low levels of all of the impression management tactics and was termed "passives." Interestingly, the only significance between the three types of impression managers in terms of peer ratings occurred for the aggressives who were assessed as not being good work group partners compared to positives and passives. No differences were found between positive and passive impression managers. Suggesting that, as least in this student work group sample, impression management had no positive impact on peer ratings and only influenced ratings negatively when impression management tactics were used indiscriminately.

Recently perfectionism has been for the first time empirically linked to concerns around self-presentation. Hewitt et al., (2003) developed the concept of perfectionistic self-presentation. These researchers assert that central to the concept of perfectionism is the desire on the part of the perfectionist to appear perfect in social situations and simultaneously hide personal characteristics or actions that would suggest nonperfection. To this end they have created the Perfectionistic Self-Presentation Scale (PSPS). This scale is composed of three subscales that measure the three facets theorized to make up the perfectionistic self-presentation construct – perfectionistic self-presentation, nondisplay of imperfection, and nondisclosure of imperfection. Self-promotion refers to actions taken by the perfectionist that actively proclaim and demonstrate one's perfection. In contrast, Nondisplay of imperfection and nondisclosure of imperfection involve concern over displaying or disclosing instances of nonperfection. Results of Hewitt et al., (2003) scale development research indicated that the three dimensions of the PSPS are

correlated with all three scales of the MPS (although the correlations with the other-oriented perfectionism scale are, as expected, lower than the correlations with self-oriented and socially-prescribed perfectionism) indicating that at least some perfectionists display these self-presentation concerns. Moreover, the PSPS was found to be positively correlated with various measures of social defensiveness including concern with others' perceptions (attention to others, sensitivity to others) and methods of self-presentation (self-handicapping and self-concealment).

Taken together the results of Hewitt et al., (2003) do suggest a strong tendency toward impression management concerns on the part of the perfectionist. When one overlays the Jones and Pittman (1982) taxonomy of impression management behaviors on the self-presentation concerns listed above it is possible to predict the behavioral impression management strategies adopted by perfectionists. Specifically, the positive impression management behaviors identified by Jones and Pittman and operationalized by Turnley and Bolino (2003) are most likely to be adopted by perfectionists as they foster an impression of perfection. In contrast, the negative impression management behaviors are less likely to be employed as they embody negative or aversive social behaviors which would be antithetical to fostering a perception of perfection.

Hypothesis #2 – Perfectionism will be positively related to positive impression management behaviors but negatively related to negative impression management behaviors (based on the Jones Pittman taxonomy)

Hypothesis #2a – Perfectionism will be positively related to ingratiation, self-promotion, and exemplification

Hypothesis #2b – Perfectionism will be negatively related to supplication and intimidation

<u>Perfectionism, Impression Management and OCB</u>

As stated previously in the current investigation it is hypothesized that perfectionism will be positively related to impression management. This relationship will be due to the perfectionist attempting to create a favorable impression on the job in order to amend for perceived sub-par performance. It is also hypothesized that in the process of impression management perfectionist employees will seek avenues in which they can demonstrate their worth to the organization. One such outlet is OCB.

There is ample evidence to support the notion that OCB is engaged in by employees reciprocating satisfaction or an assessment that the organization is treating them well compared to some standard of fairness. However, more recent conceptualizations of OCB have opened up the possibility that OCB occurs when employees are influenced by other motivations. Bolino (1999) takes issue with two commonly espoused tenets of the OCB literature. First, he challenges the notion that the motivation behind OCB is always pro-social or other-serving. Bolino asserts that it is possible that employees engage in OCB for self-serving reasons. More precisely, he hypothesizes that in an organizational context there are instances in which employees will seek to enhance their esteem in the eyes of their co-workers and superiors through impression management. Given that OCB is believed to be beneficial to the organization it stands to reason that employees seeking to create a good impression in the eyes of others might use this cluster of behaviors to do so.

Another idea in the "traditional" OCB literature is that the motivation behind the citizenship behavior exhibited by employees is irrelevant. Bolino (1999) takes issue with this notion as well; he asserts that motivation moderates the relationship between OCB and the positive organizational consequences of OCB. This view holds that all OCB is not equal and that actions taken as part of an impression management campaign will differ from actions

motivated by a desire to benefit the organization in terms of their positive impact in that organization.

Bolino also offers several propositions around OCB and impression management; some of which that are especially relevant to the notion that among perfectionists impression management will be related to OCB. First, Bolino postulates that individuals will be more likely to engage in OCB to the extent that they have transgressed against the organization or their in-role performance has declined. In the case of the perfectionist, he or she is continually thinking that their performance is discrepant from acceptable levels. The perfectionist is under the usually mistaken impression that his or her efforts are always failures. Thus, in an organizational context the perfectionist will both believe that his or her in-role performance is below standards, and be seeking to make amends for this discrepancy through OCB.

Another Bolino proposition is that employees will engage in OCB in instances in which in-role performance is hard to measure or distinguish. Presumably, in such situations employees will be aware that it is hard to distinguish between their performance and the performance of their fellows and will seek to differentiate themselves through extra-role behavior. The perfectionism literature suggests that perfectionists have difficulty measuring the true quality of their performance (Blatt, 1995). In fact the perfectionist is often times performing at very high levels but is unable to accurately gauge his or her performance, and falsely believes that he or she is "failing." In a sense the perfectionist has a cognitive impediment against accurately measuring his or her own performance. If the perfectionist in an organizational context believes he or she is failing and is unable to differentiate his or her performance regardless of whether an objective observer would be able to do so, he or she may look to OCB to differentiate themselves

from others. Taken together, the above rationales provide theoretical support for the hypothesis that among perfectionists impression management will be positively associated with OCB.

Research on impression management and OCB is somewhat equivocal. In a study directed related to the current hypothesis Rioux and Penner (2001) developed a measure of OCB motivations to explore the reasons why employees engage in OCB. The scale consisted of three scales – organizational concern, described as a desire on the part of the employee to see the organization do well and pride in the organization; prosocial values, described as a desire to be helpful and build positive relationships with others; and impression management concerns, described as a desire to avoid looking bad and to obtain organizational rewards. The researchers found that the impression management concerns scale did not correlate significantly with co-worker or supervisor ratings of OCB. However, when impression management concerns were entered into a hierarchical regression to predict OCB along with the two other motives scales, impression management accounted for a significant proportion of variance in the OCB dimension of sportsmanship. Sportsmanship is the dimension of OCB which encompasses not complaining during less than ideal situations on the job. The researchers could not account for the results but did suggest that it is too early to conclude that impression management is unrelated to OCB.

In the current investigation it is hypothesized that the case of the perfectionist will represent one of the instances in which OCB is being exhibited for impression management concerns rather than reciprocation of for satisfaction and/or fairness. For reasons enumerated elsewhere the perfectionist will be unlikely to experience satisfaction on the job. However he or she is likely to engage in OCB. It is theorized that the perfectionist is engaging in OCB both as a mechanism to “make up” for perceived lack of performance on the job and as a tactic to hide

from the outside world his or her lack of performance. The perfectionist will attempt to appear to be the perfect worker not out of regard or deference to the organization but rather for his or her own self-serving motives to cultivate an appearance of perfection. This motivation will be evident in the fact that perfectionism will moderate the relationship between impression management and OCB. At high levels of perfectionism, there will be a positive relationship between impression management and OCB; at lower levels of perfectionism, there will be no relationship between the two variables.

As explicated elsewhere, it is hypothesized that non-perfectionists will exhibit the well-researched relationships between job satisfaction and OCB. Specifically, being free of the self-imposed constraints of the perfectionist the non-perfectionist will have the latitude to respond to satisfaction on the job by deciding whether or not to exceed their formal role expectations. During instances of satisfaction these individuals will engage in OCB; but during instances of dissatisfaction they will withdraw those behaviors. Thus perfectionism will also moderate the relationship between satisfaction and OCB. At high levels of perfectionism there will be no relationship between satisfaction and OCB; at lower levels of perfectionism there will be a positive relationship between the two variables.

Hypothesis #3 – Perfectionism will moderate the relationship between impression management and OCB conscientiousness. Among perfectionists impression management will be positively related to OCB conscientiousness

Hypothesis #4 - Perfectionism will moderate the relationship between job satisfaction and OCB conscientiousness. Among non-perfectionists job satisfaction will be positively related to OCB conscientiousness

Alienation

The alienation literature suggests that alienation occurs when the actions and behaviors of the individual become more and more discrepant from what the individual believes they should be doing (Monck et al., 2005). In short, alienation is the response of the individual to the actual self becoming discrepant from the ideal self the individual conceptualizes as embodying their real goals, aspirations, feelings, etc. In the present investigation it is hypothesized that perfectionism will be positively related to alienation. In this study a situation is posited in which the perfectionist is experiencing low levels of job satisfaction for reasons enumerated elsewhere. However he or she is still engaging in OCB as an impression management technique in order to assuage the guilt and anxiety they feel as a result of their perceptions of constantly "failing" on the job. Traditional thinking around OCB suggests that these behaviors are discretionary and a result of satisfaction on the job. In instances of dissatisfaction, as experienced by the perfectionist, conventional wisdom would suggest that employees will engage in less OCB to express their dissatisfaction and to balance the social exchange between them and the organization. The perfectionist however will not have this latitude; he or she will continue to engage in OCB regardless of the level of satisfaction they are experiencing. This situation will result in alienation for the perfectionist. He or she is behaving in way that is polar opposite from how he or she would presumably like to behave. They are acting for the benefit of an organization that they are experiencing dissatisfaction in. This state of affairs is the essence of alienation.

The alienation construct as an academic area of interest has grown out of the sociological study of industrialized society. From the sociological perspective alienation was a result of societal forces and a phenomenon which could be studied at a macro-level by identifying societal

antecedents of alienation and the attitudinal/behavioral correlates which, in turn, had societal implications.

One of the first theorists to address alienation in this way was Karl Marx. Marx saw alienation as a result of the industrial revolution whereby the individual worker had become removed from the work that he or she did on a daily basis. As compared to the farmer or the craftsman in pre-industrialized society who identified with the results of their labors, Marx saw the industrialized worker as simply a means to an end, with no identification with the labor he or she performed for the machine of industry. Marx asserted that in such a state of affairs the alienated individual loses himself as the center of his emotional and social world. In essence he loses knowledge of himself as a function of supplanting his own hopes, aspirations, goals, etc for the goals and objectives of the industrial complex.

Although a trained psychologist, Fromm (1941) also saw alienation as caused at least in part by societal forces rather than individual maladjustment. Like Marx, Fromm was interested in the impact of working in an industrialized society on the psychological well-being of the individual. He writes:

> In capitalist economic activity, success, material gains, become ends in themselves. It becomes man's fate to contribute to the growth of the economic system, to mass capital, not for purposes of his own happiness and salvation, but as an end in itself. Man becomes a cog in the vast economic machine…always a cog to serve a purpose outside of himself. (p. 110)

Thus, as the individual becomes a working member of society more often than not he or she replaces personal goals, actions, and feelings for those goals, actions, and feelings that are supportive of a working society. Fromm asserts that this process causes the individual to become

alienated as he or she moves farther away from true growth and fulfillment that results form following one's own true self. The result is that the individual is incapable of experiencing the true peace and satisfaction resulting from following their true selves.

The arguments of both Max and Fromm parallel the experimental hypothesis presented in this investigation regarding alienation. Both theorists saw the work environment as causing the individual to act in a way that was discrepant from what he or she would ideally like to do. Moreover, the act of working in an industrialized context was seen as the cause of the worker losing his or her identity as a result of constantly needing to behave in this way. In the current investigation it is hypothesized that the perfectionists will likewise feel a sense of lose of identity due to that fact that he or she is compelled to act in a certain way (as the "good soldier" – engaging in OCB) that may be discrepant from how he or she would ideally like to behave.

Modern empirical investigation of alienation as a psychological construct has grown out of the work of Melvin Seeman. Seeman (1971) proposed five alternative meanings of alienation. Powerlessness refers to the belief on the part of an individual that their efforts and behavior are not sufficient to attain the outcomes he or she seeks. Seeman suggests that this facet of alienation is similar to Rotter's idea of external locus of control; specifically that one's life is controlled by external forces and that he or she is powerless to control their own life. Meaninglessness described the state in which the individual does not know what he or she should believe in unclear situations. Moreover, he or she feels that it is impossible to predict behavior or the outcomes of behavior in a given situation. Normlessness refers to the perception by the individual that the social norms that govern individuals conduct have broken down and that socially unapproved behaviors are required to achieve desired goals. Isolation describes the situation in which the individual has become estranged from his or her society through

incongruence between what he or she values and what is valued by the society in general. The final form of alienation described by Seeman is self-estrangement. This definition of alienation describes the state in which the individual perceives that he or she is behaving in a manner that is disconnected from how he or she would ideally like to act. This conception of alienation most closely resembles the type of alienation, described by Marx and Fromm, which results from working in industrialized society. In the context of the industrialized society, the worker has become estranged from the work that he or she engages in. Work is not done because the individual enjoys it or cares about the outcome of the job. Rather work is forced upon the industrialized worker as the only way he or she can obtain food, shelter, etc.

Early empirical work using Seeman's conceptualization of alienation failed to bear out the hypothesized relationships between alienation and other variables among workers. However, these null results may be due to the lack of a theoretically grounded measure of alienation. For example, Seeman (1967) found virtually no relationship between alienation at work and several personal outcomes hypothesized to be related to work alienation. Based on the assertions of Marx and other critics of modern industrialized work it was hypothesized that alienation from work would be related to generalized powerlessness in life in general, inter-group hostility epitomized by the stigmatization of relevant out-groups (e.g., Jews, gypsies, etc.), lack of political awareness, and status mindedness as measured by the propensity for choosing jobs based on status and extrinsic rewards rather than intrinsic factors of the job. Contrary to expectations, however, no relationship was found between alienation and these variables across both a blue-collar and white white-collar sample. It is important to note that the measure of alienation employed by Seeman was rather crude and more closely resembled a modern measure of job satisfaction. The measure included items such as: "Does your job make you work too fast

most of the time? Does your job really give you a chance to try out ideas of your own?" The results of this study could therefore be interpreted as a lack of a relationship between facets of job satisfaction and the dependent variables rather than a lack of a relationship between these variables and alienation.

A similar measure of alienation was employed by Aiken and Hage (1966) who found a relationship between work alienation and organizational centralization and formalization. Specifically the researchers found higher levels of alienation among worker in organizations that provided little autonomy, centralized decision making among a powerful few, and allowed little deviation from work rules and standards. While these results would be promising as they are consistent with the theoretical conceptualization of alienation they must be interpreted with caution. Closer inspection of the measures employed suggests that the measure of alienation employed might also be interpreted as a measure of intrinsic job satisfaction. The alienation scale used by the researchers included items such as "How satisfied are you that you have been given authority by your board of directors to do your job well?" and "How satisfied are you with your present job when you compare it to similar positions in the state?"

Research using more theoretically-grounded scales of alienation tended to yield more consistent and positive findings. For example, Nightingale and Toulouse (1978) used a measure of alienation created by Dean (1961) which is based on the five dimensions of alienation identified by Seeman. Rather than being focused on aspects of the job, this measure of alienation contains items that tap alienation in general. For example, the isolation sub-scale includes the item "It is not possible to rely on others", and the self-estrangement sub-scale includes the item "I can never do what I really like because circumstances require that I do otherwise." These

items are clearly distinguishable from the type of items employed by Seeman and his colleagues which typically required respondents to assess their satisfaction with specific factors of the job.

Nightingale and Toulouse demonstrated significant relationships between alienation and several sets of variables which were theoretically-linked to the construct. Specifically, the study found that alienation was negatively related to education level, salary, and level of hierarchy in the organization. In terms of interpersonal relationships, alienation was related to low levels of trust in one's supervisor and co-workers, reticence to discuss personal problems with one's supervisor, and low commitment to one's work group. Finally, and consistent with theory, high levels of alienation were associated with high levels of organizational bureaucracy.

One Interesting area of study is the relationship between alienation and motivation. Specifically, what is the impact of alienation on the individual's motivation to engage his or her environment in order to obtain desired outcomes (personal growth, extrinsic rewards, esteem in the eyes of one's peers, etc.)? In theory the alienated individual would be less motivated to proactively engage his or her environment as he or she feels compelled to engage is activities that are discrepant form what they would ideally like to be doing. Moreover, the alienated individual is thought to have actually lost the ability to identify the outcomes that would ideally be desirable (Schachtel, 1971). Thus, we might expect that an alienated individual would lack intrinsic motivation in such arenas as work, school, social relationships, etc.

Maddi, Hoover, and Kobasa (1982) Conducted one of the first tests of the hypothesis that alienation is negatively related to intrinsic motivation in general. This study used exploratory behavior in a novel situation (a waiting room) as a proxy for intrinsic motivation. The logic being that intrinsically motivated individuals are compelled to explore their environment while their non-motivated are not. The researchers found a negative relationship between self-reported

alienation as measured by the Alienation Test (Maddi, Kobasa, & Hoover, 1979) and exploratory behavior as measured by objectively assessed exploratory behaviors.

More recent work by Hirschfeld and Field (2000) supports the idea that alienation is negatively related to intrinsic motivation in the work setting. Using a measure of work alienation based on the work of Maddi et al., (1982) the study found that work alienation was significantly and negatively related to work self-discipline, job involvement, and affective organizational commitment all of which tap aspects of the employee's intrinsic motivation toward one's job and employer.

Taken together the above supports the notion that alienation is experienced as an estrangement between one's ideal thoughts, feelings, and behavior and one's actual thoughts, feelings, and behavior. Furthermore there is evidence that suggests that, to some, the work environment is experienced as coercive and individuals perceive that they must conform to norms of behavior, performance, etc (Hewlin, 2003). It is this adoption of externally imposed behavioral norms leads to alienation. In the current investigation it is hypothesized that perfectionists, in their desire to achieve perfection in all things will be especially prone to the coercive power of the workplace which will lead to adoption of externally imposed norms of comportment which in turn will lead to alienation.

Hypothesis #5 - Perfectionism will be positively related to alienation

Somatic Complaints

Elsewhere in this investigation it is hypothesized that the perfectionist will tend to be dissatisfied on the job. Perceptions that workloads are too high, that one cannot achieve an acceptable standard of performance, and feelings that one's extrinsic rewards are not commensurate with one's desires are theorized to negatively impact the job satisfaction of the

perfectionist. Under normal circumstances it may be expected that this level of dissatisfaction will lead the perfectionist to rebel against the organization, or at very least to undertake emotional withdrawal from the dissatisfying relationship. However, as mentioned earlier it is also hypothesized that the perfectionist's need to be perfect in all situations and in the work environment in particular, will constrain the behaviors the perfectionist exhibits in response to job dissatisfaction. The perfectionist, while typically being dissatisfied on the job, is still likely to engage in extra-role OCB which will benefit the very source of his or her dissatisfaction – the employer. Indeed, this behavior which is discrepant from how the individual would actually like to behave may obviously exacerbate the feelings of dissatisfaction as the perfectionist begins to feel like an imposter playing the role of the perfect worker, a role which he or she secretly detests. One obvious question then is: where do the frustration, anger, and or hostility associated with this satisfaction/behavioral discrepancy go? If the perfectionist cannot outwardly express these emotions as they are antithetical to the prototypical "perfect worker" he or she is trying to be where do these feelings find expression? One possibility is that they are repressed and directed inward.

It is a widely held notion in psychoanalysis that the repression of negative thoughts and feelings can result in psychosomatic complaints such as headaches, back pain, and heart palpitations. Freud (1959) noted that any repression by the ego of the negative or aggressive impulses of the id could result in the development of symptoms that are physically experienced by the individual. A byproduct of this process is that the individual then focuses on the symptom as the cause of his or her distress rather than the inner conflict that caused the symptom. Extending this line of thinking one can postulate that in certain instances an individual can experience some frustration or stress which results in an aggressive or violent desire. If this

aggressive or violent desire is repressed (as it usually, and thankfully, will be) and does not find another form of expression it can result in a conflict manifested by a physical symptom.

This type of inner conflict has special implications for the individual in a work context (Horney, 1950). Cleary, the work environment can produce a myriad of stressful and frustrating situations (excessive job demands, a demanding boss, argumentative co-workers, etc.). Furthermore in the work environment one's ability to act on one's frustration is even more constrained than in other less formal contexts. The individual faces the threat of sanctions with serious consequences if he or she acts out their aggressive or violent reactions to stress and frustration – not the least of which being loss of employment. Thus the individual must repress these feelings, the result of which can be the generation of psychosomatic complaints.

While the mechanism of symptom generation is open to debate (i.e., repression of aggression leading to physical symptoms) empirical evidence does support the relationship between stress in the workplace and physical symptoms. Frese (1985) conducted two studies that looked at the relationship between stress in the workplace and psychosomatic complaints. In both studies two types of stressors were measured: psychological stress (i.e., uncertainty on the job, demanding work, lack of support, etc.), and physical stress (i.e., the physical demands of the job). For each type of stressor three separate measures were obtained: a subjective measure of each participant's perceptions of their level of stress and two "objective" measures (a composite of subjective ratings within job groups and the ratings of a trainer observer). Results of both studies revealed high positive correlations between subjective psychological stress and psychosomatic complaints (between .30 and .40). Moreover, both studies also found positive, albeit smaller, correlations between the objective measures of psychological stress and psychosomatic complaints (between .16 and .23). Finally, in both studies several potential third

variables (age, socio-economic status, lack of spousal support, etc.) were measured and partialed out of the psychological stress/psychosomatic complaint relationship. In every case the correlations remained significant even for the objective measures of stress leading Frese to conclude that third variables were unlikely to account for the relationship between stress and somatic symptoms.

In another relevant study Parkes (1999) found that subjectively measured stress was associated with a host of somatic complaints among off-shore oil platform workers in the Northern Sea. Using Karasek and Theorell's (1990) conception of work stress as being a product of high perceived work demands coupled with a lack of autonomy and support Parkes found that high job demands were positively correlated with sleep problems, headaches, musculoskeletal complaints, depression, and actual work-related injuries. In contrast, job discretion and social support were both negatively associated with these outcomes. When the job stress variables were added as the last block into a regression equation containing individual difference variables (neuroticism, body mass index, smoking behavior), as well as shift (day or night) and job information a more precise set of relationships between stress and somatic complaints emerged. With the inclusion of the other predictors, job demands were associated only with work related injuries. In contrast, lack of perceived social support was associated with headaches, gastric complaints, and depression. This pattern of results high demands, coupled with perceptions that one is lacking social support represents the prototypical stressed worker as defined by Karasek and others. Thus it appears that one by-product of stress on the job may be the presence of somatic complaints.

However, surely the simple presence of stress in the workplace does not automatically or ubiquitously cause somatic complaints. One critical factor in the manifestation of somatic

complaints is likely to be the personality of the individual experiencing the stress. In the aforementioned study by Parkes (1999) a significant predictor of all of the somatic complaints measured was trait neuroticism. It is easy to imagine that a non-neurotic individual can channel work stress into positive endeavors (working harder, excelling in recreations sports, etc.). However, for a neurotic individual, or someone with similar maladaptive personality characteristics this transference of stress into positive action is less likely. What is more likely is that the individual will respond to stress with negative activities or cognitions. In the current study it is theorized that this is the case for the perfectionist whose tendency toward self-blame will make him or her less likely to channel the stress of a demanding job and constant play-acting the "perfect worker" into positive actions and more likely to turn his or her negative emotions inward, resulting in somatic complaints.

While no studies have investigated this proposed interaction between stress and personality on somatic complaints (i.e., that personality moderates the relationship between stress and somatic complaints) empirical evidence does suggest a link between some negative or maladaptive personality characteristics and somatic complaints. Costa and McCrae (1985) summarized the literature on the relationship between neuroticism and somatic complaints among the elderly and found that there was indeed a relationship between the two variables. Furthermore, by parsing the data they were able to disprove the notions that the observed relationship between neuroticism and somatic complaints is attributable to either (a) the ability of neuroticism to cause disease in people, and (b) reverse causation – that disease (and, therefore, somatic complaints) cause people to become more neurotic. Costa and McCrae (1985) instead assert that neurotics are more likely to interpret bodily feelings negatively leading to increased somatic complaints.

Leventhal et al., (1996) found that negative affect was significantly related to somatic complaints after a six month interval. In two longitudinal studies Leventhal and colleagues administered state and trait negative affect scales consisting of two sub-scales (anxious affect and depressive affect) to samples of elderly adults. The studies found that negative affect predicted somatic complaints six months later. The observed relationships were stronger for state affect than they were for trait affect although both achieved statistical significance.

Taken together the above studies suggest that both work stress and maladaptive personality traits are related to the experience of somatic complaints. As has been previously stated in the current investigation it is hypothesized that perfectionism, a maladaptive personality trait related to anxiety, depression, and negative self-focused cognitions and feelings, will cause both dissatisfaction and stress in a work environment. Moreover, the perfectionist will lack the ability to effectively manage these negative experiences. One byproduct of this situation will be somatic complaints on the job. Strictly speaking, the literature could be interpreted as suggesting an interaction. That perfectionism will moderate the relationship between job stress and somatic complaints such that among perfectionists there will be a strong relationship between stress and somatic complaints and among non-perfectionists the relationship will be weaker or non-existent. However, in the current investigation to test such a relationship would create problems of multicolinearity as both perfectionism and stress are hypothesized to have direct zero-order relationships with somatic complaints. As a result this study will focus solely on the direct relationships between these three variables.

Because both perfectionism and somatic complaints have been linked to global negative affect, it is necessary to demonstrate that the hypothesized relationship between perfectionism and somatic complaints is due to the unique influence of perfectionism and not to the variance

shared by each variable through negative affectivity. As a result, negative affect will be measured and statistically controlled for in this study.

Hypothesis #6 - Perfectionism will be positively related to somatic complaints at work when controlling for the influence of negative affectivity

Method

Participants

Fifty-two participants were included in the study. All participants were fully employed as consultants for a large management consulting firm headquartered in a Mid-Atlantic state. Participants represented two teams whose leadership had agreed to allow the principle investigator to solicit participants among their employees. Each team contained roughly 100 employees for a total possible sample of 200. Because the data from the two teams were collected at two different times it was possible to determine rough estimates of response rates for each team. Thirty four participants came from the first team (an approximate response rate of 34%); while 18 participants came from the second team (an approximate response rate of 18%). It is possible that the relatively low response rate from the second team was a function that it was headed by a Principle in the firm, while the first team was headed by a Partner. For each team, the group head sent a preceding e-mail to their team notifying them of the upcoming voluntary study, and asking them to consider participation. It is possible that endorsement of a Partner versus a Principle resulted in the differentiate response rates.

It is important to note that part of participation in this study involved having one's manager provide an assessment of one's OCB. While the study obtained 52 participants, this sample contained only 14 interpretable self-report/managerial report pairs.

The mean age of participants was 34.1 years. Consistent with the population from which it was drawn the sample had a slight female majority (29 participants, accounting for 55% of the sample), and was ethnically homogenous. Ninety-three percent of the sample reported that their country of origin was the United States. Ninety-eight percent (51 participants) of the sample reported that they received the majority of their education within the United States and that the language they speak at home is English.

One average, participants had been employed in their job for 3.3 years (SD = 3.4). The minimum tenure was one year, and the maximum was 16 years. The majority of participants reported that they worked between 40 and 60 hours per week (81%), with the next most popular responses being 30-40 hours per week (11%) and less than 30 hours per week (4%). Although it was a response option, no participants reported working greater than 60 hours per week.

Materials

In addition to the Almost Perfect Scale Revised – Short Form designed by Slaney et al. (1996) (Appendix C), the Abridged Job Descriptive Index (AJDI) (Smith et al.,1969) and the Positive and Negative Affectivity Scale (PANAS) (Appendix E) described in study one the scales described below will be employed in this study.

The Altruism and Conscientiousness subscales of the Podsakoff et al., (1990) Organizational Citizenship Measure will be used to measure OCB (Appendix G). Each subscale consists of five items that ask the respondent to indicate how descriptive an action is of him or her on the job. The subscales both use the same Likert response format (1 = Not at all; 5 = Completely). The measure asks the respondent to base his or her responses on their last week at work.

Impression Management will be measured using the Bolino and Turnley (1999)

Impression Management Scale (IMS) (Appendix F). This 20-item measure has five subscales of 5 items each. The first three tap so-called positive impression management tactics – self-promotion, ingratiation, and exemplification. The next two subscales tap negative impression management tactics – intimidation and supplication. The IMS asks respondents to indicate how frequently in the last six months have they used each of the strategies described at work. The measure employs a 5-point Likert response format (1 = Never behave this way; 5 = Often behave this way).

Alienation will be measured using the Korman (in press) Personal Alienation Scale (PAS). The PAS is a subscale of the Korman Personal and Social Alienation Scale (PSAS). It is comprised of the 8-item PAS and the 10-item Social Alienation Scale (SAS). Both scales contain positively worded and negatively worded (reverse scored) self-descriptive statements for which the respondent rates his or her level of agreement. Items from both scales are measured using a Likert-type format (1 = Strongly Disagree; 5 = Strongly Agree).

Somatic Complaints will be measured by the 14-item somatization subscale of the Hopkins Symptom Checklist (HSC) (Derogatis et al., 1974) (Appendix H). This measure requires respondents to indicate on a scale of distress, how much each symptom has distress them (1 = Not at all; 4 = Extreme). The scale is presented with a general temporal referent (e.g., "How have you felt during the past seven days including today?").

Design and Procedure

Participants for this study were obtained from a large multi-national management consulting firm headquartered in a mid-Atlantic state. Participants were comprised entirely of consultants, who were employed with the firm full-time in client-facing roles. Given the relatively high stress nature of this job environment, this setting was viewed as a good

opportunity for the PI to study a group of individuals likely to experience perfectionism in the context of their work.

Participants were initially solicited through a letter sent to several Partners and Principles of the firm asking permission to collect data among their teams. The letter explained to the recipient that the PI was conducting research on work attitudes and experiences and was seeking the opportunity to collect voluntary data from a working sample of adults. In several instances the PI was contacted and asked fro more information regarding the study. During these conversations the PI would explain the general hypotheses for the study, the desired number of participants, the length of time it would take an individual employee to participate, and any potential negative consequences associated with participation. One Partner and one Principle agreed to allow their respective teams to voluntarily participate in the study. As the firm requires that all employees account for 100% of their time to ensure proper client billing and accounting, the data collection would take place on the personal time of the individual employees. However, employees would be allowed to participate during work hours and on their company-assigned computers.

Among the teams for whom their leadership had agreed to allow study solicitation, employees were sent a short note via e-mails from their Partner/Principle informing them that they would be solicited to participate in a psychological study being conducted by one of their colleagues in partial fulfillment of his dissertation requirements and that, while not required, they were urged to participate "to show support to their colleague." Following this e-mail, each employee on either team, was sent a solicitation e-mail from the PI asking for their participation in the study. In this e-mail potential participants were provided with information regarding the study. Most notably, the each potential participant was informed that participation in the study

would require both the completion of several on-line self-report psychological measures, as well as asking his or her direct supervisor to also complete an on-line questionnaire *about their behavior at work.* The solicitation e-mail contained a link to the URL on which the study measures were housed, and interested participants typically accessed the study directly upon reading the e-mail.

Participants used a universal password supplied by the PI to access the URL on which the measures were placed. Upon signing in, the URL provided each participant with a unique identification number. These values were generated randomly and the process was totally transparent to the participants. After he or she had completed all of the self-report measures on the URL, each participant was given instructions to provide his or her supervisor's e-mail address. The survey tool then sent a solicitation e-mail to the supervisor, with a link to a separate URL on which the 13-item supervisor survey resided. The solicitation e-mail notified its recipient that one of his or her subordinates had elected to participate in a psychological study and that his or her supervisor's input was also requested. The e-mail was explicit that the provision of data was voluntary and anonymous. The e-mail also contained each participant's unique identification number.

Supervisors who agreed to participate would access their survey through a URL link in the solicitation e-mail. Once at the survey site each supervisor was asked to enter the unique identification number of the participating subordinate. Once this was done, the supervisor completed the Podsakoff et al., (1990) OCB measure which assessed the work behavior of the participating subordinate. When the scale was completed, a thank you message was displayed and the supervisor's role in the study was complete.

Data collection took place at two, non-overlapping time periods, each of which lasted

three weeks, beginning with the solicitation e-mail from the principle investigator. At the approximate midpoint of the three week period a reminder e-mail was sent out to all potential participants on each team. Finally, a last reminder was sent out 24 hours prior to the closing of the survey URL. At the end of data collection, the data was downloaded using a encryption software similar to the one used by financial institutions for wire transfers and the URL was closed.

Results

Descriptive Statistics

For each of the twelve measures employed in this study several descriptive statistics were be obtained to ensure that the sample obtained did not possess extreme values or outlier which may have unduly influenced the results. First, for each measure, measures of central tendency were established (mean, median, and mode). Second, measures of variability were obtained (variance and standard deviation). Third, histograms were created for each of the measures to graphically represent the distribution of data. By combining the information from the three above sources it was possible to identify any characteristics of the sample that might exert undo influence on the final data set. Finally, for each measure employed reliability statistics in the form of coefficient alpha were obtained. Results of the descriptive statistics are presented in Table 11.

Inferential Statistics

Hypotheses one, two, and five in this study concern linear relationships between two variables (e.g., perfectionism and OCB, perfectionism and impression management, and perfectionism and alienation). As such they were tested using the same set of inferential

statistics. The initial test of the hypotheses used Pearson Product Moment correlations to establish relationships between the variables of interest.

While the use of correlations to establish a relationship between perfectionism and the dependent variables is important, one purpose of the current investigation is to identify the differences between perfectionists (i.e., those individuals high in perfectionism) and non-perfectionists (i.e., individuals low in perfectionism) in a work context. Consequently it is necessary to distinguish between perfectionists and non-perfectionists and to identify how these two groups differ vis a vis the dependent variables. To this end, a median split was performed on the perfectionism measure. Participants were then dummy-coded: those falling above the median will be coded as perfectionists; those falling below the median will be coded as non-perfectionists. T-tests were then be performed comparing the two resultant groups on the dependent variables.

Hypotheses three and four involve predicted interactions between perfectionism and a second independent variable on OCB (e.g., perfectionism interacting with impression management on OCB and perfectionism interacting with job satisfaction OCB, etc.). Given their similarity the two hypotheses were tested in an identical manner.

In the first test of the above hypotheses, the correlations between the independent variable and OCB were compared to the partial correlations between these variables controlling for perfectionism. This comparison is important in that if there is an interaction at work between perfectionism and another variable on OCB one indication would be an observed strengthening of the correlations between independent variable and the dependent variable when controlling for perfectionism. Ideally, the correlations will be non-significant when the influence of

perfectionism is allowed to be present but will become significant when this influence is removed.

The second, more direct, test of the hypothesized interaction was conducted by performing a factorial ANOVA in which perfectionism and the independent variable were entered into the ANOVA models as predictors of OCB. In addition, an interaction term was entered as a third term in each of the ANOVA models. Should the interaction term prove to be statistically significant, it was concluded that there was evidence of an interaction between perfectionism and the independent variable on OCB.

Prior to conducting the ANOVA all independent variables were transformed from interval into nominal data. As described above, a median-split was used to classify participants as either perfectionists or non-perfectionists. Likewise, a median-split was used on all independent measures establishing two categories for each measure (i.e., high vs. low).

Hypotheses six was tested in two ways. First the Pearson Product-Moment Correlation between perfectionism and somatic complaints measure was obtained. Next the partial correlation between perfectionism and somatic complaints was calculated removing the influence of trait negative affectivity from both the predictor and criterion variables. If the magnitude of the correlation that remains is reduced, it can be concluded that trait negative affectivity accounts for shared variance across perfectionism and the dependent variable. If the correlation remains significant it can be concluded that perfectionism accounts for unique variance in the dependent variable when the influence of negative affectivity is removed from both variables.

The second test of hypothesis six was conducted using hierarchical regression analysis predicting the dependent variable. In this analysis all demographic variables were entered into the regression as the first block. The second block entered consisted of the trait negative

affectivity measure. Finally, perfectionism was entered into the regression equation. The hypothesis will be confirmed if the F test of the regression coefficient for perfectionism is significant at the .05 level. Furthermore, the change in R-square with the inclusion of perfectionism in the model was observed to determine the new variance accounted for in somatic complaints by perfectionism over and above the influence of demographic variables and negative affectivity.

Organizational Citizenship Behavior

In the first test of hypothesis one the Pearson correlation between perfectionism and the two OCB measures: conscientiousness and altruism, were obtained. Because of the small sample size listwise deletion of missing cases was used for this analysis. Contrary to the hypothesized relationships there were no significant correlations between perfectionism or conscientiousness ($r = .278$, $p = .297$) or altruism ($r = -.003$, $p = .991$). Similarly, when perfectionists were compared to non-perfectionists, the mean differences between their relation levels of the two OCB measures were also non-significant, $t = 1.28$, $p = .227$, and $t = .378$, $p = .711$ for conscientiousness and altruism respectively .

As an exploratory test of hypothesis one, the correlation between perfectionism and OCB was obtained after partialling out the influence of positive and negative affectivity (as it was in study one). After the influence of trait affectivity was removed from the relationship between perfectionism and OCB, partial support was obtained for hypothesis one. Specifically, the correlation between perfectionism and conscientiousness was highly significant once the influence of affectivity was removed ($r = .805$, $p = .001$). However, the relationship between perfectionism and altruism remained non-significant ($r = .391$, $p = .167$). The correlations and partial correlations between perfectionism and OCB are presented in Table 12.

Impression Management

Hypothesis two was not supported. First order correlations between perfectionism and the five dimensions of impression management yielded only one significant relationship. The correlations between perfectionism and two of the three positive forms of impression management: exemplification ($r = .044$, $p = .778$) and ingratiation ($r = -.091$, $p = .555$) were clearly non-significant. While the correlation between perfectionism and self-promotion was significant but in a negative direction ($r = -.364$, $p = .015$) which is contrary to the stated hypothesis. Similarly, there were no significant relationships between perfectionism and the two forms of negative impression management: intimidation ($r = -.124$, $p = .421$) and supplication ($r = .192$, $p = .213$). When the mean differences on the five dimensions of impression management were tested across perfectionists and non-perfectionists t-tests revealed no significant differences between the two groups.

Finally, the partial correlations between perfectionism and the five dimensions of impression management were obtained with the influence of both positive and negative affectivity removed. The direction and relative magnitude of all of the five relationships was largely unchanged from the zero-order correlations. Self-promotion remained the only significant relationship and in a negative direction ($r = -.357$, $p = .020$).

Interaction of Perfectionism and Impression Management on OCB Conscientiousness

In the first test of hypothesis three (the interaction of perfectionism and impression management on OCB conscientiousness) the zero order correlations between the five dimensions of impression management and OCB conscientiousness were compared to the partial correlations removing the influence of perfectionism. As illustrated, in Table 14, none of the relationships were significant, suggesting that no interaction was present.

Before conducting the tests of this hypothesis it was necessary to perform several manipulations on the data. First, in order to avoid performing multiple ANOVAs opening up the results to the possibility of type I error, the impression management subscales were summed to create aggregate indices. Because the sub-scales of the Turnley and Bolino impression management scale may be orthogonal or even negatively related, an inductive approach was used to determine how to combine the sub-scales. The subscales scores were factor analyzed using a Varimax rotation. This factor analysis resulted in a two factor solution accounting for 61% of the variance in the sample. Three subscales: ingratiation, exemplification, and supplication loaded heavily on factor one. The two remaining subscales: self-promotion and intimidation loaded heavily on factor two.

Two indices were then created. The first combined the ingratiation, exemplification, and supplication subscales and was labeled passive impression management (mean = 6.46, median = 6.20, SD = 1.59). The second combined self-promotion and intimidation and was labeled aggressive impression management (mean = 6.46, median = 6.20, SD = 1.59). Both scales were then transformed into nominal data using a median-split. The sample was split into a high passive impression manager group (n = 20) and a low passive impression manager group (n = 25); as well as a high aggressive impression manager group (n = 20) and a low aggressive impression manager group (n = 25).

Finally two factorial ANOVAs predicting conscientiousness using both the transformed impression management scales (passive impression management and aggressive impression management) and perfectionism as predictors along with an interaction term. Unfortunately, due to the extremely small sample size obtained for participants with both self-report and managerial assessment of OCB (n = 14) the results of the ANOVA were uninterpretable.

Interaction of Perfectionism and Satisfaction on OCB Conscientiousness

In the first test of hypothesis four (the interaction of perfectionism and job satisfaction on OCB conscientiousness) the zero order correlations between the dimensions of job satisfaction and OCB conscientiousness were compared to the partial correlations removing the influence of perfectionism. As illustrated, in Table 15, none of the relationships were significant, suggesting that no interaction was present.

In order to conduct the more direct test of hypothesis four using factorial ANOVA it was necessary to perform several manipulations on the data. Firs, the JDI subscales were summed to create one aggregate index of job satisfaction. Second, the combined job satisfaction scale (mean = 97.35, median = 97.50, SD = 19.29) was transformed into nominal data using a median-split. The sample was split into a high satisfaction group (n=23) and a low satisfaction group (n=23).

As was the case for hypothesis three, due to the extremely small sample size obtained for participants with both self-report and managerial assessment of OCB (n = 14) the results of the ANOVA were uninterpretable.

Alienation

Hypothesis five was strongly supported. The zero order correlation between perfectionism and alienation was .435 (p = .004). Importantly this relationship remained significant even after removing the influence of positive and negative affectivity through partial correlation (r = .342, p = .029).

As an exploratory analysis the zero-order and partial correlations between perfectionism and the other scale of Korman's alienation scale, social alienation, were obtained. Social alienation is described feelings of estrangement form one's social world and the people in it.

High levels of social alienation are exemplified by discomfort in social situations and distrust for one's fellow man. As perfectionism was found to be negatively related to satisfaction with people at work in study one, there is reason to suspect that perfectionism may also be related to estrangement from one's social world (i.e., social alienation).

Analysis of the zero order and partial correlations between perfectionism and social alienation suggest the existences of a positive relationship between the two constructs. The zero order correlation was clearly significant ($r = .355$, $p = .020$). However the magnitude of the relationship was diminished and only marginally significant once the influence of positive and negative affectivity were removed ($r = .288$, $p = .068$).

Somatic Complaints

Hypothesis six was not supported. There was virtually no relationship between perfectionism and somatic complaints as measured by the zero-order correlations between the two variables ($r = -.003$, $p = .985$). Moreover, and more directly testing hypothesis six, there was no relationship between perfectionism and somatic complaints even after partialling out the influence of positive and negative affectivity ($r = -.089$, $p = .570$).

Discussion

The current investigation was severely limited by the extremely small sample size obtained for participants with both self-report data and a managerial assessment of OCB. This study highlights the challenges associated with performing independent, non-organization mandated, voluntary research in a busy and dynamic organization (the majority of employees in the study worked greater than 40 hours per week). While the self-report response rates for each team resulted in an apparently viable sample size, the response rate among the participants'

managers was extremely small and resulted in very low statistical power for several of the analyses. That said, the study did obtain some significant results which suggest the existence of important relationships between perfectionism and the other variables under study.

The most important finding of this study was the discovery of a relationship between self-reported perfectionism and OCB conscientiousness as measured by one's supervisor. While the zero-order correlation between these two variables was not significant, when the influence of positive and negative affectivity was controlled for statistically the result was a highly significant positive correlation between perfectionism and OCB conscientiousness. These results were interpreted as illustrating that high levels of perfectionism are associated with high levels of extra-role behavior targeting the organization when holding the affective disposition of the target individual constant. It is important to note here that perfectionism is defined in this study, and was measured as, feelings of discrepancy between one's desired standards of performance and the resulting anxiety from this discrepancy. While it may be expected that perfectionism, when defined as simply holding high personal standards of performance, would be related to extra-role behavior on the job – it is counter-intuitive to find that maladaptive perfectionism is related to these types of behaviors.

The traditional OCB literature suggests that the primary motivation for engaging in extra-role behavior on the job is to reciprocate for the benefits the individual receives from the organization (Organ and Ryan, 1995). The literature has paid relatively little attention to the notion that OCB could be used by individuals to compensate for perceived short-falls in their performance. The results of the present study, however, suggest that – at least for some individuals – this motivational pattern may be in play. In the current study, perfectionism was negatively related to several facets of job satisfaction (see Tables 7 and 18) but positively related

to OCB. These results suggest that for perfectionists, OCB is not used as a method of paying the organization back for benefits received. Rather, the alternative interpretation, that perfectionists feel they must engage in OCB to address their performance short-falls, better fits the data obtained.

This study was designed to test the proposed differential OCB motivation patterns for perfectionists and non-perfectionists. Specifically, it was hypothesized that perfectionism would moderate the influence of both job satisfaction and impression management on the occurrence of OCB. Among perfectionists it was theorized that high levels of impression management would be associated with higher levels of OCB conscientiousness; while among non-perfectionists it was hypothesized that high levels of job satisfaction would be associated with higher levels of OCB. Had these predictions been supported, it would have provided initial evidence of the alternative motivation pattern supposed to be part and parcel of why perfectionist will tend to engage in organizationally supportive behavior, even in the context of a job with which they are not satisfied. Unfortunately the low number of supervisor ratings of OCB obtained for study participants resulted in cell sizes which we too small to conduct the necessary analyses.

Another finding in this study that supports the idea that perfectionists use OCB as a tool for mitigating performance gaps is the strong positive correlation between perfectionism and personal alienation. This relationship was present both as a zero-order correlation as well as when the influence of positive and negative affectivity were controlled for statistically. This suggests that perfectionism is related to perceptions that one is engaged in activities and behaviors that differ importantly from what one would ideally like to be doing. It is possible that perfectionistic thoughts and feelings associated with failing to live up to their own rigid standards and the preoccupation associated with the consequences of this failure drive the

perfectionist to engage in a whole host of behaviors that are inconsistent with his or her "ideal self." In the present example, the perfectionist may be engaging in behaviors that benefit a organization while simultaneously experiencing the organization and his or her job negatively.

The investigator in this study theorizes that engaging in OCB is an anxiety-reducing effort on the part of the perfectionist in that it allows him or her to avoid or, at least, postpone the perceived negative outcomes associated with continuing "failures" on the job. Following this line of thought, it is possible that the motivation to avoid negative outcomes associated with "failure" override all other motivational drives in the perfectionist (to the extent that they even exist). In retrospect a short-coming of the current study is the failure to explicitly measure anxiety. Future research should focus on tracking anxiety among perfectionists in organizational settings in an attempt to find both antecedents and consequents of the construct. Of particular interest is identifying the behaviors (especially maladaptive behaviors) used by perfectionists to reduce anxiety on the job. Additionally, it would be interesting to ascertain the effectiveness of these anxiety-reducing behaviors in an attempt to determine whether their effects are lasting or whether they are actually ineffective mechanisms for lasting quiescence at work.

The most pressing global concern vis-à-vis future research in this area is the need to replicate these results with a larger sample size. These results are essentially based upon the data obtained from the 14 employees for whom the investigator was able to obtain both self and managerial-reports. As such they are highly suspect and require a concerted effort to establish external validity prior to being taken at face value. Replication efforts should focus on obtaining another organizational sample to establish the relationship between perfectionism and OCB in a real-world setting. As a first step in this direction, it may be necessary to develop a rationale for organizational participation in this research. For example, future researcher could

create perfectionism-mitigating programs or workshops for delivery to employees and managers. A business case for such a program could be developed using the results of the current study in conjunction with some of the non-work related perfectionism findings, such as the negative relationship between perfectionism and academic performance (Rice and Dellwo, 2002). If these individual level negative outcomes could be linked (even theoretically) to organizational outcomes it could stimulate interest on the part of organization to participate in research on perfectionism on the job and, thus, help to build the literature base in this area.

General Discussion

The two studies contained within this volume are an important first step in better understanding the role perfectionism plays in the work context. Not researched since Burns (1980) and never quantitatively investigated, these studies represent some of the first systematic investigations of perfectionism at work. And, the results obtained support the thesis that perfectionism is an important construct which exerts unique influence on many work-related variables central to organizational psychology. To summarize: perfectionism was found to be negatively related to several facets of job satisfaction including satisfaction with one's job in general, satisfaction with co-workers, and satisfaction with supervisors. Perfectionism was also found to be positively related to several constructs indicative of negative experiences at work including facets of work strain (physical and psychosomatic strain depression and life dissatisfaction, and sleeping problems), burnout (emotional exhaustion), and personal alienation. It is important to note that these relationships remained even after the influence of positive and negative affectivity were removed statistically. Finally, and perhaps most interestingly, perfectionisms was related to OCB conscientiousness.

The finding that perfectionism is related to OCB conscientiousness was interpreted as illustrating that, rather than serving a satisfaction-reciprocation function, OCB serves an anxiety-reduction function for perfectionists – allowing them to compensate for perceived "failures" on the job. As explained previously, this is a novel interpretation of OCB and one for which there is a dearth of available corroborating empirical evidence. If these results can be replicated they are suggestive of an entirely different motivational pattern than the one widely held for the OCB construct.

In addition to being novel in the context of the majority of the OCB literature, the results of these two studies are also somewhat antithetical when interpreted in the context of the regulatory focus literature (Higgins, 1989; Higgins et al., 1994). This research suggests that individuals who are failure focused (as the perfectionist demonstrably is) possess a self-regulatory system that is avoidant focused. An avoidant self-regulatory system is one in which the individual engages his or her environment by avoiding negative outcomes rather than approaching positive outcomes (Carver and Scheier, 1990). In previous research (Roney et al., 1995) this motivational pattern has been found to be related to lower levels of performance, driven largely by the fact that avoidant focused individuals were less expansive in their behavior and less likely to persist in the face of failure. Given this one would expect perfectionism to be negatively related to extra-role performance, presumably because the perfectionist would not persist in the face of failure. The fact that perfectionists did engage in OCB at a higher rate than non-perfectionists begs the question: do perfectionists represent a special case of high fear of failure individuals? More precisely, are perfectionists a sub-group of high fear of failure individuals that do not experience the negative motivational tendencies traditionally associated with fear of failure. The most direct test may be to differentiate between "traditional" high fear

of failure individuals versus perfectionists and obtain objective measures of performance. It is possible that the perfectionists would tend to outperform the "traditionals." If these results were obtained the next question may be: are there negative consequences of continuing to engage an environment or task that one finds aversive. Certainly the results obtained in there two studies regarding work strain and burnout suggest a psychological toll for the perfectionist. The question then becomes: is there a breaking point after which the perfectionist's objective performance begins to deteriorate? Future research should be conducted to address these questions.

Appendix A – Study #1 Hypotheses

Study #1

Hypothesis #1 – Perfectionism will be positively related job stress when controlling for the influence of affectivity

Rationale: Perfectionism is associated with a perception that one is unable to attain an acceptable standard of performance, and resulting negative self-directed affect. These features of perfectionism will lead to perceptions of high work demands and low levels of control over one's work. These are the two psychosocial factors typically attributed to the experience of work stress.

Hypothesis #2 – Perfectionism will be negatively related to job satisfaction over and above the influence of affectivity

Rationale: Due to the perfectionist's fixation on perfect performance, or more precisely fixation on his or her failure to achieve perfection, perfectionism will be associated with an inability to experience pleasure from one's work. This will lead to negative judgments about the work environment.

Hypothesis #3 – Perfectionism will be positively related to burnout over and above the influence of work stress and affectivity.

Rationale: Burnout is characterized as being the result of perceptions of high work demands coupled with perceptions of a lack of personal and organizational resources to address these demands. Due to the fact that perfectionists will adhere to a standard of performance that is impossible to achieve, they will experience these perceptions leading to work burnout.

Appendix B – Study #2 Hypotheses

Study #2

Hypothesis #1 - Perfectionism will be positively related to OCB conscientiousness but negatively related to OCB altruism

Rationale: Perfectionists will want to engage in OCB in an effort to mitigate the impact of their perceived poor performance at work. Because conscientiousness most closely resembles in-role performance and is readily attributable to the actor it will be the preferred method for perfectionists. In contrast perfectionists will be less likely to engage in altruism (pro-social helping on the job) due to their interpersonal deficiencies as well as the fact that altruism is less readily identifiable by the organization.

Hypothesis #2 – Perfectionism will be positively related to positive impression management behaviors but negatively related to negative impression management behaviors (based on the Jones Pittman taxonomy)

2a – Perfectionism will be positively related to ingratiation, self-promotion, and exemplification

2b – Perfectionism will be negatively related to supplication and intimidation

Rationale: Research suggests that perfectionists will attempt to hide their imperfections from others. As such it is expected that they will employ impression management tactics that result is positive versus negative impressions of other.

Hypothesis #3 – Perfectionism will moderate the relationship between impression management and OCB conscientiousness. Among perfectionists impression management will be positively related to OCB conscientiousness

Hypothesis #4 - Perfectionism will moderate the relationship between job satisfaction and OCB conscientiousness. Among non-perfectionists job satisfaction will be positively related to OCB conscientiousness

Rationale: Research suggests that OCB is used to proactively respond to satisfaction experienced in the work environment. Among non-perfectionists this relationship will be evident. Perfectionists, however, will use OCB as part of an impression management campaign and therefore among perfectionists there will be a relationship between impression management and OCB.

Hypothesis #5 - Perfectionism will be positively related to alienation

Rationale: In the quest for perfection it is theorized that the perfectionist will engage in may behaviors and endeavors that are discrepant from what he or she would ideally like to be doing (e.g., OCB when they are not satisfied, impression management, etc.). This will result in feelings of alienation.

Hypothesis #6 - Perfectionism will be positively related to somatic complaints at work when controlling for the influence of affectivity

Rationale: As stated elsewhere it is hypothesized that perfectionists will be stressed and dissatisfied at work. However, rather than reacting to these feelings they suppress them and instead engage in impression management attempting to appear the “good soldier.” This repression may result in somatic complaints at work.

Appendix C – Almost Perfect Scale - Revised

Instructions

The following items are designed to measure attitudes people have toward themselves, their performance, and toward others. There are no right or wrong answers. Please respond to all of the items. Use your first impression and do not spend too much time on individual items in responding.

Respond to each of the items using the scale below to describe your degree of agreement with each item. Fill in the appropriate number on the line next to each statement

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree

1. _____ I have high standards for my performance at work or at school.
2. _____ I am an orderly person.
3. _____ I often feel frustrated because I can't meet my goals.
4. _____ Neatness is important to me.
5. _____ If you don't expect much out of yourself, you will never succeed.
6. _____ My best just never seems to be good enough for me.
7. _____ I think things should be put away in their place
8. _____ I have high expectations for myself.
9. _____ I rarely live up to my high standards.
10. _____ I like to always be organized and disciplined.
11. _____ Doing my best never seems to be enough.
12. _____ I set very high standards for myself.
13. _____ I am never satisfied with my accomplishments.
14. _____ I expect the best from myself.
15. _____ I often worry about not measuring up to my own expectations.
16. _____ My performance rarely measures up to my standards.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree

17. _____ I am not satisfied even when I know I have done my best.
18. _____ I try to do my best at everything I do.
19. _____ I am seldom able to meet my own high standards of performance.
20. _____ I am hardly ever satisfied with my performance.
21. _____ I hardly ever feel that what I've done is good enough.
22. _____ I have a strong need to strive for excellence.
23. _____ I often feel disappointment after completing a task because I know I could have done better.

Appendix D – Job Content Questionnaire

My job requires that I learn new things
My job involves a lot of repetitive work
My job requires me to be creative
My job allows me to make a lot of decisions on my own
My job requires a high level of skill
On my job, I have very little freedom to decide how I do my work
I get to do a variety of different things on my job
I have a lot of say about what happened on my job
I have an opportunity to develop my own special abilities

My job requires working very fast
My job requires working very hard
My job requires lots of physical effort
I am not asked to do an excessive amount of work
I have enough time to get the job done
I am free from conflicting demands that others make

My supervisor is concerned about the welfare of those under him/her
My supervisor pays attention to what I am saying
My supervisor is helpful in getting the job done
My supervisor is successful in getting people to work together
People I work with are competent in doing their jobs
People I work with take a personal interest in me
People I work with are friendly
People I work with are helpful in getting the job done

Appendix E – Positive and Negative Affectivity Scale

Instructions

This scale consists of a number of words that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate the extent to which you experienced each of the following emotions during and directly after your last performance appraisal, using the scale provided below. Be sure to respond to all items.

1	2	3	4	5
Very Slightly	A little	Moderately	Quite a bit	Extremely

1. ___ Interested
2. ___ Excited
3. ___ Upset
4. ___ Determined
5. ___ Scared
6. ___ Hostile
7. ___ Proud
8. ___ Irritable
9. ___ Ashamed
10. ___ Inspired
11. ___ Nervous
12. ___ Attentive
13. ___ Jittery
14. ___ Afraid
15. ___ Distressed
16. ___ Alert
17. ___ Strong
18. ___ Guilty
19. ___ Enthusiastic
20. ___ Active

Appendix F – Impression Management Scale

Instructions

Listed below are a number of behaviors people engage in at work. Using the scale provided below please indicate how frequently in the past 6 months have you have behaved in each of the ways described below while you were at work.

1	2	3	4	5
Never behave this way	Very rarely behave this way	Occasionally behave this way	Sometimes behave this way	Often behave this way

1. _____ Try to appear busy, even at times when things are slower
2. _____ Let others know that you are valuable to the organization
3. _____ Pretend to know less than you do so you can avoid an unpleasant assignment
4. _____ Talk proudly about your experience or education
5. _____ Try to appear like a hard-working, dedicated employee
6. _____ Use intimidation to get colleagues to behave appropriately
7. _____ Use flattery anf favors to make your colleagues to show them that you are friendly
8. _____ Let others know that you have a reputation for being competent in a particular area
9. _____ Come to the office at night or on weekends to show that you are dedicated
10. _____ Deal strongly or aggressively with coworkers who interfere in your business
11. _____ Let others know that you can make things difficult for them if they push you too far
12. _____ Act like you need assistant so people will help you out
13. _____ Take an interest in your colleagues for their accomplishments so they will consider you a nice person
14. _____ Stay at work late so people will know you are working hard
15. _____ Arrive at work early in order to look dedicated
16. _____ Make people aware of your accomplishments
17. _____ Make people aware of your talents or qualifications
18. _____ Do personal favors for your colleagues to show them that you are friendly

19. _____ Act like you know less than you do so people will help you out
20. _____ Pretend not to understand something to gain someone's trust
21. _____ Be intimidating with coworkers when it will help you get your job done
22. _____ Try to gain assistance or sympathy from people by appearing needy in some area
23. _____ Compliment your colleagues so they will see you as likeable
24. _____ Praise your colleagues for their accomplishments so they will consider you a nice person
25. _____ Deal forcefully with colleagues when they hamper your ability to get your job done.

Appendix G – Organizational Citizenship Behavior Scale

Instructions

Below is a set of statements that may or may not describe your behavior during an average week at your last job. For each statement please indicate how descriptive it is of you using the scale provided below. Please respond to all items.

1	2	3	4	5
Not at all	Somewhat	Pretty much	Very much	Completely

1. _____ Attendance at work is above the norm.
2. _____ Does not take extra breaks.
3. _____ Obeys company rules and regulations even when no one is watching.
4. _____ Is one of my most conscientious employees.
5. _____ Believes in giving an honest day's work for an honest day's pay.
6. _____ Helps others who have been absent.
7. _____ Helps others who have heavy workloads.
8. _____ Helps orient new people even though it is not required.
9. _____ Willingly helps others who have work related problems.
10. _____ Is always ready to lend a helping hand to those around him/her.

Appendix H – Somatic Complaints Scale

Instructions

Using the scale provided below please indicate the extent to which you have experienced the below physical symptoms over the past seven days.

1	2	3	4
Not-at-all			Extreme

1. _____ Headaches
2. _____ Faintness or dizziness
3. _____ Pains in the heart or chest
4. _____ Feeling low in energy or slowed down
5. _____ Pains in the lower part of your back
6. _____ Soreness in your muscles
7. _____ Loose bowel movements
8. _____ Difficulty in falling asleep or staying asleep
9. _____ Trouble getting your breath
10. _____ Hot or cold spells
11. _____ Numbness or tingling in parts of your body
12. _____ A lump in your throat
13. _____ Weakness in parts of your body
14. _____ Heavy feelings in your arms or legs

Table 1: Study One Scale Descriptive Statistics

	n	Mean	Median	SD	Alpha
Perfectionism	195	3.63	3.58	1.22	.91
Work Stress - Skill Discretion	196	30.98	30.00	5.61	.65
Work Stress - Decision Authority	195	30.27	32.00	3.39	-.22
Work Stress - Psychological Demands	195	31.67	31.00	6.70	.13
Work Stress - Supervisor Social Support	192	11.34	12.00	2.68	.84
Work Stress - Coworker Social Support	192	11.66	12.00	1.99	.76
Work Stress - Job Dissatisfaction	194	.47	.47	.07	.80
Work Stress - Physical Psychosomatic Strain	196	.28	.25	.19	.61
Work Stress - Depression and Life Dissatisfaction	189	.29	.25	.19	.80
Work Stress - Sleeping Problems Work Stress	197	.30	.28	.28	.73
Job Satisfaction - Work on Present Job	197	8.34	9.00	3.50	.19
Job Satisfaction - Present Pay	197	15.67	16.00	9.53	.58
Job Satisfaction - Opportunities for Promotion	197	7.34	6.00	5.95	.88
Job Satisfaction - Supervision	197	10.65	12.00	4.57	.70
Job Satisfaction - People at Work	197	10.92	12.00	4.44	.73
Job Satisfaction - Job in General	197	15.25	16.00	7.23	.85
Burnout - Exhaustion	197	2.41	2.38	.45432	.45
Burnout - Disengagement	197	2.67	2.63	.34651	.75
Positive Affectivity	195	27.58	27.00	8.77	.90
Negative Affectivity	194	15.71	14.00	6.33	.88

Table 2: Study One Participants by Language Spoken at Home (n=196)

Language	Count	Percent
English	86	44%
Chinese	34	17%
Spanish	26	13%
Russian	12	6%
Cantonese	8	4%
Urdu	4	2%
Japanese	3	2%
Albanian	2	1%
Bengali	2	1%
Bosnian	2	1%
French	2	1%
Hebrew	2	1%
Indonesia	2	1%
Korean	2	1%
Polish	2	1%
German	1	.5%
Hindi/Eng	1	.5%
Hungarian	1	.5%
Krobo	1	.5%
Lithuania	1	.5%
Portuguese	1	.5%
Slovak	1	.5%
	196	100.%

Table 3: Study One Participants by Job Category (n=196)

Job Category	n	Percent
Sales and Related	54	28%
Business and Financial Operations	34	17%
Office and Administrative Support	27	14%
Food Preparation and Serving Related	22	11%
Management	14	7%
Education, Training, and Library	7	4%
Personal Care and Service	7	4%
Healthcare Support	6	3%
Arts, Design, Entertainment, Sports, and Media	5	3%
Computer and Mathematical	4	2%
Legal	4	2%
Architecture and Engineering	3	2%
Community and Social Services	2	1%
Protective Service	2	1%
Production	2	1%
Transportation and Material Moving	2	1%
Construction and Extraction	1	1%
Life, Physical, and Social Science	0	0%
Building and Grounds Cleaning and Maintenance	0	0%
Installation, Maintenance, and Repair	0	0%
	196	100%

Table 4: Study One Correlations Between Perfectionism and the JCQ (n=196)

	Perfectionism			
	Correlations		Partial Correlations [1]	
	r	p	r	p
Work Stress - Skill Discretion	-.093	.196	-.016	.831
Work Stress - Decision Authority	-.199	.006**	-.024	.757
Work Stress - Psychological Demands	.062	.395	.090	.239
Work Stress - Supervisor Social Support	-.175	.015*	-.090	.239
Work Stress - Coworker Social Support	-.221	.002**	-.174	.023*
Work Stress - Job Dissatisfaction	.188	.009**	.156	.042*
Work Stress - Physical Psychosomatic Strain	.329	.000**	.247	.001**
Work Stress - Depression and Life Dissatisfaction	.468	.000**	.384	.000**
Work Stress - Sleeping Problems	.199	.005**	.147	.056

[1] Controlling for the influence of Positive and Negative Affectivity
* Significant at the .05 level
** Significant at the .01 level

Table 5: Study One Hierarchical Regression for JCQ (n=196)

		F	Sig.	Adjusted R^2
Work Stress - Skill Discretion	Block One	3.801	.000	.120
	Block Two	4.906	.000	.188
	Block Three	4.473	.000	.184
Work Stress - Decision Authority	Block One	3.666	.000	.115
	Block Two	3.546	.000	.132
	Block Three	3.596	.000	.145
Work Stress - Psychological Demands	Block One	3.544	.000	.111
	Block Two	4.397	.000	.169
	Block Three	4.310	.000	.178
Work Stress - Supervisor Social Support	Block One	.982	.457	-.001
	Block Two	2.201	.016	.068
	Block Three	2.120	.018	.069
Work Stress - Coworker Social Support	Block One	1.259	.263	.013
	Block Two	2.224	.015	.069
	Block Three	2.549	.004	.093
Work Stress - Job Dissatisfaction	Block One	.750	.663	-.012
	Block Two	.965	.480	-.002
	Block Three	1.148	.325	.010
Work Stress - Physical Psychosomatic Strain	Block One	2.094	.032	.051
	Block Two	3.792	.000	.142
	Block Three	4.549	.000	.187
Work Stress - Depression and Life Dissatisfaction	Block One	.682	.725	-.016
	Block Two	6.662	.000	.258
	Block Three	9.324	.000	.358
Work Stress - Sleeping Problems	Block One	1.992	.043	.046
	Block Two	2.468	.007	.080
	Block Three	2.636	.003	.095

Table 6: Study One Complete Regression Models for JCQ (n=196)

	Coworker Social Support			Physical/Psychosomatic Strain			Depression and Life Dissatisfaction			Sleep Problems		
	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.
Education	-.061	-.833	.406	-.037	-.545	.586	-.024	-.394	.694	.102	1.410	.160
Age	-.085	-.931	.353	-.046	-.530	.597	.019	.235	.814	.149	1.626	.106
Sex	.108	1.460	.146	.063	.907	.366	-.059	-.941	.348	.078	1.065	.288
Country of Origin	.110	1.200	.232	.290	3.411	.001	-.002	-.024	.981	.129	1.442	.151
Country of Education	-.235	-2.471	.014*	-.145	-1.646	.102	-.068	-.834	.405	-.123	-1.317	.189
Hours	-.060	-.723	.471	-.024	-.310	.757	.116	1.647	.101	.037	.448	.655
Job Category	-.027	-.357	.721	-.093	-1.322	.188	.047	.721	.472	-.083	-1.116	.266
Shift	-.169	-2.224	.027*	.133	1.868	.064	.044	.685	.494	.242	3.239	.001**
Tenure	-.070	-.804	.423	-.014	-.175	.862	.006	.079	.937	-.098	-1.134	.258
Positive Affectivity	.219	2.909	.004**	-.050	-.706	.481	-.378	-5.919	.000**	-.018	-.245	.807
Negative Affectivity	-.030	-.392	.695	.238	3.326	.001**	.233	3.583	.000**	.161	2.133	.034*
Perfectionism	-.182	-2.343	.020*	.236	3.253	.001**	.342	5.214	.000**	.153	2.003	.047*

* Significant at the .05 level
** Significant at the .01 level

Table 7: Study One Correlations Between Perfectionism and the JDI (n=196)

	Perfectionism			
	Correlations		Partial Correlations [1]	
	r	p	r	p
Job Satisfaction – Work on Present Job	-.059	.412	.020	.797
Job Satisfaction – Present Pay	-.097	.179	-.100	.192
Job Satisfaction – Opportunities for Promotion	-.072	.316	-.037	.634
Job Satisfaction - Supervision	-.145	.043*	-.062	.418
Job Satisfaction – People at Work	-.233	.001**	-.189	.013*
Job satisfaction – Job in General	-.275	.000**	-.216	.005**

[1] Controlling for the influence of Positive and Negative Affectivity
* Significant at the .05 level
** Significant at the .01 level

Table 8: Study One Regression Models of Selected JDI Scales (n=197)

	People at Work			Job in General		
	Beta	t	Sig.	Beta	t	Sig.
Education	-.084	-1.148	.252	.069	.970	.333
Age	.006	.064	.949	.060	.673	.502
Sex	.005	.073	.942	-.055	-.772	.441
Country of Origin	.087	.960	.338	-.067	-.764	.446
Country of Education	-.287	-3.029	.003**	-.174	-1.897	.059
Hours	-.038	-.452	.652	-.023	-.285	.776
Job Category	-.002	-.022	.982	-.077	-1.058	.292
Shift	-.124	-1.637	.103	-.072	-.984	.327
Tenure	-.054	-.612	.541	-.116	-1.377	.170

* Significant at the .05 level
** Significant at the .01 level

Table 9: Study One Correlations Between Perfectionism and Facets of the OLBI (n=196)

	Perfectionism			
	Correlations		Partial Correlations [1]	
	r	p	r	p
Burnout - Exhaustion	.302	.000**	.238	.002**
Burnout - Disengagement	.061	.395	-.021	.788

[1] Controlling for the influence of Positive and Negative Affectivity

* Significant at the .05 level

** Significant at the .01 level

Table 10: Study One Complete Regression Models of Exhaustion (n=196)

	Exhaustion		
	Beta	t	Sig.
Education	-.088	-1.364	.174
Age	.048	.613	.541
Sex	.232	3.561	.000**
Country of Origin	.031	.392	.696
Country of Education	-.157	-1.880	.062
Hours	.125	1.633	.104
Job Category	.030	.453	.651
Shift	.055	.802	.424
Tenure	-.070	-.916	.361
Positive Affectivity	-.256	-3.583	.000**
Negative Affectivity	.122	1.800	.074
Skill Discretion	-.013	-.166	.869
Decision Authority	-.097	-1.375	.171
Psychological Demands	.038	.519	.604
Supervisor Support	-.337	-4.817	.000**
Co-worker Social Support	.041	.607	.544
Perfectionism	.197	2.865	.005**

* Significant at the .05 level
** Significant at the .01 level

Table 11: Study Two Descriptive Statistics

	n	Mean	Median	SD	Alpha
Perfectionism	49	2.99	2.50	1.35	.95
Job Satisfaction - Work on Present Job	46	9.11	12.00	3.97	.62
Job Satisfaction - Present Pay	46	17.30	18.00	6.55	.45
Job Satisfaction - Opportunities for Promotion	46	22.48	25.00	7.96	.73
Job Satisfaction - Supervision	46	12.54	14.00	3.43	.67
Job Satisfaction - People at Work	46	14.00	15.00	2.49	.81
Job Satisfaction - Job in General	46	18.91	21.00	5.35	.80
Impression Management – Self-promotion	45	3.18	3.00	.746	.84
Impression Management – Ingratiation	45	2.81	2.80	.936	.89
Impression Management – Exemplification	45	2.33	2.20	.714	.65
Impression Management – Intimidation	45	1.31	1.00	.507	.80
Impression Management – Supplication	45	1.31	1.20	.418	.71
Organizational Citizenship Behavior - Conscientiousness	17	21.53	22.00	2.76	.78
Organizational Citizenship Behavior - Altruism	17	20.82	20.00	3.36	.90
Positive Affectivity	46	29.22	29.00	8.19	.91
Negative Affectivity	46	13.04	11.00	3.88	.81
Somatic Complaints	46	1.38	1.36	.305	.71
Personal Alienation	44	2.54	2.57	.769	.85
Social Alienation	44	2.75	2.75	.407	.44

Table 12: Study Two Correlations Between Perfectionism and OCB (n=14)

	Perfectionism			
	Correlations		Partial Correlations [1]	
	r	p	r	p
Organizational Citizenship Behavior - Conscientiousness	.278	.297	.805**	.001
Organizational Citizenship Behavior - Altruism	-.003	.991	.391	.167

[1] Controlling for the influence of Positive and Negative Affectivity

* Significant at the .05 level

** Significant at the .01 level

Table 13: Study Two Correlations Between Perfectionism and Impression Mgt. (n=42)

	Perfectionism			
	Correlations		Partial Correlations[1]	
	r	p	r	p
Impression Management – Self-promotion	-.364*	.015	-.357*	.020
Impression Management – Ingratiation	-.091	.555	-.133	.402
Impression Management – Exemplification	.044	.778	-.003	.985
Impression Management – Intimidation	-.124	.421	-.202	.199
Impression Management – Supplication	.192	.213	.171	.279

[1] Controlling for the influence of Positive and Negative Affectivity
* Significant at the .05 level
** Significant at the .01 level

Table 14: Study Two Correlations Between Conscientiousness and Impression Mgt. (n=14)

	OCB Conscientiousness			
	Correlations		Partial Correlations [1]	
	r	p	r	p
Impression Management – Self-promotion	-.153	.573	-.057	.839
Impression Management – Ingratiation	.299	.261	.339	.217
Impression Management – Exemplification	.173	.522	.167	.551
Impression Management – Intimidation	.118	.664	.160	.569
Impression Management – Supplication	.190	.481	.145	.607

[1] Controlling for the influence of Perfectionism
* Significant at the .05 level
** Significant at the .01 level

Table 15: Study Two Correlations Between Conscientiousness and the JDI (n=14)

	OCB Conscientiousness			
	Correlations		Partial Correlations[1]	
	r	p	r	p
Job Satisfaction - Work on Present Job	-.026	.923	.052	.854
Job Satisfaction - Present Pay	.083	.760	.065	.819
Job Satisfaction - Opportunities for Promotion	.064	.814	.129	.647
Job Satisfaction - Supervision	-.219	.416	-.124	.659
Job Satisfaction - People at Work	-.151	.577	-.108	.700
Job Satisfaction - Job in General	-.113	.676	-.001	.998

[1] Controlling for the influence of Perfectionism
* Significant at the .05 level
** Significant at the .01 level

Table 16: Study Two Correlations Between Perfectionism and Alienation (n=43)

	Perfectionism			
	Correlations		Partial Correlations[1]	
	r	p	r	p
Personal Alienation	.435**	.004	.342*	.029
Social Alienation	.355*	.020	.288	.068

[1] Controlling for the influence of Positive and Negative Affectivity
* Significant at the .05 level
** Significant at the .01 level

Table 17: Study Two Correlations Between Perfectionism and Somatic Complaints (n=43)

	Perfectionism			
	Correlations		Partial Correlations[1]	
	r	p	r	p
Somatic Complaints	-.003	.985	-.089	.570

[1] Controlling for the influence of Positive and Negative Affectivity
* Significant at the .05 level
** Significant at the .01 level

Table 18: Study Two Correlations Between Perfectionism and Antecedent Variables (n=43)

	Perfectionism			
	Correlations		Partial Correlations[1]	
	r	p	r	p
Job Satisfaction - Work on Present Job	-.324*	.034	-.221	.164
Job Satisfaction - Present Pay	.107	.496	.190	.235
Job Satisfaction - Opportunities for Promotion	-.236	.128	-.109	.498
Job Satisfaction - Supervision	-.444**	.003	-.397**	.010
Job Satisfaction - People at Work	-.230	.138	-.191	.233
Job Satisfaction - Job in General	-.470**	.001	-.413**	.007
Impression Management – Self-promotion	-.364*	.015	-.357*	.020
Impression Management – Ingratiation	-.091	.555	-.133	.402
Impression Management – Exemplification	.044	.778	-.003	.985
Impression Management – Intimidation	-.124	.421	-.202	.199
Impression Management – Supplication	.192	.213	.171	.279
Somatic Complaints	.003	.985	-.089	.570
Personal Alienation	.435**	.004	.342*	.029
Social Alienation	.355*	.020	.288	.068
Positive Affectivity	-.204	.190	--	--
Negative Affectivity	.264	.087	--	--

[1] Controlling for the influence of Positive and Negative Affectivity

* Significant at the .05 level

** Significant at the .01 level

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