2016

ON WORKAHOLISM: DO PARENTAL WORK BEHAVIORS PREDICT THE WORK BEHAVIORS OF UNDERGRADUATES?

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A thesis submitted in partial fulfillment of the requirements for the degree of Master of Science at Virginia Commonwealth University

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Acknowledgements

I wish to thank my advisor and thesis committee chair, Dr. Victoria Shivy, for her support and mentorship throughout this project. Additionally, I would like to thank Dr. Deborah DiazGranados and Dr. Charles Calderwood for their advice and encouragement during this process. Lastly, I would like to acknowledge the unfailing support and patience of my partner, family, friends, and peers.

Table of Contents

List of Tables

Abstract

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This cross-sectional study examined the associations among perceived parental behavior and personality on work behaviors of undergraduate students from a large Southeastern university. Past research suggests that children who perceive their parents to be workaholics are more likely to exhibit workaholic behavior themselves (Chamberlin & Zhang, 2009). Moreover, personality factors including conscientiousness and neuroticism, have been categorized as antecedents of workaholic behavior in previous studies (Andreassen, Hetland, & Pallesen, 2010; Aziz & Tronzo, 2011; Burke, Matthiesen, & Pallesen, 2006). Students (N = 209) completed questionnaires assessing Big Five personality factors, dispositional optimism, and perceptions of parental work drive, parental work involvement, and parental work enjoyment. Hypotheses regarding parental work behaviors and their ability to predict undergraduate student work behavior were not supported. Conscientiousness and extraversion were significant predictors of work drive,

involvement and enjoyment. Neuroticism was also significant in predicting work drive among students included in the sample. Findings and recommendations for future study are discussed.

Introduction

Wayne Oates (1971) first described workaholism as an addiction, defining a workaholic as a person "whose need for work has become so excessive that it creates noticeable disturbances or interference with his [sic] bodily health, personal happiness, and interpersonal relations" (p. 7). Following Oates's definition, workaholic habits were conceptualized as an array of attitudes characterized by excessive involvement with and thought about work-related activities that go beyond workplace expectations (Machlowitz, 1980; Scott, Moore, & Micelli, 1997; Spence & Robbins, 1992). Research suggests that workaholism is linked to several negative outcomes including job stress, poor life satisfaction, work-family conflict, and loss of purpose in life (Clark, Michel, Zhdanova, Pui, & Baltes, 2014).

Antecedents are examined by psychologists in the hope of mitigating problems resulting from maladaptive patterns of behavior. Antecedents are biological, psychological, and social phenomena that explain abnormal and normal behavior. In the study of workaholism, Ng, Feldman, and Sorensen (2007) organize the literature by suggesting a three-category antecedent model which includes personality factors, sociocultural factors, and behavioral reinforcements and, by categorizing antecedents, researchers gain a better picture of the developmental background of workaholics. Andreassen (2014) emphasizes that theories of workaholism are not exclusive of one another. Therefore, it is important to note that no one category of antecedents precludes another; each category empirically explains variance on measures of workaholism.

Examples of sociocultural factors that influence workaholism are stressful childhood or family experiences, competition amongst colleagues at work, and vicarious learning in the home environment (Ng et al., 2007). Therefore, workaholism can be partially explained by witnessing others engaging in compulsive work-related activity. The original conceptualization of workaholism emerged from Oates (1971) who detailed his own work behaviors and the outcomes these behaviors had on his children and family. In this sense, parental workaholic behavior can be categorized as a sociocultural antecedent of workaholism.

Bryan Robinson, a family therapist, suggested that workaholics develop as a result of a dysfunctional family system (Robinson, 2000). Robinson (and Kelley, 1998) found that children of workaholic fathers experienced higher levels of depression and anxiety in comparison with children of non-workaholic fathers. Both Robinson (1998) and Oates (1971) conceived these outcomes as related to the "emotional absenteeism" of the workaholic parent, requiring some children to set exceedingly high expectations for their own work and/or work-related activity. According to Robinson and colleagues, children of workaholics are overly responsible, self-reliant, achievement-oriented, and resilient in response to their parents' work addiction (Robinson & Carroll, 1999; Robinson & Kelly, 1998). Although these qualities are socially desirable in academic and employment environments, it is believed such features disguise symptoms of depression and anxiety among children of workaholics.

Other research has led to examination of personality factors in the explanation of workaholism. A personality-based perspective defines workaholism as a stable constellation of behaviors and attitudes (Burke, Matthiesen, & Pallesen, 2006). Relations of workaholism with specific personality factors have been identified in earlier studies (Burke et al., 2006; Clark, Livesley, Schroeder, & Irish, 1996; McMillan, Brady, O' Driscoll, & Marsh, 2002). Furthermore,

Burke and colleagues, by implementing their early study of personality and workaholism, suggest that personality factors, in addition to sociocultural factors, contribute to the expression of workaholism.

The Five-Factor Model (FFM) or 'Big Five' model is used in most studies examining personality and workaholism due to its robust research base (Andreassen, Hetland, & Pallesen, 2010; Aziz & Tronzo, 2011; Burke et al., 2006; Clark, Lelchook, & Taylor, 2010). The variables in this model include neuroticism, extraversion, openness to experience, conscientiousness, and agreeableness. Studies exploring the influence of these variables on the expression of workaholic behaviors have highlighted the importance of neuroticism, extraversion, and conscientiousness specifically (Andreassen et al., 2010; Aziz & Tronzo, 2011; Burke et al., 2006).

Neuroticism has the most extensive research history among the Big Five due to the former clinical use as the term *neuroses* (Costa & McCrae, 1992). Higher scores on measures of neuroticism suggest difficulties with impulse control and challenges in managing stress. A feature of workaholism consists of a compulsive behavior in work, defined by an internal pressure to engage in such activity (Spence & Robbins, 1992). Higher neuroticism scores also are characterized by frequent negative emotion and instability. Thus, an individual who scores highly on a measure of neuroticism may demonstrate less interest and enjoyment in their work, a feature central to the definition of workaholism.

Extraversion is a personality factor defined by gregariousness, assertiveness and positive emotion. Individuals high on extraversion gravitate towards leadership roles and highly stimulating environments. Unlike neuroticism, extraversion is positively associated with job satisfaction (Barrick & Ryan, 1991), an outcome correlated with work enjoyment which is an affective component of a commonly used workaholism measure (Burke et al., 2006; McMillan et

al., 2002). Though not explicitly stated among researchers, much literature suggests that workaholics possess negative emotions in response to work- or work-related activities. Thus high scores on measures of extraversion would seem rare among workaholics, who tend not to enjoy the function of their work or work-related activities.

Conscientiousness is also a factor of interest among workaholism researchers. This personality factor is defined by self-control and the ability to plan and organize. High scorers on measures of conscientiousness are desired in nearly all employment settings. This factor is relevant in the study of workaholism as high scores correlate with rigidity and compulsive behaviors (Costa & McCrae, 1992). As Oates (1971) described, workaholics become preoccupied or obsessed with their work or work-related activity. Common measures of conscientiousness use the term "workaholism" to describe negative features of high scores on this factor (Clark, Livesley, Schroeder, & Irish, 1996; Costa & McCrae, 1992). Among personality researchers workaholism is characterized as an extreme level of conscientiousness and is, in some cases, a feature of a personality disorder (Samuel & Widiger, 2011).

Dispositional optimism is another trait important to consider in the study of workaholism. Optimism is a trait defined by a positive view of life (Scheier & Carver, 1992). This trait has a large research base reported in relation to its ability to predict adaptive and maladaptive coping (Solberg Nes & Segerstrom, 2006). High scores of optimism correlate with positive and adaptive coping strategies. Workaholism is a phenomenon characterized by maladaptive work behaviors, suggesting that workaholics are less optimistic about their work- and work-related activity. Because the relation between optimism and workaholism has not been explored, this study aims at identifying whether optimism is influential in the expression of workaholic behaviors among students.

Though personality factors and traits are well-developed in the literature as predictors of workaholism (Andreassen et al., 2010; Aziz & Tronzo, 2011; Burke et al., 2006; Clark et al., 2010), the association of perceived parental workaholism to childrens' own workaholic behaviors is not well-understood. Recalling Oates's (1971) original narrative pertaining to his own work behaviors, research focusing on the influence of parental work behaviors has become sparse in comparison to other factors. This study seeks to revisit the influence of parental work behaviors, while accounting for the variance of personality in determining work behaviors among undergraduate students.

Review of Literature

The first section of this review provides introduction to the empirical study of workaholism. The second section addresses the possible influence of parental work behaviors on the expression of workaholism in undergraduate students. The final section surveys empirical correlates of neuroticism, extraversion, conscientiousness, and optimism relative to workaholism. Because workaholism is operationally defined in several ways, the terms "workaholism," "work addiction," and "compulsive work behavior" will be used interchangeably throughout this manuscript.

Workaholism

A Google internet search of the word "workaholism" conducted on October 27, 2016 revealed approximately 308,000 results, definitions varying considerably from site to site. In psychological literature, the term “workaholism” has been used across disciplines most frequently in Industrial and Organizational Psychology. The word "workaholism" appeared 438 times in a keyword search using the American Psychological Association PSYCNet database, 278 of those hits were from peer-reviewed journals (2016, October 27). Among these studies workaholism has been conceptualized differently which has hindered replication and slowed progress in universally defining the global phenomenon.

Wayne Oates, a pastoral psychotherapist, has been credited with coining the term in *Confessions of a Workaholic*: *The Facts about Work Addiction*, a text describing his own internal compulsion to engage in work to the exclusion of other life activities. His self-study of dysfunctional work behavior generated interest in varying disciplines since the 1970s. The literature, itself, has been a mix of scholarly work and popular (or, "pop") psychology and the

term often is related to burnout, another construct common among scholarly and pop psychologists.

Meta-analyses conducted by Clark, Michel, Zhdanova, Pui and Baltes (2014) offered the most comprehensive evaluation of the empirical study of workaholism to date. They defined the construct as a phenomenon influenced by varied antecedents, associated with several negative outcomes. They further defined workaholism as "an addiction to work that involves feeling compelled or driven to work because of internal pressures, having persistent and frequent thoughts about work when not working, and working beyond what is reasonably expected (as established by the requirements of the job or basic economic needs) despite potential negative consequences" (Clark et al., 2014, p. 5). Clark and colleagues found that workaholism correlated with job stress, work-life conflict, and poor emotional and physical health. In addition, they found that workaholism predicted negative scores on measures of job and life satisfaction and observed a strong relation with perfectionism, a construct associated with conscientiousness (Stoeber, Otto, & Dalbert, 2009; Cruce, Pashak, Handal, Munz, & Gfeller, 2012).

Though several measures of workaholism or work addiction have emerged, this study used the Workaholism Battery (WorkBat; Spence & Robbins, 1992), the instrument with the most robust research base. The WorkBat was developed to assess three work behaviors or attitudes: Work drive, work involvement, and work enjoyment. Referring to Ng et al. (2007), the WorkBat components support dimensional features of workaholism including affective, behavioral, and cognitive elements. The work drive scale is a measure of compulsive work behavior not influenced by external pressures (e.g., supporting a family or paying bills). The work involvement scale is a measure identifying a person's psychological investment, more specifically the degree to which a person is committed to productivity at work as well as at his or

her home. The work enjoyment scale measures affect as a proxy for the satisfaction one derives from work-related activities. The following paragraphs survey construction of the WorkBat, after which sections review existing literature examining the three components--work drive, work involvement, and work enjoyment--as separate constructs. The WorkBat likely remains one of the most commonly used measures of workaholism because it conceptually aligns with etiological models of addiction containing affective, behavioral and cognitive components. The following section provides an overview of the WorkBat development, and its early use in the study of workaholism.

Construction of the Workaholism Battery

Spence and Robbins (1992) used cluster analytic methods to determine profiles of participant scores on each scale. According to Spence and Robbins, two categories of workaholics were identified: enthusiastic workaholics and nonenthusiastic workaholics, and four of which they described as non-workaholics. The two profiles of workaholics were both described as individuals highly involved in work and highly compelled to work. However, their differences were defined by scores on the enjoyment scale where the former reported high levels of enjoyment and the latter reported lower levels.

The Spence and Robbins' cluster analytic methods have been critiqued by other investigators. McMillan and colleagues (2002), citing Romesburg (1984), noted that cluster analyses begin with structuring groups by items *prior* to analysis as to ensure that scales are valid in their measurement of variables. Clustering worker types demonstrates a methodological concern which has since halted attempts to replicate findings from the Spence and Robbins study. Bonebright, Clay, and Ankenmann (2000) made the most recent attempt to use the WorkBat to categorize employees (N = 171) from a high-technology company. They found that

18% of participants did not match the six original categories. Kanai, Wakabayashi and Fling (1996) also failed to replicate profiles defined by Spence and Robbins in a study involving Japanese workers. As a result, the WorkBat scales are now used as independent measures of work drive, work involvement, and work enjoyment. The following sections will provide a brief review of relevant outcomes identified among researchers using the three scales of the WorkBat.

Work Drive

Patel, Bowler, Bowler, and Methe (2012) defined work drive by examining its moderate correlations among motivations for achievement, perfectionism, and work-life balance. Spence and Robbins (1992) originally defined work drive as an inner compulsion to engage in work-related behavior, a definition McMillan et al. (2002) likened to characteristics of obsessive-compulsive personality disorder and intrinsic job motivation. In a study examining the validity of the WorkBat, McMillan and colleagues found that a shortened version of the scale associated (r = .61, p < .01) with the Schedule for Nonadaptive and Adaptive Personality-Workaholism Scale (SNAP; Clark, 1993), a measure of workaholism used in assessment of obsessive-compulsive personality patterns. They also found that the shortened drive scale converged with the Intrinsic Job Motivation Scale (IJMS; Warr, Cook, & Wall, 1979), a measure of intrinsic job motivation (r = .39, p<.01), which suggests that internal motivation influences the expression of compulsive work behavior. The findings from this study indicate that underlying personality patterns may influence the expression of compulsive work behavior.

The work drive scale also was used in studies outside of the United States. Andreassen, Hetland, Molde, and Pallesen (2011) found that scores on the work drive scale positively associated with insomnia, long work hours, and subjective health complaints among Norwegian employees (N = 661) in varying occupational industries. The same study found that scores on the

work drive scale negatively correlated with job satisfaction and life satisfaction. The negative association with life satisfaction confirmed findings from Bonebright et al., (2000) who reported that higher work drive scores correlated with lower life satisfaction. Additionally, studies with samples from Canada (Burke, 1999) and Japan (Kanai et al., 1996), have demonstrated positive correlations among work drive scores and perfectionism, a personality variable characterized by a desire to work towards exceedingly high standards and unwillingness to make mistakes.

Work Involvement

According to Spence and Robbins (1992), to be involved in work an individual "characteristically devotes himself or herself wholeheartedly to productive projects and prefers to make constructive uses of time" (p. 162). This definition has led some to conflate time spent at work with the work involvement variable. Few investigators have supported the assertion that time spent in work-related activities defines work involvement or the latent workaholism construct (Andreassen, 2014; McMillan et al., 2002; Scott et al., 1997; Machlowitz, 1980). McMillan and colleagues (2002) asserted that single-item measures of work-hours are unreliable and responses do not approximate accurate accounts of time devoted to work or work-related activity among participants. Therefore, the work involvement scale likely taps a more complex and holistic characteristic of compulsive work behavior.

Despite claims that work involvement is foundational in defining workaholism, its support among researchers is mixed. Poor parallel structure and unclear factor loadings have lead some investigators to exclude the work involvement scale from research (Andreassen, Ursin, Eriksen, & Pallesen, 2012; Andreassen, Ursin, & Eriksen, 2007; Kanai et al., 1996). Studies excluding the work involvement scale from research have been conducted in Europe and Japan suggesting that, unlike the work drive scale, items measuring involvement may not culturally translate well

beyond North American countries. Even though the work involvement scale has been excluded from these studies, it is still used in other research and has demonstrated positive correlations with active problem solving (Andreassen, Hetland, & Pallesen, 2012), generalized self-efficacy, and job satisfaction (Burke et al., 2006). Individuals' scores on the work involvement scale also showed a negative correlation with passive avoidance (Andreassen et al., 2012) and job stress (Spence & Robbins, 1992). This study included the work involvement scale, given that its items were derived from a student sample.

Work Enjoyment

The work enjoyment scale measures individuals' attitudes, specifically the extent to which they enjoy their work- or work-related activity (Spence & Robbins, 1992). Inclusion of a scale measuring affect helps define individuals' emotional perceptions of work. The original conceptualization of workaholism using the WorkBat maintained that two types of workaholics exist: "enthusiastic workaholics" (those scoring highly on all three scales), and "nonenthusiastic workaholics" (high scores of work drive and involvement, and *low* on work enjoyment). Two studies defining workaholics in this manner found that nonenthusiastic workaholics endorsed higher levels of job stress (Spence & Robbins), lower life satisfaction, greater work-life conflict, and lower sense of purpose in life in comparison with enthusiastic workaholics (Bonebright et al., 2000).

In a study of New Zealand employees, McMillan et al. (2002) found that the work enjoyment scale converged with a measure of job satisfaction ($r = .48$, $p < .01$) an attitudinal variable well-researched in the Industrial/Organizational psychology and Management fields. Furthermore, meta-analyses have found that lower scores on measures of neuroticism are strong predictors of job satisfaction (Judge & Bono, 2001; Judge, Heller, & Mount, 2002). Work

enjoyment and its likeness to job satisfaction suggests that the inclusion of an affective component in defining workaholism is important and relevant.

The work enjoyment scale also has been criticized by researchers particularly as it relates to its conceptualization of workaholism using the WorkBat (see Mudrack, 2006; Schaufeli, Taris, & Bakker, 2008). Prior to development of the WorkBat, Machlowitz (1980) conducted qualitative research with workaholics using criterion based upon hours worked. Her research showed that workaholics *could be* satisfied with their work activity, which framed future arguments against the enjoyment scale after its development a decade later. Mudrack (2006) suggested that the inclusion of an affective component of workaholism may be more appropriate as a moderator variable rather than a core component in the definition. Mudrack also suggested abandoning the WorkBat from further empirical studies altogether despite its robust research base and alignment with conceptualizations of workaholism as an addiction.

Other researchers argued that the inclusion of the work enjoyment scale obfuscates the operational definition of similar types of people, such as engaged workers or burned-out workers (Schaufeli, Taris, & Rhenen, 2008). Schaufeli and colleagues suggested that conceptualization based on an affective component contributes to confusion regarding the definition of workaholism. This argument is formed on the basis of the authors' concerns about types (or profiles) of workaholics, a conceptualization that has fallen out of style among researchers. This manuscript conceptualized workaholics using the latter definition (i.e., high scores of work drive and involvement, and low work enjoyment) and considered work enjoyment an important factor in the study of workaholism.

Work enjoyment scores, independent of scores on the drive and involvement scales, also lend credence to the importance of enjoyment in the study of compulsive work behaviors. For

example, work enjoyment is a predictor of adaptive coping strategies. In a study of coping patterns, Andreassen and colleagues (2012) found that employees who enjoyed their work were more likely to engage in active problem solving behaviors. Further evidence suggests that people who enjoy their work also tend to feel capable of performing the functions of their respective roles. Burke et al. (2006) reported that individuals with greater work enjoyment are more likely to feel as though they are competent in performing duties of their roles than those endorsing lower levels of work enjoyment. Feeling able to perform the functions of a role is defined well within Social Cognitive Career Theory (SCCT; Lent, Brown, & Hackett, 1994) as self-efficacy, which is influenced by environmental and individual-difference variables.

Though self-efficacy is not examined in this study, the work enjoyment of undergraduate students may have implications on their ability to perform academically and should be considered in future research with undergraduate students. Furthermore, studies examining work enjoyment should also consider other sociocultural factors which likely influence the expression of affect relating to employment. A sociocultural factor that has been considered in other research is parental workaholism, particularly whether parents' behaviors and attitudes at work influence children. The following paragraphs will offer review of the literature on parental workaholism, which is categorized as a sociocultural factor.

Parental Workaholism

Literature examining parental workaholism is scarce and has been conducted primarily by a few who conceptualized workaholism as an addiction. Concern over the children of workaholics was an impetus for Oates's (1971) narrative addressing dysfunctional family outcomes relating to his own work behaviors. Empirical work examining parental workaholism was conducted by Bryan Robinson, a family therapist. Robinson (2000; 1996) suggested that all

members of a family unit are affected negatively by workaholic behaviors, and he posited that children of a workaholic parent experience feelings of loneliness, abandonment, and isolation.

Robinson proposed that children of workaholic parents become *parentified* as a result of the emotional and physical absence of a caregiver (Robinson, 2000; 1999). Parentified children assume caregiving roles and responsibilities for themselves and others forfeiting their emotional well-being for the benefit of the family unit. Robinson and Kelly (1998) conducted a study evaluating mood and external locus of control among children of workaholic parents. They administered the Work Addiction Risk Test (WART; Robinson, 1999), an alternative measure of workaholism, to a sample of young adults (N = 211) and assessed their perceptions of their parents' work behaviors. They split the sample based on a cut-off score distinguishing children of workaholics and nonworkaholics, with the former categorized as one standard deviation above the mean. They found that children of workaholic parents reported higher levels of depression and external locus of control in comparison with parents in the nonworkaholic group. Additionally, they found that children of workaholic fathers scored higher on measures of anxiety in comparison with children with nonworkaholic fathers. This finding may be attributable to early gender norms characteristic of the time in which the study was conducted, a point referenced in the authors' discussion of results. The authors' findings indicated that parental work behaviors influenced the moods of children in the family system, which in turn affected their perception of work behaviors.

One concern regarding the outcome of this study pertains to the method used to determine groups of workaholics and nonworkaholics. When determining a cut score, researchers should avoid using a norm-referenced method based on the scores of one sample. Norm-referenced cut points are derived by averaging participants' scores and then grouping the sample either above or

below the mean. The flaw in this method assumes that the sample approximated a normal distribution of scores generalizable to the population (i.e., there are an equal number of those identified as workaholics, and those that are not), which cannot be determined with one sample. A norm-referenced cut score using one sample may be an overestimate or underestimate of workaholism. Therefore, Robinson's results should be interpreted with caution.

With regard to frequency of use, the WART, which is the instrument used in Robinson's studies falls second only to the WorkBat (Andreassen, 2014; Patel et al., 2012). Items on the WART were validated using a sample of undergraduate students from the United States (N = 363), which is subject to criticism based on the presumable absence of work experience among traditional-age undergraduate students. In contrast, Spence and Robbins (1992) used a rationally-derived method to develop the item pool for the WorkBat. They tested the instrument on samples of both students and social workers with differing work experiences (N = 291) basing their analyses on a sample which, at least in terms of age, is more likely to approximate a representative sample of the United States population.

To date, no empirical study has used a modified version of the WorkBat to assess children's perceptions of parents' work behaviors. However, in another study examining the influence of parental workaholism on children, Carroll and Robinson (1999), using the Children of Workaholics Screening Test (COWST; Robinson & Carroll, 1999) found that children of workaholics were more likely to have higher scores of depression and parentification than of children of alcoholics. This study was novel insofar as the investigators made an attempt to demonstrate the comparability of parental alcoholism and parental workaholism.

Chamberlin and Zhang (2009) hypothesized that parental workaholism would *not* influence an increase in workaholic scores among adult children. The basis for their hypotheses

stems from early theoretical workaholism literature suggesting that children of workaholics either (a) continued their parents' patterns of compulsive work behavior (Machlowitz, 1980) or (b) disengaged from work altogether becoming "paralyzed" (Fassel, 1990, p. 78). The latter response is characterized by an avoidant coping response to what the child perceives as a distressing factor in the parent-child relationship. Contrary to their hypothesis, Chamberlin and Zhang's findings revealed that adult children who perceived their parents to be workaholics are more likely to become workaholics themselves.

Despite these findings, no other empirical studies have examined the influence of parental workaholic behaviors or attitudes on outcomes of adult children. A limitation of the studies referenced above pertains to the measure used. Robinson and Carroll (1999) developed the COWST, a 30-item measure of adult children's perceptions of their parents' work behaviors. However, there has been little support for validity with this measure using a sample representative of the United States population, and items were created based only on clinical observations of children with reported workaholic parents. In the presence of this limitation, the influence of parental workaholism remains understudied among compulsive work behavior researchers.

In addition to exploring parental work behaviors and attitudes, this study also examines the role of individual difference variables, specifically personality factors and traits. Several researchers have explored relations between personality variables and workaholism, but none have done so while simultaneously examining the influence of parental work behaviors and attitudes. Given the relative stability of behaviors which correlate with personality factors such as the Big Five, this study sought to replicate findings suggesting that workaholic behavior is associated with certain factors and traits. The following paragraphs address the relevance of

personality in the study of workaholism by first introducing a principle of development germane to studies exploring antecedents of behavior.

Relevance of Personality in Study of Workaholism

Personality is of interest to workaholism researchers given it reliably predicts human behavior. Despite its observed stability, questions persist regarding how personality develops and in what ways is it susceptible to environmental factors. Based on prior study of personality and workaholism, the Big Five model of personality shows utility in predicting workaholic behavior. However, much of the existing research examining personality and workaholism has lacked a theoretical basis and mention of how personality develops over the lifespan. Researchers of workaholism have determined that personality factors predict the expression of workaholism, however, all studies have lacked a guiding principle, theory, or model to support their hypotheses.

Before providing a review of the literature examining each personality variable in this study, the following paragraph describes an existing perspective of personality development pertinent to the variables of interest and human behavior. The social investment principle perspective (Lodi-Smith & Roberts, 2007; Roberts, Woods, & Smith, 2005) posits that personality factors and traits develop throughout adulthood in response to social role expectations common across culture and time. This principle does not negate the fact that personality is relatively stable. It does, however, suggest that personality maintains a bidirectional relation with sociocultural or environmental factors.

The social investment principle asserts that individuals establish their identities on the basis of their commitment to roles they play in society (e.g., investment in marriage, work, family, place of worship, and community). According to this principle these roles place

expectations on young adults, promoting a system of rewards (i.e., advancement in a job or career, finding compatible partnership, starting a family). This system of rewards influences changes in personality as individuals mature, specifically in terms of increases in social dominance, agreeableness, conscientiousness, and emotional stability (an alternative title for neuroticism).

The social investment principle suggests that factors and traits are still developing throughout adulthood. Roberts and colleagues' (2005) perspective acknowledges and accounts for environmental factors influencing the expression of work-related behaviors. From this viewpoint, personality factors develop in response to the contingencies related to common social roles. Lodi-Smith and Roberts (2007) suggested that there are individual differences in preference to invest in such social roles, referred to as *selection effects*. Given that social roles in young adulthood expect individuals to be agreeable, conscientious, and emotionally stable, the authors asserted that certain individuals scoring highly on measures of these factors may invest more time and energy in pursuit of these roles.

Based on the social investment principle, workaholic behaviors may develop as a function of normative change in personality traits which are either socially rewarded or admonished in work settings. Though workaholism has not been explored using the social investment principle, it shows promise in explaining maladaptive work-related behavior in relation to personality development. This perspective accounts for observed changes in personality during the maturation process. For example, in a longitudinal study examining personality development in young adulthood, Roberts, Caspi, and Moffit (2003) found that work was related to changes in personality among maturing adults from ages 18 to 26 (N = 980).

Historically, studies examining personality and workaholism have excluded explanation regarding the theoretical importance of personality. While personality is consistently reported as a stable predictor of work behavior, it explains only partial variance in self-reported workaholic behavior. To date, no studies have examined the functional variance explained by parental workaholic behaviors and attitudes when accounting for the influence of personality variables. The following paragraphs will introduce each of the personality factors and traits examined and will provide review of the literature relating each factor to the study of workaholism.

Conscientiousness

Individuals with higher scores on measures of conscientiousness are described as well-organized and diligent workers, whereas lower scores are indicative of disorganization and a lackadaisical work style (Costa & McCrae, 1992, p. 6). Evidence suggests that conscientiousness is related to several positive outcomes. For example, studies found conscientiousness to be a strong predictor of success-oriented behavior such as academic achievement measured by grade point average among college students (Paunonen & Ashton, 2013; Noftle & Robins, 2007; Paunonen & Ashton, 2001) and job performance amongst working adults (Barrick & Mount, 1991).

In a Canadian sample, Burke et al. (2006) found that higher scores on measures of conscientiousness predicted higher scores of work drive. Aziz and Tronzo (2011) replicated this finding with an American sample (N = 193) of full-time employees from diverse occupational backgrounds in business, education, and health. In this study they found that conscientiousness positively related to higher scores of work drive and work involvement. These findings suggest that conscientiousness contributes to the expression of workaholic behavior, perhaps due to its features of fastidiousness and disciplined work ethic.

As expressed earlier, evidence suggests that there are also negative outcomes related to conscientiousness. In a recent study, Carter, Guan, Maples, Williamson and Miller (2016) found a curvilinear relationship among conscientiousness and psychological well-being, suggesting that extreme levels of conscientiousness contribute to poorer levels of psychological well-being. Carter and colleagues found that the associations among the maladaptive traits of obsessive compulsive personality disorder were strengthened with higher facet-level scores of conscientiousness. This finding is consistent with previous studies which suggested that workaholism is a feature of obsessive-compulsive personality disorder (Samuel & Gore, 2012; Samuel & Widiger, 2008; Saulsman & Page, 2004; Haigler & Widiger, 2001).

Extraversion

Individuals scoring higher on measures of extraversion are characterized as affectionate, gregarious, and talkative, whereas those scoring lower tend to be reserved, retiring, and quiet (McCrae & Costa, 1987). Burke et al. (2006) found that high scores on extraversion predicted greater work enjoyment and greater work involvement. In other words, individuals may be more likely to enjoy their work and invest more time and energy in work-related activity if they are socially engaged and outgoing. In another study, Straud, McNaughton-Cassill, and Fuhrman (2015) found that extraversion positively predicted proactive coping skills among undergraduate students. This finding implies that higher levels of extraversion may contribute to action-oriented coping behaviors in response to stressful circumstances.

Individuals who engage proactive coping skills tend to be solution-focused, meaning that they address stressors as problems that can be solved as opposed to threats (Straud et al., 2015; Penley & Tomaka, 2002). Studies have examined the influence of extraversion on work enjoyment, but have not expanded upon the importance of how the relation among the two

variables is important in an emotional response to work. In relation to the social investment principle, young adults who score high on measures of extraversion may demonstrate a greater ability to adapt with the demands of the graded social roles impressed upon them by society.

Neuroticism

Neuroticism is associated with emotional instability, anxiety, hostility, impulsivity, and increased psychosomatic complaints (Costa & McCrae, 1980). Additionally, neuroticism influences negative affect and pessimism, which predicts (albeit inversely) satisfaction in life, hopefulness, and morale (p. 674). In clinical environments, individuals scoring high on measures of neuroticism have a tendency to elevate scales of symptomatic anxiety and depression (Costa & McCrae, 1992). The construct of burnout is well-researched in psychological literature and is similar to workaholism. Burnout is described as a syndrome of emotional fatigue, elevated cynicism, and an enduring vulnerability to job stress (Maslach & Jackson, 1981; Maslach, 2003), and shows empirical correlation with depression (Bakker, Schaufeli, Demerouti, et al., 2000; Toker & Biron, 2012). Furthermore, in a study examining personality correlates among Dutch employees (N = 572), Langelaan, Bakker, von Doornen, and Schaufeli (2006) demonstrated that neuroticism is a primary personality factor predictive of burnout.

Individuals scoring high on measures of neuroticism tend to experience negative moods more intensely and longer than others and may experience physical symptoms as a result (Burke et al., 2006). Costa and McCrae (1980) conducted a longitudinal study of males and females and determined that neuroticism predicted more acute symptoms of emotional instability. Its relations with workaholism and workaholic components have been significant in all studies conducted to date (Andreassen et al., 2012; Aziz & Tronzo, 2011; Burke et al., 2006). Burke et al. (2006) found neuroticism to be the strongest predictor of work drive among any other personality factor

included in the study. Andreassen et al. (2010) also found that neuroticism positively correlated with work drive scores and was inversely related to work enjoyment. In another study examining the influence of the FFM on workaholism with the WART, Clark and colleagues (2010) found that neuroticism was a strong predictor of impatience, compulsion to work, and polychronic control.

Dispositional Optimism

This study also considered the relevance of optimism in relation to workaholic behaviors exhibited by students. Dispositional optimism is defined as an individual belief that good things will happen in life. This variable correlates with numerous mental and physical health outcomes and is well-researched among varying disciplines (Scheier & Carver, 1992; Solberg Nes & Segerstrom, 2006). In a study examining the relations between optimism and stress as risk factors for job burnout among college students, it was found that both variables significantly correlated (Chang, Rand, & Strunk, 1998).

Optimism was considered in this study due to its predictive ability of avoidant and approach coping strategies (Solberg Nes et al., 2006; Scheier & Carver, 1992; Scheier & Carver, 1985). Avoidant coping behavior is characterized by disengagement from a behavior, often in response to stress. Approach coping refers to the opposite of avoidance, whereby an individual reacts to stress by working to reduce the effects of the stressor. In their meta-analytic review of optimism and coping, Solberg Nes and Segerstrom offered several examples of both types of coping. Avoidance coping includes disengaging from the perceived stressor, withdrawing from interaction with others, and distancing one's self. Examples of approach-coping include accepting the perceived stressor, seeking support, and restructuring maladaptive thought patterns (p. 236).

Summary of Study

Workaholism is a complex dimensional construct, and its expression is influenced by three categories of antecedents, including sociocultural, personality, and behavioral reinforcing factors (Ng et al., 2007). The WorkBat, the measure used in this study, conceptualizes workaholism as a compilation of three parts: work drive, work involvement, and work enjoyment (Spence & Robbins, 1992). Because clustering scores on these scales is not supported in the literature (Bonebright et al., 2000, Kanai et al., 1996), workaholic behavior was defined by high scores of work drive and involvement, and low scores of work enjoyment.

Several factors were examined in this study, all of which fall into two of the antecedent categories proposed by Ng and colleagues (2007). The first category of antecedents included personality factors such as optimism, extraversion, neuroticism, and conscientiousness. Research supports the inclusion of these factors as viable predictors of workaholic behaviors, yet existing studies generally lack a guiding theoretical basis or framework. Though it is not a theory, the social investment principle suggests that personality factors such as conscientiousness and neuroticism develop in accordance to an individual's investment in age-dependent and universal social roles including pursuing a career and starting a family (Lodi-Smith & Roberts, 2007; Roberts, Woods, & Smith, 2005). The bidirectional relation which exists among traits and an individual's investment in social roles is viewed as a determinant of changes in their personality over time. Therefore, if an individual's perception of work or work-related activity is demanding in regards to expectations, it is hypothesized that investment in work also may be relatively high as well.

Also of interest in this study are parental work behaviors and attitudes defined as sociocultural factors by Ng et al. (2007). These factors are likely antecedents of workaholic

behavior as evidenced by previous study (Carroll and Robinson, 1999; Chamberlin & Zhang, 2009; Robinson & Carroll, 1998). Specifically, it is hypothesized that parental work drive, parental work involvement, and parental work enjoyment predict the work drive, involvement, and enjoyment scores of undergraduate children. Previous studies of parental workaholism exclusively used the WART, an alternative measure of workaholism. This study is the first to use an adapted version of the WorkBat to assess parental workaholism and its influence on the work drive, involvement, and enjoyment scores of undergraduate children.

The inclusion of these two sets of antecedents of workaholism has important implications for clarifying the developmental course and treatment of problematic work behaviors. As mentioned, much of the existing research examining workaholism has focused on atheoretical correlations between individual difference variables (e.g., personality factors) and workaholic behavior. Oates (1971) and Robinson (1998; 2000) emphasized the importance of family influence on the expression of workaholism, with Oates first suggesting that workaholism was maladaptive because it interfered with his family life. Cross-sectional studies to date have focused on explaining variance in workaholism scores by examining individual-difference variables and work-related attitudinal variables (as evidenced by research in industrial/organizational psychology and management fields). Very few studies, in comparison, have empirically examined how children's perceptions of their parents' work behavior influences their own behaviors and attitudes towards work. As a result, this study sought to identify the variance in workaholism scores among undergraduate students from a large, Southeastern university while simultaneously accounting for the influence of personality.

Method

Participants

Participants consisted of a sample of 209 undergraduate students from introductory and core psychology courses offered at a large Southeastern university. A total of 211 participants completed survey instruments, however two elected not to respond to items regarding parental work habits; therefore, those responses were removed from the study and only the remaining participants' data were included in analysis. There were 64 men (30.6%) and 143 women (68.4%), proportions which are representative of the psychology major. Two participants chose not to identify as either male or female. With respect to racial background, 23.9% of the sample was African-American, 13.9% was Asian-American, 53.1% was Caucasian, 3.8% was Latino/a or Hispanic-American, and .5% was Native American (4.8% did not specify racial background). Three participants did not report their age and those remaining ranged from 18 to 59 years (M = 20.97, SD = 5.24). Most participants reported being in their first year of undergraduate studies (67.5%). Grade point average (GPA) ranged from 1.0 to 4.0 (M = 2.93, SD = .62) on a 4.0 scale, with three participants neglecting to respond. With regard to language ability, 88.5% of the sample reported that English was their primary language, whereas 25.4% (or, 53 individuals) indicated that they were bilingual. Given the potential for parental work behavior to vary by culture, participants were asked to report whether their parents were born in the United States. Within the sample, participants reported that their birth father (27.8%) and birth mother (25.4%) were born in a country other than the United States.

Design

This study employed a correlational cross-sectional design whereby a sample was drawn from a university undergraduate student population. All participants responded to the same items at a single point in time from questionnaires listed in the following sections.

Procedure

Participants were recruited for a study measuring work habits using an online study scheduling system and by verbal requests in introductory and core psychology courses for an Institutional Review Board (IRB) approved study. Participants also were recruited through a campus-based electronic newsletter. They were asked to complete questionnaires pertaining to their own personal work habits and the work habits of either a male or female parental figure.

Measures

Work drive, work involvement, and work enjoyment. Work drive, work involvement, and level of work enjoyment were measured using the 25-item WorkBat (Spence & Robbins, 1992). Scores on each scale were based on the degree to which a participant agreed with a particular statement using a 5-point response scale (i.e., strongly agree, agree, neutral, disagree, and strongly disagree). Items on the work drive scale included statements such as, "I often feel that there's something inside me that drives me to work hard." The work drive scale measures the internal compulsion that an individual has towards work or work-related activities (e.g., academic coursework, volunteer work, etc.). The work involvement scale is a measure of psychological commitment that an individual has to their work or work-related activities. An example of an item on the work involvement scale is, "Wasting time is as bad as wasting money." The work enjoyment scale is a measure of affect or emotion as it pertains to the pleasure and enjoyment derived from work or work-related activity. Items include, "Most of the time my work is very pleasurable," and "my job is more like fun than work."

Because analyses were conducted using each scale separately, Cronbach's alpha coefficients were calculated for the three measures of work drive (α = .78), work involvement (α = .68), and work enjoyment (α = .85). Original use of the WorkBat supported the creation of profiles based on composite scores of each scale (Spence & Robbins, 1992; Bonebright et al., 2000); however, because these profiles could not be replicated in a later study (Kanai et al., 1996) and because the profiles were developed prior to the validation of the scales from which they were based (McMillan et al., 2002); the WorkBat subscales will be used as individual measures of workaholism components.

Parental work drive, parental work involvement, and parental work enjoyment. Parental workaholism components were measured using a modified version of the 25-item WorkBat. Participants were asked to complete the questionnaire in reference either to a mother-like figure (i.e., birth mother, a step mother, grandmother, aunt) or a father-like figure (i.e., birth father, a step father, grandfather, uncle). Instructions given to participants were as follows, "Now, think of the woman you view to be your mother (that could be your birth mother, a step mother, grandmother, aunt, etc.) AND think of the man you view to be your father (that could be your birth father, a step father, grandfather, uncle, etc.)." Participants were then asked to reply to a 2-option item indicating which parent (either mother or father) influenced them more in terms of their career and how they think about work. Therefore, each participant responded to the questionnaire *only* in reference to *one* parent. Each item on the three scales measuring participant perception of parental work habits corresponded with items from the original WorkBat scales (Appendices B and C). The beginning of each item specified the participants' perception of their parent's work habit (e.g., "My mother feels guilty when she takes time off from work.").

Cronbach alpha coefficients for the parental work drive, parental work involvement, and parental work enjoyment scales were .77, .73, and .90 respectively.

Dispositional optimism. The Life Orientation Test-Revised (LOT-R; Scheier, Carver, & Bridges, 1994) is a 10-item questionnaire used to measure differences in dispositional optimism and pessimism. Scores were based on 6 items (with four filler questions) measuring a single-factor on a 5-point scale where participants were asked to respond regarding their agreement with items such as, "I'm always optimistic about my future." The LOT-R has acceptable internal consistency, test-retest reliability, convergent and discriminate validity (Scheier et al., 1994). The Cronbach's alpha for this study was .73.

Five-factors of personality. The published version of the NEO-Five Factor Inventory (NEO-FFI; Costa & McCrae, 1989) was used in this study. The NEO-FFI is a 60-item instrument designed as a brief measure of the Big Five factors of personality (i.e., neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness). The five domains measured with the NEO-FFI define a model that is used to describe a broad range of personality traits. The neuroticism scale measures the degree to which an individual experiences emotional distress or instability (characterized by emotions such as fear, sadness, embarrassment, and guilt; Costa & McCrae, 1992). The extraversion scale measures an individual's level of gregariousness, affability, and energy (often more energetic in social environments). The openness to experience scale is used to measure the degree to which an individual is curious about their environment, attentive to their feelings, and open to situations involving change. The scale measuring agreeableness is similar to that of extraversion in that it is used to examine individuals' interpersonal propensities. The agreeableness scale measures the degree to which a person is cooperative, altruistic, and sensitive to the needs and values of others. Lastly, the

conscientiousness scale measures an individual's ability to operate with self-control, plan and organize their activities, and carry out day-to-day tasks.). In a recent study using the NEO-FFI that examined relationships amongst personality and work-related constructs (N = 661), reliability coefficients for the neuroticism, extraversion, openness to experience, and conscientiousness scales were acceptable ranging from .73 to .86 (Andreassen et al., 2010), although the agreeableness scale demonstrated questionable reliability (α = .69). Cronbach alpha coefficients for the neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness scales for this study were .81, .77, .73, .84, and .68 respectively.

Specific Aims

This study examined the associations among personality and parental workaholism (i.e., parental work drive, work involvement, and parental work enjoyment) as related to three specific work behaviors and attitudes of undergraduate students (i.e., work drive, work involvement, and work enjoyment). These aims are further explained in the following paragraphs.

Aim 1. The first aim of this study was to measure the degree to which personality and parental workaholism are associated with the work drive scores of undergraduate participants. Previous investigations using different measures of workaholism (Chamberlin & Zhang, 2009) demonstrated relations between parental workaholism and the work behaviors of children. Due to the developing nature of personality as described in a previous section of this manuscript, it was hypothesized that (1a) neuroticism, due to its features of emotional instability and impulsivity, and (1b) conscientiousness, due to characteristics of rigidity and sense of dutifulness, would predict undergraduate work drive scores. Furthermore, it was hypothesized that (1c) parental work drive, (1d) parental work involvement, and (1e) parental work enjoyment would predict the work drive scores of undergraduate students.

Aim 2. The second aim of this study sought to determine if parental work involvement and personality predicted the work involvement scores of undergraduate participants. It was hypothesized that (2a) conscientiousness, due to its characteristics of self-discipline, sense of responsibility, dutifulness, and achievement-striving would predict the work involvement scores of undergraduate students. Furthermore, it was hypothesized that the (2b) parental work drive, (2c) parental work involvement, and (2d) parental work enjoyment scores also would be associated with work involvement among undergraduate participants given that this variable is characterized as a psychological commitment to work or work-related activity.

Aim 3. The third aim of this study tested the associations among personality and parental work behaviors and attitudes on the work enjoyment scores of undergraduate participants. Work enjoyment is an affective component of the workaholism construct; hence it was hypothesized that scores on this scale would be related to participant personality factors, specifically (3a) optimism, (3b) extraversion, (3c) neuroticism, and (3d) conscientiousness. Furthermore, given that personality traits and factors develop in context to individual social expectations and investment in family roles, it was hypothesized that (3e) parental enjoyment would predict participant scores on the work enjoyment scale of undergraduates.

Results

All analyses were conducted using IBM SPSS 24.0 statistical package. Descriptive statistics were calculated prior to testing the study hypotheses to determine if scores among study variables were normally distributed. Means, ranges, standard deviations, and reliability coefficients of each scale are provided in Table 1. A power analysis was conducted using G*Power software (Faul, Erdfelder, Buchner, & Land, 2009) to determine whether the sample size was sufficiently powered for regression analyses involving multiple predictor variables. An

earlier study examining personality and workaholism (Andreassen et al., 2010) suggested that the sample size would adequately power regression analyses assuming a small effect size ($f^2 = .16$; power ≥ 0.80, $\alpha \leq 0.05$).

Table 1.

Mean, Range, Standard Deviation, and Cronbach Reliability Coefficients for Continuous Study Variables

Study Variable	*M*	Range	*SD*	α
Age	20.97	18 - 59	5.24	--
GPA	2.93	1.00 - 4.00	.618	--
LOT-R	20.86	6.00 - 30.00	3.83	.73
PW-Drive	25.97	12.00 - 35.00	4.62	.77
PW-Involve	24.89	12.00 - 40.00	5.22	.73
PW-Enjoy	29.49	10.00 - 50.00	7.40	.90
FFI-N	22.86	2.00 - 46.00	7.63	.81
FFI-E	30.12	10.00 - 48.00	6.27	.77
FFI-O	27.82	9.00 - 45.00	6.38	.73
FFI-A	29.69	8.00 - 43.00	5.68	.68
FFI-C	30.08	10.00 - 47.00	7.01	.84
OPT	20.86	6.00 – 30.00	3.83	.73
W-Drive	22.81	7.00 - 33.00	4.82	.77
W-Involve	22.08	8.00 - 35.00	4.66	.68
W-Enjoy	29.74	10.00 - 49.00	6.51	.85

Note: GPA = Grade Point Average; FFI-N = Five Factor Inventory - Neuroticism Scale; FFI-E = Five Factor Inventory - Extraversion Scale; FFI-O = Five Factor Inventory - Openness to Experience Scale; FFI-A = Five Factor Inventory - Agreeableness Scale; FFI-C = Five Factor Inventory - Conscientiousness Scale; LOT-R = Life Orientation Test-Revised; PW-Drive = Parental Work Drive Scale; PW-Involve = Parental Work Involvement Scale; PW-Enjoy =

Parental Work Enjoyment Scale; W-Drive = Work Drive Scale; W-Involve = Work Involvement Scale; W-Enjoy = Work Enjoyment Scale

Preliminary Analyses

Correlational analysis. In order to determine the relevance of study variables, preliminary-bivariate correlations were calculated using Pearson product-moment coefficients and are presented in Table 2. In addition to positive correlations with the two other scales of the WorkBat (i.e., work involvement and work enjoyment) results indicated that undergraduate work drive also positively correlated with parental work drive, extraversion, and conscientiousness. Undergraduate work drive was also found to be positively correlated with gender and GPA, and negatively associated with university honors status. Undergraduate work involvement also was positively correlated with dispositional optimism, extraversion, and conscientiousness. As expected, work involvement also was positively associated with age.

Undergraduate work enjoyment was positively correlated with parental work enjoyment, dispositional optimism, and extraversion. Work enjoyment also showed positive associations with openness to experience, conscientiousness, age, and school year. Also as expected, undergraduate work enjoyment was found to be negatively correlated with neuroticism. Significance of correlations maintained alpha levels of .01 and .05, details of which are included Table 2.

Multivariate analysis of variance. A preliminary between-subjects multivariate analysis of variance (MANOVA) was conducted with three dependent variables (parental work drive, parental work involvement, and parental work enjoyment) to determine if differences existed among participants' perceptions of their parent's work behaviors and attitude based upon the binary subject variable of whether their parent of influence was born in the United States or in

another country. Means and standard deviations for the parental workaholism scales are provided in Table 3, whereas correlation coefficients for the dependent variables can be found in Table 2. Of the 209 participants, one response regarding parental birthplace origin was omitted therefore the MANOVA was conducted with remaining participant data (N = 208).

The combined dependent variables were not significantly affected by whether the participant's parent of influence was born in the United States or in another country, Wilks'Λ = .98, F (3, 204) = 1.24, p = .297, partial η^2 = .018. A Levene's Test of Equality of Equal Variances was conducted and the assumption of homogeneity of variance between groups was not violated, indicating that the variance is equal. Additionally, a Box's Test of Equality of Covariances was conducted in order to determine if the variance for each of the dependent variables (parental work drive, parental work involvement, and parental work enjoyment) was equal for both groups. This analysis indicated that the assumption of homogeneity of covariance was not violated.

This preliminary analysis was conducted in order to determine if differences existed on the parental workaholism scales among participants who identified with a parent that was born in the United States and those identifying with a parent born in another country. The original study was not arranged in such a way to capture further information regarding parental country of origin. Despite results from this preliminary analysis, future studies should consider the influence of culture on perceptions of work-related behavior as there are likely differences among persons raised by parents or guardians born in other countries. As a result of this preliminary analysis, variables regarding whether a parent was born in the United States were excluded as a statistical control for each of the study hypotheses.

Table 2.

Intercorrelations Among Study Variables

	Study Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1.	Age	-																		
2.	GPA	.09	-																	
3.	Gender	-.04	.00	-																
4.	Honors	-.08	.42**	.07	-															
5.	Sophomore	.09	-.08	.11	.01	-														
6.	Junior	.17*	-.06	-.14*	-.07	-.15*	-													
7.	Senior	.24**	.06	.07	.02	-.08	-.05	-												
8.	FFI_N	-.11	.01	-.03	.09	-.04	.06	-.03	-											
9.	FFI_E	-.01	-.05	-.14*	-.05	.09	.01	.03	-.35**	-										
10.	FFI_O	.13	.27**	.10	.17*	.04	.07	.16*	.05	-.10	-									
11.	FFI_A	.04	.09	-.17*	.03	-.02	.01	.02	-.22**	.32**	.03	-								
12.	FFI_C	.10	.10	-.20**	.03	.05	.01	-.01	-.22**	.28**	-.11	.19**	-							
13.	OPT	.09	.06	-.04	.06	.01	.06	.05	-.55**	.50**	.03	.36**	.34**	-						
14.	PW_Drive	-.17*	.07	-.07	.03	.02	-.04	.03	.16*	.00	-.02	-.09	.02	-.14*	-					
15.	PW_Inv	.03	.23**	.00	.01	-.04	.01	-.09	.00	-.02	.03	.07	-.04	.01	.38**	-				
16.	PW_Enj	.11	.04	.04	-.05	.06	.07	.02	-.03	.11	.15*	.09	.03	.14*	.04	.33**	-			
17.	W_Drive	.07	.16*	-.23**	.15*	.07	.03	-.05	.09	.20**	-.05	.03	.42**	.09	.17*	.07	-.01	-		
18.	W_Inv	.18*	.12	-.11	.08	.11	.11	-.03	.04	.17*	-.04	.02	.35**	.05	.05	.08	-.05	.57**	-	
19.	W_Enj	.30**	.12	-.02	.04	.16*	.07	.08	-.16*	.25**	.17*	.09	.26**	.28**	-.02	-.03	.14*	.25**	.39**	-

Note: ** Correlation is significant at the 0.01 level (2-tailed) and * Correlation is significant at the 0.05 level (2-tailed). GPA = Grade Point Average; FFI-N = Five Factor Inventory - Neuroticism Scale; FFI-E = Five Factor Inventory - Extraversion Scale; FFI-O = Five Factor Inventory - Openness to Experience Scale; FFI-A = Five Factor Inventory - Agreeableness Scale; FFI-C = Five Factor Inventory - Conscientiousness Scale; LOT-R = Life Orientation Test-Revised; PW-Drive = Parental Work Drive Scale; PW-Involve = Parental Work Involvement Scale; PW-Enjoy = Parental Work Enjoyment Scale; W-Drive = Work Drive Scale; W-Involve = Work Involvement Scale; W-Enjoy = Work Enjoyment Scale

Table 3.

Mean Scores and Standard Deviations for Measures of Parental Workaholism as a Function of Influential Parent's Birthplace

		Parental Work Drive		Parental Work Involvement		Parental Work Enjoyment	
Group	*N*	*M*	*SD*	*M*	*SD*	*M*	*SD*
US Born	154	25.6	4.6	24.7	5.0	29.4	7.1
Non-US Born	54	26.9	4.5	25.6	5.7	29.8	8.4

Note: Categories of the independent variable refer to whether the parent of influence was born in the United States or in a country other than the United States.

Hypotheses Testing

Three multiple hierarchical regression models were used to examine the associations of study variables on undergraduate work drive, work involvement, and work enjoyment. As a reminder, variables are entered into a hierarchical regression model based on theory and perceived predictive ability relative to the antecedents in the study. Models were designed in order to control for age, gender, GPA, honors status, and school year. Age was selected as a control variable as it has demonstrated significance in predicting variance in the outcomes in another study (Andreassen et al., 2010). Gender was also included as a control variable in each of the regression models, as the extant research shows that results regarding differences among men and women are mixed. Lastly, GPA, honors status, and school year were also controlled for given their likelihood of influencing outcome variables associated with work behavior. Prior to entering demographic variables, school year was dummy coded into three variables so that inclusion of such could be meaningfully interpreted. The questionnaire asked participants to identify themselves by their year in school with four options: First year, second year, third year,

and fourth year. The grouping with the largest proportion of responses served as the reference category. In this case, first year students made up the reference category and three dichotomous dummy variables were recoded (i.e., sophomore, junior, and senior) and entered into each model in the first step.

Because there was not a strong theoretical basis for sequential ordering of antecedents, personality variables and parental workaholism scores were entered into each regression model simultaneously (i.e., parental work drive, parental work involvement, and parental work enjoyment) after controlling for the effects of the demographic variables. To investigate how well the demographic variables, personality variables, and parental workaholism scores predicted workaholism scores of undergraduates, hierarchical regression models were computed. Prior to conducting analyses, assumptions of normality, linearity, and homoscedasticity were checked and were not found to be violated. There were missing data observed among responses to questions about age, gender, and GPA. Pairwise deletion was used to account for missing data in each regression analysis.

Regression Model Predicting Work Drive

For the first regression model, the demographic variables of age, gender, GPA, school year, and university honors status were entered into the model in the first block. This set of variables, as expected, significantly predicted undergraduate work drive scores, $F(7, 196) = 3.21$, $p = .003$, $R^2 = .103$. As indicated, 10.3% of the variance in work drive could be predicted by the inclusion of the demographic variables. When personality variables and parental workaholism scores were entered into the model in the second block, they significantly improved the prediction of work drive scores, $\Delta R^2 = .200$, $\Delta F\ (9, 187) = 5.98$, $p < .001$. All variables entered into the model significantly predicted 30.3% of the variance in work drive scores of

undergraduate participants, $F(16, 187) = 5.09$, $p < .001$, $R^2 = .303$. The results from this set of analyses are included in Table 4.

Hypotheses regarding the predictive ability of the variables included in the model were partially supported. Both neuroticism and conscientiousness were found to be significantly associated with work drive after controlling for the effects of the demographic variables. Though not hypothesized, extraversion also was significantly related to work drive. Of the Big Five factors, conscientiousness related most strongly to work drive ($\beta = .37$, $p < .001$) followed by neuroticism ($\beta = .22$, $p < .01$) and extraversion ($\beta = .17$, $p < .05$). This means that when the effects of the other variables are held constant, work drives scores will increase as conscientiousness increases. As such, the more conscientious individuals consider themselves to be, the more likely they are to exhibit compulsive work behaviors.

Gender was observed as a significant predictor of work drive scores ($\beta = -.24$, $p < .001$) before personality and parental workaholism components were entered into the model, which indicated that the effect of being male influenced work drive scores of undergraduate students but not in the presence of other significant predictors. Therefore, variance in work drive scores among men and women in this sample appear to be better explained by other factors. Burke (1999) determined that men and women tend to differ very little on the scales of the WorkBat, which confirms findings revealed in this analysis.

Hypotheses 1c, 1d, and 1e suggesting that parental workaholism scores on each of the modified WorkBat scales would associate with the work drive scores of children were not supported. Though a positive association between parental work drive scores and undergraduate work drive scores was observed prior to analysis ($r = .17$, $p < .05$), such a relation did not

significantly predict drive scores among undergraduate students. Conclusions regarding this finding will be further addressed in the next section of this manuscript.

Table 4.

Regression Analyses Predicting Undergraduate Work Drive

Variable and Step	B	SE B	β	R^2	ΔR^2
Work Drive					
Step 1				.10**	
Age	.05	.07	.06		
Gender	-2.49	.72	-.24***		
GPA	.84	.59	.11		
Honors	1.83	1.12	.12		
Sophomore	1.24	.87	.10		
Junior	.23	1.19	.01		
Senior	-1.25	2.04	-.04		
First Year (reference)	0				
Step 2				.30***	.20***
Age	.08	.06	.08		
Gender	-1.34	.68	-.13		
GPA	.61	.57	.08		
Honors	1.61	1.03	.11		
Sophomore	.69	.80	.06		
Junior	.06	1.09	.00		
Senior	-1.36	1.90	-.05		
FFI_N	.14	.05	.22**		
FFI_E	.13	.06	.17*		
FFI_O	-.02	.05	-.03		
FFI_A	-.07	.06	-.09		
FFI_C	.26	.05	.37***		
OPT	.03	.11	.03		
PW_Drive	.10	.07	.10		
PW_Inv	.05	.07	.05		
PW_Enj	-.03	.04	-.04		

Note: *p <. 05. **p < .01. ***p < .001. GPA = Grade Point Average; FFI-N = Five Factor Inventory - Neuroticism Scale; FFI-E = Five Factor Inventory - Extraversion Scale; FFI-O = Five Factor Inventory - Openness to Experience Scale; FFI-A = Five Factor Inventory - Agreeableness Scale; FFI-C = Five Factor Inventory - Conscientiousness Scale; LOT-R = Life Orientation Test-Revised; PW-Drive = Parental Work Drive Scale; PW-Involve = Parental Work Involvement Scale; PW-Enjoy = Parental Work Enjoyment Scale; W-Drive = Work Drive Scale; W-Involve = Work Involvement Scale; W-Enjoy = Work Enjoyment Scale

Regression Model Predicting Work Involvement

The second regression analyses included the same predictor variables as the first with the work involvement variable as the criterion. Demographic variables were entered into step one of the model, whereas personality and parental workaholism variables were entered into step two. The demographic variables significantly predicted the outcome accounting for 8.2% of the variance in work involvement scores, F (7, 196) = 2.54, p = .017, R^2 = .082. Personality and parental workaholism scores were entered into block two, and significantly improved the predictive ability of the model by 15.2%, ΔR^2 = .152, ΔF (9, 187) = 4.13, p < .001.

It was hypothesized that conscientiousness (2a) and all three parental workaholism components (2b, 2c, and 2d) would significantly predict undergraduate work involvement scores. Whereas conscientiousness was found to be the strongest predictor of work involvement scores in the overall model (β = .33, p <.001), the latter hypotheses were not supported. Similar to results observed in the first regression analyses, extraversion was found to be a significant predictor of work involvement scores (β = .20, p <.05), albeit of lesser significance in comparison with the influence of the conscientiousness variable. Parental workaholism components were not found to be significant predictors of undergraduate's psychological investment in work or work-related activity among participants in this sample. Results of this analysis are further detailed in Table 5.

Table 5.

Regression Analyses Predicting Undergraduate Work Involvement

Variable and Step	B	SE B	β	R^2	ΔR^2
Work Involvement					
Step 1				.08*	
Age	.14	.07	.15*		
Gender	-1.10	.70	-.11		
GPA	.77	.58	.10		
Honors	.85	1.10	.06		
Sophomore	1.50	.85	.13		
Junior	1.51	1.16	.09		
Senior	-1.51	1.99	-.05		
First Year (reference)	0				
Step 2				.24***	.15***
Age	.14	.06	.16*		
Gender	-.15	.69	-.01		
GPA	.55	.58	.07		
Honors	.81	1.05	.06		
Sophomore	1.16	.81	.10		
Junior	1.60	1.10	.10		
Senior	-1.05	1.92	-.04		
FFI_N	.09	.05	.14		
FFI_E	.15	.06	.20*		
FFI_O	-.02	.05	-.03		
FFI_A	-.06	.06	-.07		
FFI_C	.22	.05	.33***		
OPT	-.08	.11	-.07		
PW_Drive	-.02	.08	-.02		
PW_Inv	.11	.07	.13		
PW_Enj	-.08	.04	-.13		

Note: *p <. 05. **p < .01. ***p < .001. GPA = Grade Point Average; FFI-N = Five Factor Inventory - Neuroticism Scale; FFI-E = Five Factor Inventory - Extraversion Scale; FFI-O = Five Factor Inventory - Openness to Experience Scale; FFI-A = Five Factor Inventory - Agreeableness Scale; FFI-C = Five Factor Inventory - Conscientiousness Scale; LOT-R = Life Orientation Test-Revised; PW-Drive = Parental Work Drive Scale; PW-Involve = Parental Work Involvement Scale; PW-Enjoy = Parental Work Enjoyment Scale; W-Drive = Work Drive Scale; W-Involve = Work Involvement Scale; W-Enjoy = Work Enjoyment Scale

Regression Model Predicting Work Enjoyment

Similar to previous models discussed, the third model was designed to predict work enjoyment scores of undergraduate participants. The variables were entered into the third model

in the same order as the first and second. Demographic variables were found to significantly predict work enjoyment scores of undergraduate participants, F (7, 196) = 3.95, p <.001, R^2 = .092. The second block consisting of the personality and parental workaholism variables also significantly predicted work enjoyment scores, explaining an additional 12.2% of the variance in the outcome, ΔR^2 = .122, ΔF (9, 187) = 3.36, p < .001. Overall, the model accounts for 24.5% of the variance in work enjoyment scores.

Unlike the other two regression models, the third set of analyses examined predictor variables of an affective component of workaholism. Of the personality factors hypothesized to be predictors of work enjoyment among undergraduate participants, optimism and extraversion were not significant when included in the model. It should be noted that both optimism and extraversion were significant correlates of the work enjoyment variable in preliminary analyses, but their significance was not observed in the regression model. Neuroticism and conscientiousness, both personality factors hypothesized (3c and 3d) to predict work enjoyment, were significant when included in the model. Of the sociocultural antecedents hypothesized to predict work enjoyment, parental enjoyment did not significantly predict the outcome in this model despite demonstrating a positive correlation prior to analyses (r = .14, p < .05).

Table 6.

Regression Analyses Predicting Undergraduate Work Enjoyment

Variable and Step	B	SE B	B	R^2	ΔR^2
Work Enjoyment					
Step 1				.12***	
Age	.32	.09	.26***		
Gender	-.26	.96	-.02		
GPA	1.11	.79	.11		
Honors	.28	1.50	.01		
Sophomore	2.72	1.16	.16*		
Junior	1.31	1.58	.06		
Senior	1.07	2.72	.03		
First Year (reference)					
Step 2				.25***	.12***
Age	.31	.09	.25***		
Gender	.39	.96	.03		
GPA	.80	.81	.08		
Honors	-.04	1.45	.00		
Sophomore	1.84	1.12	.11		
Junior	.69	1.53	.03		
Senior	-.71	2.67	-.02		
FFI_N	.01	.07	.01		
FFI_E	.17	.08	.16*		
FFI_O	.13	.07	.13		
FFI_A	-.05	.08	-.05		
FFI_C	.14	.07	.15*		
OPT	.23	.15	.14		
PW_Drive	.08	.10	.06		
PW_Inv	-.10	.10	-.08		
PW_Enj	.06	.06	.07		

Note: *p <. 05. **p < .01. ***p < .001. GPA = Grade Point Average; FFI-N = Five Factor Inventory - Neuroticism Scale; FFI-E = Five Factor Inventory - Extraversion Scale; FFI-O = Five Factor Inventory - Openness to Experience Scale; FFI-A = Five Factor Inventory - Agreeableness Scale; FFI-C = Five Factor Inventory - Conscientiousness Scale; LOT-R = Life Orientation Test-Revised; PW-Drive = Parental Work Drive Scale; PW-Involve = Parental Work Involvement Scale; PW-Enjoy = Parental Work Enjoyment Scale; W-Drive = Work Drive Scale; W-Involve = Work Involvement Scale; W-Enjoy = Work Enjoyment Scale

Discussion

By definition workaholism maintains status as a complex psychological construct. Over four decades workaholism has been conceptualized as a behavioral addiction (Oates, 1971), a syndrome (Aziz & Zickar, 2006), a maladaptive variant of normal personality (Costa & McCrae, 1992), and an obsession (Samuel & Widiger, 2011). With few exceptions, most researchers define the construct as a negative phenomenon with implications beyond working environments. This agreement among researchers of workaholism has led to theoretical development regarding its antecedents and outcomes. Few have done as much to guide progress in this area as Ng and colleagues (2007) and Andreassen (2014). Ng and colleagues guided research efforts by grouping antecedents of workaholism into three categories: dispositions (or personality factors), sociocultural experiences, and behavioral reinforcements. Andreassen (2014) reviewed and summarized empirical findings and provided definition based upon the current status of existing workaholism literature. Both contributions have aided in guiding research in the study of workaholism.

Using the framework proposed by Ng et al., this study sought to determine if two antecedent categories contributed to the prediction of workaholic behaviors and attitudes among undergraduate participants. Of these two categories, personality factors (specifically neuroticism, conscientiousness, and extraversion) were significant predictors of workaholism which is consistent with earlier findings (Andreassen et al., 2010; Aziz & Tronzo, 2011; Burke et al., 2006). Variables hypothesized to predict work enjoyment (optimism and extraversion) were not significant, yet maintained significance in preliminary bivariate correlational analyses. While

optimism and extraversion may correlate with work enjoyment, the variance attributable to these variables may be better explained by other factors in the regression model.

Earlier research using different measures of parental workaholism demonstrated support for this hypothesis (Chamberlin & Zhang, 2009); however, the findings from this study revealed that parental workaholism did not influence the WorkBat scores among participants in the sample. Despite these findings, the study of parental influence on compulsive work behavior should be further explored with the following limitations taken into consideration. The next sections will describe limitations and recommendations for future study.

Limitations

Several limitations of this study exist. As mentioned, this sample was drawn from a single university and includes only undergraduate students who may or may not have had extensive employment experience. Thus, future research efforts should specifically examine the work-related experiences of participants. Additionally, the sample was unbalanced with regard to student status (67.5% first year undergraduate students) and those identifying as female (68.4%). Despite evidence suggesting that men and women do not differ significantly on the WorkBat scales (Burke, 1999), further study of gender and work-related constructs may be fruitful for researchers to examine in the future.

The social investment principle suggests that developmental role expectations inform the development of personality factors and traits which, in turn, inform behavior. The inclusion of predominately first year undergraduate students is a limitation as student perceptions of work may be influenced by social and academic role expectations associated with early undergraduate studies (e.g., adjustment to workload in college, increase in class rigor, or limited exposure to work-related activities). Underrepresentation of students from other majors also poses a

limitation to this study as the sample was predominately comprised of undergraduates with concentrations in psychology.

Data were collected at a single-point in time from a large Southeastern university with an age range representative of the student population. It is common among researchers to transform cases (either by elimination or substitution) when outliers exist among variables in the sample, especially when it is likely that inclusion would influence results. In this study all reported ages were retained without transformation given that age is not normally distributed in population. The inclusion of participant data in the upper quartile of the range likely contributed to the influence of age on work enjoyment before entering the study variables into the regression model.

An additional limitation of this study is the inclusion of work involvement as a component of workaholism. Early research conducted using the WorkBat suggests that the work involvement scale be eliminated due to reliability concerns (McMillan et al., 2002, Kanai et al., 1996). This study revealed a Cronbach's alpha of the work involvement scale that is considered questionable (α = .68). Consistent with previous findings, further study of the factor structure of workaholism across measures is encouraged.

Parental workaholism had been hypothesized to predict work drive, involvement, and enjoyment among undergraduate children; however, these relationships were non-significant. From a mechanistic and behavioral perspective, parental workaholism would be expected to predict the work behavior of children. Chamberlin and Zhang (2009) found that children who perceive their parents to be workaholics were more likely to become workaholics themselves, contrary to their original hypothesis. As a result, the findings from this study should be interpreted with the following consideration.

Parental workaholism was measured using a modified version of the WorkBat which assessed the *perceptions* of two parental work behaviors (i.e., drive and involvement) and one attitude or affective response (i.e., enjoyment). The study also measured students' work behaviors using the three WorkBat scales (drive, involvement, and enjoyment). As a cross-sectional study, these measures were administered to participants at the same time and in the same manner. When the same (or similar, in this case) measures are used in cross-sectional studies, there is a chance for spurious effects related to the instrument *and* the source to emerge. This is referred to as common-method bias; a concern and limitation in cross-sectional studies. Measuring perceptions of others' behaviors at a single time, while convenient, limits inferences that can be made as a result of this bias. In absence of other-source reports of behavior, future researchers of parental work behaviors using the modified WorkBat should consider administering measures of the predictor and criterion variables at different time points. This method reduces bias associated with the response process of the same-source reporter (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Furthermore, this study was the first of its kind to measure perceptions of parental work behavior using a modified version of the WorkBat. To further qualify children's perceptions of parental work behaviors as a suitable method of measuring parental workaholism, further research should seek to cross validate measures of parental work-behavior and parental self-report on the WorkBat.

Recommendations for Future Study

There are several interesting findings from this study. Though hypothesized to predict workaholic behavior and attitudes in children, parental workaholism did not significantly contribute to variance in the undergraduate workaholism scores. However, the work of Robinson

and colleagues over the years suggests that parental workaholism and the perceptions of parental work activity (as reported by Chamberlin and Zhang) influences emotion and work behavior in children. The limitations relating to the instrument used to measure parental workaholism should not impede future study exploring parental and child work behaviors and attitudes. In career counseling and clinical environments, it is generally a difficult task for individuals to identify factors which influence their behavior (hence the emphasis placed on the exploration of early familial and interpersonal patterns in many therapeutic orientations). Cross-sectional studies, while convenient and cost-effective, may not adequately capture a child's perception of parental work behavior given that data are collected at a single point in time. Further research examining the influence of parental work behavior should incorporate qualitative research methods, which could enhance the study of workaholism and its antecedents by identifying patterns not identifiable through self-report measures.

As mentioned, personality variables were significant in all three regression models. Measures of the FFM are considered instruments which assess normal personality and are not appropriate for use in clinical environments. However, researchers across disciplines have contested that some measures of the FFM have relevance in clinical environments (Costa & McCrae, 1992; Quirk, Christiansen, Wagner, & McNulty, 2003). The consistency in expression of workaholic behaviors among persons scoring highly on measures of conscientiousness, neuroticism, and extraversion appear to suggest that such behavior results from maladaptive variants of normal personality or, perhaps, underlying psychopathology (i.e., mood or personality disorders).

At play among researchers of workaholism is the confusing debate regarding a threshold for normalcy in work and work-related behavior. Excessive and compulsive work

behavior does not imply that an individual is addicted to work per se, at least not in the sense of the word used in clinical environments. Instruments like the WorkBat and the WART are screening measures, not intended for use in clinical environments. Personality measures like the SNAP, however, are commonly used in the assessment of maladaptive or *abnormal* personality. The workaholism scale of the SNAP implies that, to some extent, excessive and compulsive work behavior is pathological and may be indicative of underlying maladaptive personality patterns.

Positioning workaholism as a disorder (or a functional consequence of existing disorders) may help guide a new research agenda, one less focused on negative outcomes and more focused on etiology and treatment. In her review of the literature, Andreassen (2014) claimed that no treatment for workaholism exists and recommended that longitudinal studies be conducted using objective health measures. If workaholism was determined to be a functional consequence of an existing disorder (e.g., mood disorders or personality disorders), clinicians and researchers alike could focus attention on the efficacy of existing interventions in reducing workaholic behaviors.

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Appendix A

Demographics

When you are asked to do so, please:

Fill in your Sex.

Fill in your Educational Level, as follows:
13 = 1st year of college
14 = 2nd year of college
15 = 3rd year of college
16 = 4th year of college

Fill in your Date of Birth (section in lower left corner), using only the month and year sections.

Use sections A & B of the "Identification Number" section to indicate your cumulative grade point average (GPA).

Examples:
if your GPA is 2.8, mark a 2 in column A, and an 8 in column B.
if your GPA is 3.5, mark a 3 in column A, and an 5 in column B.

Now, you will use the actual numbered bubbles on the answer sheet. The numbering of questions in this booklet always corresponds to the numbering on the bubble sheet. So, please make sure that you use the correct item on the bubble sheet to respond to each question in your booklet.

1. What is your ethnic background?
A = African-American
B = Asian-American
C = Caucasian
D = Latino/Latina or Hispanic-American
E = Native American
(If none of the above, please leave blank)

2. Is English is your primary language?
A = Yes
B = No

3. Are you bilingual?
A = Yes
B = No

(Being "bilingual" means that you, on a regular basis, speak a language other than English – with your family or your friends, for example)

4. Were you born in the United States?
A = Yes
B = No

5. Was your birth mother (your biological mom) born in the United States?
A = Yes
B = No

6. Was your birth father (your biological dad) born in the United States?
A = Yes
B = No

7. Are you in a Departmental Honors Program at VCU?
A = Yes
B = No

8. Are you in the University Honors Program at VCU?
A = Yes
B = No

9. Are you in one of VCU's Guaranteed Admissions programs?
A = Yes
B = No

10. If yes, which Guaranteed Admissions program?
A = Medicine (M.D.)
B = Pharmacy (Pharm D.)
C = Dentistry (D.D.S.)
D = Allied Health (M. S.)
E = Business (M. S. / M. B. A.)
(If none of the above, please leave blank)

Appendix B

Modified Workaholism Battery (Maternal)

This next set of items pertain to how you view YOUR MOTHER'S work habits. Please respond in terms of the woman you view to be your mother (that could be your birth mother, a step mother, grandmother, aunt, etc.) Using the scale, below, indicate how much you agree with the following items.

1 = Strongly Agree
2 = Agree
3 = Neutral
4 = Disagree
5 = Strongly Disagree

1. My mother seems to have an inner compulsion to work hard, a feeling it's something she has to do whether she wants to or not.

2. My mother often feels that there's something inside her that drives her to work hard.

3. It's important to my mother to work hard, even when she doesn't enjoy what she's doing.

4. My mother often finds herself thinking about work, even when she wants to get away from it for a while.

5. My mother feels guilty when she takes time off from work.

6. My mother feels obligated to work hard, even when it's not enjoyable.

7. My mother often wishes she weren't so committed to her work.

8. When she has free time my mother likes to kick back and relax.

9. My mother gets bored and restless on vacations when she doesn't have anything productive to do.

10. My mother spends her free time on projects and other activities.

11. Between her job and other activities she's involved in, my mother doesn't have much free time.

12. My mother likes to use her time constructively on and off the job.

13. My mother likes to relax and enjoy herself as often as possible.

14. My mother really looks forward to the weekend – all fun, no work.

15. For my mother, wasting time is as bad as wasting money.

16. My mother's job is so interesting to her that it often doesn't seem like work.

17. When she gets involved in an interesting project, it's hard to describe how exhilarated my mother feels.

18. My mother loses track of time when she's engaged on a project.

19. My mother does more work than is expected of her strictly for the fun of it.

20. Most of the time my mother's work is very pleasurable to her.

21. Sometimes my mother enjoys her work so much that she has a hard time stopping.

22. My mother likes her work more than most people do.

23. My mother rarely finds anything to enjoy about her work.

24. Sometimes when she gets up in the morning my mother can hardly wait to get to work.

25. My mother's job is more like fun than work.

Appendix C

Modified Workaholism Battery (Paternal)

This next set of items pertain to how you view YOUR FATHER'S work habits. Please respond in terms of the man you view to be your father (that could be your, etc.). Using the scale, below, indicate how much you agree with the following items.

1 = Strongly Agree
2 = Agree
3 = Neutral
4 = Disagree
5 = Strongly Disagree

1. My father seems to have an inner compulsion to work hard, a feeling it's something he has to do whether he wants to or not.

2. My father often feels that there's something inside him that drives him to work hard.

3. It's important to my father to work hard, even when he doesn't enjoy what he's doing.

4. My father often finds himself thinking about work, even when he wants to get away from it for a while.

5. My father feels guilty when he takes time off from work.

6. My father feels obligated to work hard, even when it's not enjoyable.

7. My father often wishes he weren't so committed to his work.

8. When he has free time my father likes to kick back and relax.

9. My father gets bored and restless on vacations when he doesn't have anything productive to do.

10. My father spends his free time on projects and other activities.

11. Between his job and other activities he's involved in, my father doesn't have much free time.

12. My father likes to use his time constructively on and off the job.

13. My father likes to relax and enjoy himself as often as possible.

14. My father really looks forward to the weekend – all fun, no work.

15. For my father, wasting time is as bad as wasting money.

16. My father's job is so interesting to him that it often doesn't seem like work.

17. When he gets involved in an interesting project, it's hard to describe how exhilarated my father feels.

18. My father loses track of time when he's engaged on a project.

19. My father does more work than is expected of him strictly for the fun of it.

20. Most of the time my father's work is very pleasurable to him.

21. Sometimes my father enjoys his work so much that he has a hard time stopping.

22. My father likes his work more than most people do.

23. My father rarely finds anything to enjoy about his work.

24. Sometimes when he gets up in the morning my father can hardly wait to get to work.

25. My father's job is more like fun than work**.**

Vita

Jesse Alexander Wingate was born on October 23, 1985, in Port Jefferson, New York. He graduated from North Country Union High School, Newport, Vermont in 2003. He received his Bachelor of Science in Psychology from St. Lawrence University, Canton, New York in 2007. He then received his Master of Education in Higher Education and Student Affairs Administration from the University of Vermont in 2009. Afterward, he worked as an Assistant Director in the career services departments at Dartmouth College in Hanover, New Hampshire and the University of Richmond in Richmond, Virginia.