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A SITUATIONAL JUDGEMENT TEST OF SELF-CONTROL AND ITS
RELATIONSHIP TO ACADEMIC PERFORMANCE: DEVELOPMENT OF A NEW
MEASURE

A Thesis submitted in partial fulfillment of the
requirements for the degree of
Master of Science

By

MICHAEL BRADY

B.A., Sewanee: The University of the South, 2009
M.A., George Mason University, 2013

2019
Wright State University

WRIGHT STATE UNIVERSITY

GRADUATE SCHOOL

JUNE 27, 2018

I HEREBY RECOMMEND THAT THE THESIS PREPARED UNDER MY
SUPERVISION BY Michael Brady ENTITLED A Situational Judgement Test of Self-
Control and its Relationship to Academic Performance: Development of a new measure
BE ACCEPTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE
DEGREE OF Master of Science.

Corey Miller, Ph.D.
Thesis Director

Scott Watamaniuk, Ph.D.
Graduate Program Director

Debra Steele-Johnson, Ph.D.
Chair, Department of Psychology

Committee on
Final Examination

Corey Miller, Ph.D.

Nathan Bowling, Ph.D.

Gary Burns, Ph.D.

Barry Milligan, Ph.D.
Interim Dean, Graduate School

ABSTRACT

Brady, Michael M.S. Department of Psychology, Wright State University, 2019. A Situational Judgement Test of Self-Control and its Relationship to Academic Performance: Development of a new measure.

Personality has been extensively researched but the literature has not lived up to its potential for application. Personality variables such as self-control can identify qualified applicants, while minimizing adverse impact. I designed two SJT measure of self-control. The first SJT was hypothesized to predict college grade point average. The second SJT was hypothesized to predict counterproductive work behavior. I administered the first SJT to 676 undergraduates. I administered the second SJT to 608 employed people. Most hypotheses were fully supported. Both SJTs had incremental validity over and above self-report personality measures. The results demonstrate the potential of SJTs to measure personality while predicting important outcomes. Future research should investigate other personality sub-facets and alternative measures of personality.

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I. INTRODUCTION

Personality has been extensively researched but the literature has not lived up to its potential for application (Morgeson et al., 2007). The research has led to an emerging consensus that five broad constructs can encapsulate most of personality, or the Big Five (Costa & McCrae, 1985), that the subgroup differences are small or non-existent (Hough, Ployhart, Oswald, 2001; Tett & Christianson, 2007) and that Conscientiousness predicts job performance across multiple job-types. Industrial/organizational psychology however, has failed to fully capitalize on this knowledge of these individual differences. As stated by Morgeson et al. (2007), “common sense tells you that broad personality factors *should* be important, but the data suggest that they are not (p. 694).” The reliance on self-report and the big-five personality traits are not predicting performance as well as many would expect.

The literature includes multiple explanations of why personality is not living up to its potential for application: the Big Five traits might be too broad to predict narrow criteria such as performance in a particular job (Dudley, Orvis, Lebiecki, & Cortina, 2006), may be fakeable (McFarland & Ryan, 2006), or that the format of the tests might be an issue (Morgeson et al., 2007). The goal of the proposed research is to explore a Situational Judgment Test format for personality measures, building upon the success of Bledow & Frese (2011). Exploring the construct structure of personality or building the nomological network are beyond the scope of this research. The ability of the SJT measure of personality to predict undergraduate grade point average (GPA) will be

examined as criteria. Several researchers and practitioners have voiced concerns that personality is not living up to its promise in the realm of personnel selection (Morgeson et al., 2007). The conundrum of attempting to maximize selection effectiveness while balancing minority representation exists in all types of organizations: private business, public government institutions, and university admissions. One of the main reasons personnel selection finds personality measures appealing is their relative lack of subgroup differences.

There has been a push to broaden college admission criteria beyond high school grade point average and standardized tests by incorporating non-cognitive predictors into the selection battery (Camara, 2005). Consistent with that effort, the goal of this study is to develop a measure that taps personality and complements cognitive predictors of performance, rather than try to replace the primary predictors of college GPA. Personality does not predict nearly as well as cognitive ability (Neisser et al., 1996), but such measures might supplement traditional selection batteries, while minimizing subgroup differences.

Exploring alternative measurement methods will allow us to better understand the underpinnings of personality as well as the relationship between alternative measurement methods (e.g. situational judgment tests) and personality constructs (e.g. self-control).

Identifying qualified students from a variety of backgrounds is critical to a university's goal of building and retaining a successful and diverse student body. Predictors commonly used in the selection of university students include the American College Test (ACT), Scholastic Aptitude Test (SAT), and high school grade point average (HSGPA). There is evidence that students from high-income backgrounds score

higher on these measures than those from low-income backgrounds (Dixon-Roman, 2013). Identifying qualified students from low-income backgrounds will expand opportunities and create a more diverse student body, a priority among academic institutions. Developing supplemental measures that are predictive of performance across the socio-economic spectrum will help accomplish this goal. There is a lack of research examining predictors that can identify qualified low-income students who may be overlooked by traditional selection batteries. Thus, the purpose of my study is to develop an effective supplemental predictor of academic performance that allows for the identification of qualified students, and has incremental validity over ACT/SAT and HSGPA, serving as a supplement or complement to these measures.

Bias of Traditional Cognitive Ability Measures

Standardized test scores such as the SAT and ACT are among the most powerful predictors of undergraduate student performance. Standardized tests correlate with educational outcomes such as years of education and college grade point average (CGPA) (Murphy & Davidshofer, 2005; Neisser et al., 1996). The correlation of standardized tests and CGPA is between .30 and .35, while the correlation of HSGPA and CGPA is between .40 and .50. Combined, these variables correlate with CGPA between .55 and .60 (Murphy & Davidshofer, 2005). Relative to other variables, these are efficient predictors of undergraduate performance.

However, there are concerns that the heavy reliance on HSGPA and standardized testing might overlook qualified students from disadvantaged backgrounds, such as low-income and minority populations. Research has suggested that both high school achievement and family income have effects on SAT scores such that students from

disadvantaged background do not score as well. The effects of family income on SAT scores are almost twice as large for African-American students (Dixon-Roman, 2013).

A similar trend exists for gender, as men typically score higher on the SAT. Importantly, these gender differences on test scores do not translate into differences in grades earned (Kling, Noftle, & Robins, 2013). If the goal of a university is to build a qualified and diverse student body, and to expand opportunity for advancement, it is beneficial to develop measures that minimize subgroup differences. Neisser et al. (1996) caution that adverse impact in selection settings has the potential to exacerbate subgroup differences and create a permanent underclass of citizens who are cut off from opportunities to advance. Society would benefit from supplemental predictors of student success that are less affected by race and socio-economic status. Another benefit gained by the university by using the most efficient selection system possible is the reduction of student turnover. High student dropout rates reflect poorly on a university and are a waste of invested resources.

What is Personality?

While personality can be manifested through attitudes, beliefs, and self-concepts, it can also drive observable behaviors. Binning and Barrett (1989) provide a succinct definition by describing constructs as labels for co-varying behaviors. For instance, the co-varying behaviors encompassed by conscientiousness can be described in terms of behaviors such as planfulness, attention to detail, being organized, and paying attention to detail. It has been found that individuals are more likely to believe that behaviors reflecting their own personality traits are more effective than alternative behaviors

(Motowidlo, Hooper, & Jackson, 2006), which can have implications for how personality will guide a person's behavior in work settings.

An integral component of personality is stability. Stability is what differentiates personality from mere moods and emotions. This is an important distinction for the purposes of personnel selection, as stable traits identified in personality testing can be expected to carry over into the actual performance domain.

The Big Five

The five-factor personality model has clarified the literature and allowed for greater understanding of personality and its correlates. Prior to the Big Five (Costa & McCrae, 1985), the taxonomy of personality traits contained hundreds, then dozens of overlapping traits, which made it nearly impossible to find consensus regarding their correlates. The Big Five personality model provides a common vocabulary and streamlines research. Although not without criticism (e.g. Block, 2005; Eysenck, 1992; Paunonen & Jackson, 2000), the five factor model is the most efficient personality trait framework and has allowed for a better understanding of the relationship between personality and job performance. Among the Big Five traits, conscientiousness has shown the most promise as a predictor of job performance across a broad range of domains (Barrick, Mount, & Judge, 2001).

Personality as a supplemental predictor of performance. Conscientiousness is predictive of performance across domains with little correlation to cognitive ability measures and several other predictors with little, if any, adverse impact, thus resulting in low adverse impact and incremental validity over other predictors (Mcrae & Costa, 1987). To the extent that we can develop measures that are orthogonal to cognitive

ability, we will add incremental validity to the prediction of undergraduate performance, and address the issue of adverse impact. Our goal is not to supplant cognitive ability as a measure of university performance, but to develop measures that supplement or complement it. Because personality and cognitive ability are unrelated (Austin, Dreary, & Gibson, 1997), one would not replace cognitive ability with personality as they are measuring different things since they are each providing unique predictive variance.

Conscientiousness is the quality of being self-disciplined, careful, reliable, and organized (Duckworth, Peterson, Matthews, & Kelly, 2007). Measures of conscientiousness and job performance correlate approximately .10 to .15 (Barrick, Mount, & Judge, 2001). The sample-weighted mean correlation between conscientiousness and job performance is .12 (Tett, Jackson, & Rothstein, 1991). Students who score highly on conscientiousness earn better grades than their SAT scores predict (Kling et al., 2012). These personality measures have incremental validity over cognitive ability measures, however their ability to predict top performers is not nearly as effective as measures of cognitive ability, and provides little utility in the face of cognitive ability measures such as the SAT or ACT.

Even more promising, narrow traits related to conscientiousness have been found to improve the prediction of these outcomes. Personality trait sub-facets might predict performance better than the broad traits of the Big Five in some instances. Dudley et al. (2006) found benefits to considering the sub-facets of conscientiousness to predict performance and suggested that future research adapt the sub-facets of conscientiousness to specific performance domains. Paunonen and Ashton (2001) performed a study in an education context and concluded that looking at narrow traits of the Big Five (e.g.

impulsivity, endurance) allows for greater behavior prediction and explanation than is gained by looking simply at global traits of the Big Five alone.

Shouldn't personality predict better? The relatively low criterion-related validity of personality measures in predicting performance has frustrated researchers and practitioners alike (e.g. Morgeson et al, 2007; White, Young, Hunter, & Young, 2008). Although intelligence accounts for a large amount of variance in performance, it is axiomatic that successful people typically possess traits such as work-ethic, planfulness, and persistence in the face of adversity. Industrial/organizational psychology has failed to fully capitalize on this understanding of individual differences. As stated by Morgeson et al. (2007), “common sense tells you that broad personality factors *should* be important, but the data suggest that they are not” (p. 694). The reliance on self-report and the big-five personality traits are not predicting as well as many would expect. This has caused some researchers and practitioners to suggest that the use of personality in selection should be reconsidered (Morgeson et al., 2007; Ployhart, 2006). However, there is evidence that improving test formats and exploring traits outside of the big-five have the potential to improve the predictive validity of measures.

Exploring alternatives to self-report measures of personality. There is evidence demonstrating that the modest ability of personality to predict performance may be due to the way in which personality is measured. The most common method of measuring personality is to use self-report, in which participants respond directly to items reflecting behaviors, attitudes, beliefs, and opinions (Paulhus & Vazire, 2007). While such methods have achieved modest criterion-related validities (Barrick, Mount, & Judge, 2001), there is reason to believe that more robust results could be found by

exploring measurement methods outside of self-report (e.g., Oh, Wang, & Mount, 2011; Connelly & Ones, 2010) . The failure of existing measures are not necessarily due to the true nature of the personality-performance relationship, rather our current measures are the culprit. The development of an effective measure the general mental ability construct went through almost 100 years of trial-and-error to refine (Ackerman & Heggestad, 1997). Personality constructs can similarly be furthered by novel attempts to conceptualize and measure them. The big-five and later meta-analyses (e.g. Barrick, Mount, & judge, 2001) signaled the promise of personality as an effective predictor of meaningful outcomes, but they do not reflect the full extent of what can be accomplished.

Other-report measures provide evidence that criterion-related validity of measures might be improved by exploring alternative measurement methods. A meta-analysis by Oh et al. (2011) found that observer ratings of FFM personality traits had incremental validity over self-report measures in predicting job performance. For conscientiousness, when other-report and self-report measures were regressed onto job performance, the other-report measure had more than double the standardized regression weight (.28) than self-report (.12). A meta-analysis by Connelly and Ones (2010) found that other-report ratings of personality had greater (and incremental) predictive validity for academic achievement and job performance than self-report measures of the same construct. Other-report measures of conscientiousness had a .41 corrected correlation with academic achievement, versus .25 for self-report; these respective values were .29 and .20 when predicting job performance. These results demonstrate how the approach taken to measure personality affects our results and subsequent conclusions about the nature of the relationship between predictors and outcomes.

I/O psychology should continue to explore personality measures outside of self-report in order to understand these constructs and improve their utility. Below, I review previous attempts to accomplish this, most of which have found little success, with the exception of recent innovations using the situational judgment test format (Bledow & Frese, 2011).

Implicit Association Test (IAT). Implicit association tests (IATs) are based on the premise that individuals process information about themselves implicitly (outside of consciousness) in addition to explicitly (controlled, conscious such as on a self-report measure). The IAT works by measuring the strength of associations between concepts via response times on combined discrimination tasks. Two concepts being highly associated is assumed to result in faster reaction times (Schmukle, Back, & Egloff, 2008). Since IATs are outside of conscious awareness, it is reasonable to expect them to be more difficult to fake and less vulnerable to a lack of self-insight or misunderstandings. This could result in greater criterion-related validities when applied to personality measures.

An interesting application of implicit measurement could be conducted by observing behavior that participants or applicants do not know the researcher is interested in. For example, one study used behavioral benchmarks that were judged by subject matter experts to be representative of conscientious behaviors. Examples include attention to detail when asked to write something, and providing help to the experimenter when prompted (Back, Schmukle, & Egloff, 2009). While this study considered these behaviors as criteria rather than predictors, it provides an interesting framework for how we could measure conscientiousness implicitly in the future.

There have been several criticisms leveled at the use of IAT. Nosek and Smith (2007) identified that the IAT has low test-retest reliability, and did not believe that the intercorrelations between explicit and implicit measures were as high as they would be if they were truly measuring the same construct. As was indicated above, it is also the case that IAT measures of conscientiousness are not as predictive as we would hope, and at this time do not offer more criterion-related validity than is seen with self-report measures, a fact that has been pointed out by critics. This criticism can also be interpreted as a call to improve the IAT rather than to abandon it entirely. Finally, IATs seem to lack the construct clarity that self-report and other-report measures provide, since we are not entirely sure what the linkages are that drive the response latencies (De Houwer, Teige-Mocigemba, Spruyt, & Moors, 2009).

Conditional Reasoning Test. Conditional reasoning tests are based on another technique that similarly tries to avoid explicit measurement. These tests provide a scenario and response choices describing explanations, justifications, or solutions to the scenario. It is theorized that people who engage in a type of behavior will find certain choices more logically compelling. While there is limited evidence shedding light on its effectiveness in measuring conscientiousness, an aggression CR measure had moderate correlation with behavioral outcomes ($r = .44$; James et al., 2009). This test has also been adapted to organizational topics such as toxic leadership. Although this attempt at measuring personality appeared promising, subsequent studies have cast doubt on CR's effectiveness in both measuring personality and predicting job performance (Siers & Christiansen, 2013).

Situational Judgement Tests (SJTs). SJTs are an established predictor of performance that might be adaptable to personality measures. First introduced by Motowidlo, Dunnette, and Carter (1990), SJTs are regarded as low-fidelity simulations, similar to structured interviews. Applicants are presented with a written or oral description of a situation, and provide written or oral descriptions of how they would respond. The theoretical basis of SJTs is the notion of behavioral consistency, which states that past behaviors can be used to predict future behaviors, because people are expected to behave consistently over time (Wernimont & Campbell, 1968). Thus, an applicant's response to an SJT scenario is indicative of how they will respond to on-the-job situations. In general, SJTs are not intended to measure particular constructs, but instead are considered a measurement method that focuses on criterion-related and content validity.

SJTs and Academic Performance. SJTs have been successfully applied to academic environments. Specifically, SJT measures have added incremental validity to the prediction of CGPA over and above that of high school grade point average (HSGPA) and ACT/SAT, while demonstrating smaller score differences between white and minority students (Schmitt et al., 2009; Oswald et al., 2004). These findings support the notion that SJTs can be useful in expanding college admission criteria to identify qualified students from backgrounds associated with lower ACT/SAT scores and HSGPA. The goal of this research is to accomplish this with a construct-driven SJT (i.e. an SJT that measures a personality construct). Specifically, the goal of this research is to develop a SJT measuring the construct of self-control that is predictive of undergraduate performance (i.e. college GPA).

What do SJTs Measure? A common criticism of SJTs is their lack of construct validity (Gessner & Klimoski, 2006; Schmitt & Chan, 2007). Selection researchers and practitioners typically have less regard for constructs and are more concerned with maximizing the prediction of employee performance, pursuing the "dustbowl empiricism" fallacy lamented by Landy (1986). Gessner & Klimoski (2006) argue that SJT researchers will make a greater contribution to the literature if they begin to adopt a construct-driven approach. In this study, I will attempt to develop a construct-driven SJT that can further our understanding of the elusive relationship between personality and performance.

Can we measure personality with SJTs? An area of frustration amongst both selection researchers and practitioners is the modest relationship between job performance and personality. SJTs might be useful in the measurement of personality, since they are less susceptible to faking than self-report measures, and are much more contextualized than other personality measures, using specific work-related scenarios that the target is familiar with.

There is already ample evidence indicating that personality plays a role in participants' responses to SJT scenarios. SJTs in general tend to be related to personality traits, regardless of designers' intentions. Correlations vary depending on the instructions format (knowledge instructions versus behavioral tendency instructions. However when behavioral tendency instructions are used, SJTs correlate .33 with agreeableness; .30 with conscientiousness; .31 with emotional stability; .07 with extroversion; and .09 with openness to experience (McDaniel, Hartman, Whetzel, & Grubb, 2007). These personality correlations are lower for knowledge instructions, which have higher

correlations with cognitive ability (.28 versus .17), leading to the conclusion that behavioral tendency instructions are more appropriate when attempting to measure personality and/or minimize the correlation with cognitive ability. Schmitt and Chan (2007) suggest there is ample evidence demonstrating the potential for the development of SJTs measuring specific constructs, including personality traits. Explicit attempts to measure personality with SJT are few, however studies attempting to do so have found promising results (e.g., Bledow & Frese, 2009). Thus, SJT methods could be useful in establishing stronger linkages between personality and job performance, and allow for greater incremental validity of existing personality constructs.

Why SJTs are amenable to personality measurement.

SJTs are contextualized. Respondents are known to consider their behavior across multiple contexts when responding to items on a personality measures. Although people might behave consistently in similar situations, they will not necessarily behave consistently across situations. For instance, a teacher may be moderately extroverted in the classroom, but prefer solitary activities in their personal time. Their score on a measure of extroversion will differ depending on which of these contexts they are considering. The effect of this phenomenon on the validity of measures has been supported in the literature (e.g. Bing et al, 2004; Ovidiu, 2015; Woo, Jin, & LeBreton, 2015).

Providing a clear context for participants to consider when responding to items has been found to improve the criterion-related validity of personality measures in undergraduate samples. In the prediction of undergraduate GPA, Bing et al. (2004) demonstrated the incremental validity of context-specific personality items over and

above that of non-contextualized items, and cognitive measures (this was in spite of instructions inducing social desirability). They conclude that these findings highlight the importance of providing respondents with a common frame of reference, and future research implementing such methods can improve our depth of understanding of personality measures. This is consistent with the findings of Woo et al. (2015), which similarly found that contextualized items had incremental validity over non-contextualized items as well as cognitive ability in the prediction of college GPA. It has recently also been found that contextualizing personality measures provide incremental validity can increase the financial benefit of selection measures (Ovidiu, 2015).

SJTs are highly contextualized in that they provide respondents with specific scenarios drawn from incumbents in the actual work role for which the respondent is being considered. Because of this, they can be expected to have incremental validity over traditional self-report items as well as cognitive ability.

SJT Measures Require Less Personal Insight. Brooks & Hughes (2006) summarize limitations that interfere with a people's ability to predict their behavior. When predicting how they will behave in the future, people do not consider potential barriers or setbacks they might face (Brooks & Hughes, 2006). Newby-Clark & Ross (2003) found that people's future intentions are more optimistic than is merited by their past behaviors, even when asked to consider negative experiences in their past that might contradict their prediction. As temporal distance decreases, people work with more realistic conceptions of the scenario in question (Lieberman & Trope, 1998). People are overconfident in how they think they will act in the future, so providing them with a realistic, less than ideal (e.g. the student has failed a midterm and needs to choose the

best corrective action), scenario with limitations and set-backs might result in more accurate responses.

SJTs Leverage Situated Action. An advantage of SJTs is being able to observe the choices participants make in a hypothetical situation rather than assuming they have the insight and experiences necessary to rate their personality on a self-report questionnaire. Whereas self-report measures often lead people to rate themselves in comparison to their peers or according to their personal narrative they would like to believe about themselves, SJTs require participants to report how they would behave in a particular situation, thus leveraging situated action. Situated action is the idea that each situation has its own limitations and affordances, and certain traits are difficult to observe and measure when researchers abstract away from the context of behavior, because human behavior emerges out of the specific constraints and context of a given situation (Suchman, 1987). Rather than asking participants to consider their personality in the abstract using a likert-type scale, we are asking them to choose between competing behaviors in a specific situation.

Self-control can be viewed as a domain specific activity, in that it is best observed in scenarios with competing priorities and distractions, requiring the person to choose the course of action that will further their long-term goals instead of pursuing immediate gratification. Such situations are perhaps most significant and of greater consequence in a work or school setting. Whereas likert-type items require the participants to infer their standing on the self-control trait, the SJT reflects their situated behavioral preferences in work or school situations, as they reveal their preference for high or low self-control actions. Global traits often do not lend themselves to the SJT format, as the elements of

such constructs are not domain-specific activities. Rather, global trait items are reflective of general patterns of behaviors (e.g. “I am exacting in my work”; I shirk my duties”, Goldberg, 2006). Attempting to fit such general elements into specific situations of the content domain will likely render narrow traits , rather than creating a measure of global traits.

Narrow Traits of Personality

Previous authors have found that narrowly defined personality traits are more predictive of performance measures than the broad traits of the Big Five. Dudley, Orvis, Lebiecki, & Cortina (2006) found that there are benefits to considering the narrow traits of conscientiousness to predict performance, and suggested that future research adapt the narrow traits of conscientiousness to specific performance domains. Paunonen & Ashton (2001) performed a study in an education context and concluded that looking at the narrow traits of the Big Five and traits outside of the Big Five allows for greater behavior prediction and explanation than is gained by looking simply at global traits of the Big Five. This is not to suggest that the Big Five should be abandoned in favor of the conceptual messiness that it resolved. When using narrow traits, it is important to be mindful of how they relate to the overarching global traits of the Big Five.

Self-Control. One particularly promising narrow trait is self-control. While more intelligent students are likely to be at an advantage when facing novel problems on a standardized test, students with high self-control will not yield to external distractions or beliefs about their own abilities while pursuing personally meaningful goals. If academic achievement is important to such students, they will allocate the time and

resources required to meet the requirements of their courses, resisting distractions that detract from this goal.

Defining Self-Control. The literature uses several terms to describe self-control, including self-regulation, willpower, ego strength, and inhibitory control. Duckworth & Kern (2011) identify the common thread among these conceptualizations as "voluntary self-governance in the service of personally valued goals and standards" (pp. 260). As with other personality traits, self-control is relatively stable over one's life-span, becoming more stable as one ages (Duckworth & Kern, 2011).

Although self-control is related to grit, researchers distinguish between them (Duckworth et al., 2007). While grit occurs over a long period of time towards a long-term goal (e.g. someone who is trying to lose 50 pounds), self-control takes place moment to moment (e.g. someone who is resisting the temptation to eat an unhealthy meal). The correlation between the two variables is .62, and they have been found to differentially predict outcomes (Duckworth, Peterson, Matthews, & Kelly, 2007).

Outcomes of self-control. There is evidence that self-control can predict success in an undergraduate setting. Lack of self-control has been linked to several negative behaviors, including substance abuse, overspending, unwanted pregnancy, and crime (Baumeister, Vols, & Tice (2007). Baumeister et al. (2007) also posited that self-control may be related to work performance outcomes such as failures in task performance, lack of persistence, and (of particular interest to this study) school underachievement. Self-control differentially predicts grades and standardized test scores. Intelligence predicts standardized test scores better (Duckworth, Quin, & Tsukayama, 2012). This difference might be because grades occur over a longer span of time, and are based on knowledge

and skills gained during the course, whereas standardized tests measure problem-solving ability, and its effects can immediately be observed on a continuing basis. These tests measure behavior that occurs in a short period of time, and may cover knowledge and skills that the test-taker has never encountered (Duckworth, et al., 2012). A longitudinal study by Duckworth et al. (2012) found that self-control predicted middle-school grades better than intelligence, while intelligence better predicted changes in standardized achievement test scores (not the ACT/SAT). Standardized test scores were still the strongest predictor of GPA in Duckworth et al.'s (2012) study. Other findings indicate that self-control accounted for unique variance in first semester college GPA, over and above the ACT/SAT, and found a moderate positive correlation between self-control and hours studied (Honken, Ralston, & Tretter, 2016).

Measuring Self-Control. Example items from the International Personality Item Pool (IPIP) include "I forego things that are bad for me in the long run even if they make me feel good in the short run"; I do my tasks only just before they need to be done" (Goldberg, 2006). Participants indicate the extent to which they agree with these statements on a 7-point scale.

In addition to likert-type items, self-control has been measured using delay of gratification tasks, in which participants (usually children) are given a delay task (e.g. seeing how long they can go without eating candy presented to them in return for a later reward), or are given a hypothetical situation ("would you rather receive five dollars today or wait a month and receive thirty dollars?"). In both cases, the response that is most in-line with long-term goals is considered the "correct" response. More compulsive individuals are expected choose the immediate gratification response whereas those with

self-control will choose the correct response (Duckworth & Kern, 2011). These delay tasks lend themselves to the SJT format, which offers multiple courses of action for the participant to choose from. The response option that delays gratification in pursuit of long-term goals is more likely to be chosen by participants with a higher level of self-control.

I have defined the above constructs with a particular focus on the observable behavioral manifestations of an individual's standing on the construct (e.g., giving up on a difficult task, resisting distractions). Binning and Barrett (1989) provide a succinct definition by describing constructs as labels for covarying behaviors. For instance, the covarying behaviors encompassed by conscientiousness might be described in terms of covarying behaviors such as planfulness, attention to detail, organized, and paying attention to detail. I am therefore interested in developing a measure that can identify behaviors that participants are most likely to engage in. Situational judgment tests (SJTs) are particularly well-suited to this cause, since SJT items ask participants to identify how they would likely *behave* (via identifying the best and worst amongst responses to a situation) in a work-related situation (Campion, Ployhart & MacKenzie, 2014). Global conscientiousness does not lend itself to the SJT format, as the elements of this construct are not domain specific activities. Rather, global conscientiousness items are reflective of general patterns of behaviors (e.g. "I am exacting in my work"; I shirk my duties", Goldberg, 2006). Attempting to fit such general elements into specific situations of the content domain will render narrow traits of conscientiousness, rather than creating a measure that reflects a person's standing on global conscientiousness. I am trying to demonstrate the incremental validity added by the SJT self-control personality measure,

using conscientiousness self-report as a baseline personality measure, since it is often regarded as having the greatest efficacy in predicting job performance among personality traits (e.g., Barrick et al., 2001).

In addition to academic performance, self-control has been found to be predictive of several outcomes valued by organizations. One such example of this is counterproductive work behavior (CWB; Marcus & Schuler, 2004). Briefly described, CWBs are voluntary behaviors that violate organizational policies or norms or detract from organizational goals (Robinson & Bennett, 1995). CWBs are often referred to as workplace deviance, which can include antisocial behavior (e.g. sexual harassment, spreading rumors), or lacking personal discipline (e.g. excessively using the internet for non-work purposes, theft). It can therefore be seen that CWBs can cost organizations financially, as well as being detrimental to psychological or workplace culture.

CWBs are more likely to be influenced by personality than by variables related to ability. Mount, Ilies, and Johnson (2006) found that conscientiousness had a direct impact on organizational CWBs (CWB-O), such as theft, breaking policy. Kim et al. (2016) similarly found a significant negative correlation ($r = -.19$) between conscientiousness and cyberloafing (i.e., exchanging instant messages, surfing the web). More specifically, it has been found that people high in conscientiousness are less likely to cyberloaf when they perceive more organizational justice. It has also been found that employees high on conscientiousness are less likely to engage in CWBs as a result of work stressors than low-conscientious workers. Thus it can be seen that well-designed conscientiousness measures can play a role in reducing costs for organizations and improving the workplace for employees. Research by Marcus and Schuler (2004) found

that self-control is a significant predictor of counterproductive behavior ($\beta = -.63$, $P < .001$). It was further found that the correlations between other personality variables and counterproductive behaviors did not reach significance when controlling for self-control, suggesting that the ability of these other variables to predict CWBs is due to their overlap with self-control (it should be noted that conscientiousness was not among these variables).

Situational Judgment Tests

Construct validity of the SJT measure of self-control. Although they are attempting to measure the same construct, we believe that the self-report measure and SJT measure of self-control will evoke different cognitive processes in respondents while evaluating items and response options. Respondents are likely to consider different aspects of self-control when considering how they would behave in a given situation than they would on measures asking them to indicate their level of agreement on self-report items. Brunstein and Maier (2005) made a similar argument in their comparison of direct and indirect measures of achievement motivation (Bledow & Frese, 2011). Therefore a moderately strong correlation between self-report self control and the SJT measures of self control would be expected, but not an extremely strong correlation (i.e. the correlation between these measures should be higher than their respective correlations with a related construct such as conscientiousness).

Since self-control has been described as a sub-facet of conscientiousness (Duckworth et al., 2007), it is expected that the SJT measure of self-control should demonstrate convergent validity with global conscientiousness as well. However, as they will be measured using different formats (SJT and self-report), we would not expect the

correlation to be as strong as we would normally expect in a construct validation analysis. The goal of the proposed research is to determine if it is possible to develop a measure of the construct in a novel format. A full construct validation study was beyond the scope of the research as the focus was to determine if it was possible to develop an SJT measure of self-control.

H1a: The SJT measures will have a statistically significant, positive correlation with self-report self-control.

H1b: The SJT measures will have a statistically significant, positive correlation with the self-report measure of conscientiousness.

If these hypotheses are supported. It will provide evidence that our SJT items are measuring self-control (a sub-facet of conscientiousness), albeit different aspects of self-control and/or cause different cognitive processes in respondents than self-report measures.

Self-control relationship to other constructs. To demonstrate further construct validity, the SJT measures should demonstrate theoretically-driven relationships to other variables. Among the big five, it would be expected for the SJT measures to have no relationship to extraversion and openness to experience. The relationship between self-control and neuroticism would be more difficult to predict, since emotional instability could possibly manifest into behaviors similar to that of people with low self-control. The relationship with agreeableness is also difficult to predict, as people with greater self-control in interpersonal situations might also appear more agreeable than those with low self-control. As hypothesized above, self-control is expected to have a positive relationship to conscientiousness.

Among variables outside of the big 5, there is no theoretical reason to believe that self-control will be negatively related to impulsivity, since self-control can be described as the successful regulation of one's impulses (Duckworth & Kern, 2011). Finally, there would be no theoretical basis for a relationship between self-control and the construct of dominance.

H1c: There will be no relationship between self-control and extraversion.

H1d: There will be no relationship between self-control and openness to experience.

H1e: There will be a negative relationship between self-control and impulsivity.

H1f: There will be no relationship between self-control and dominance.

Relationships among SJT measures and other predictors and CGPA. As described above, it is well accepted in the literature that there is a relationship between CGPA, HSGPA, ACT, and Conscientiousness, we hope to build on the literature by adding our SJT measure of self-control. Based on the literature supporting the relationship between established predictors (i.e. ACT, HSGPA), personality, and CGPA, the following hypotheses are stated:

H2a: The correlation between the self-report measure of conscientiousness and CGPA will be statistically significant.

H2b: The correlation between the self-report measure of self-control and CGPA will be statistically significant.

H2c: The correlation between the academic SJT measure of self-control and CGPA will be statistically significant.

H2d: The correlation between the self-report measure of self-control and the CWB-checklist will be statistically significant.

H2e: The correlation between the WJP measure of self-control and CWBs will be statistically significant.

If the above hypotheses are supported, it will support the existing notion of a relationship between traditional predictors of academic performance and CGPA, and provide reason to believe that personality variables and our SJT measure could possibly be used to predict academic performance.

Comparing SJT measures to global conscientiousness and self-report self-control. Given the evidence suggesting narrow traits are more predictive of outcomes than global traits, coupled with the research demonstrating the importance of self-control to successful academic performance, the following hypotheses are stated:

H3a: The academic SJT measures will have a higher correlation with CPGA than the self-report measure conscientiousness.

H3b: The academic SJT measures will have a higher correlation with CGPA than the self-report measures of self-control,

H3c: The SJT-CWB measures will have a higher correlation with CWBs than the self-report measure of self-control.

H3d: The SJT-CWB measures will have a higher correlation with CWBs than the academic SJT measures will, and vice versa.

Incremental validity of the SJT measures. As stated previously, to the extent that measures are orthogonal to cognitive ability, they will add incremental validity in the prediction of undergraduate performance, and possibly reduce adverse impact.

Therefore, the following hypotheses are stated:

As described above, there are significant advantages to using narrow traits over global traits in predicting performance (Dudley et al., 2006), since they enable more direct linkages between the trait and the performance criteria. Likewise, there are several advantages of using behavioral measures of personality rather than traditional self-report (Bledow & Frese, 2011). SJT provides a clear frame-of-reference to participants, requires less insight and interpretation by participants, and leverages situated action. Based on these advantages of using measures that are behavior-based, criterion-focused predictors that are orthogonal to current predictors (i.e. ACT/SAT and HSGPA), the following hypotheses are stated:

H4a: The SJT measures will have incremental validity over the self-report measure of conscientiousness

H4b: The SJT measures will have incremental validity over the self-report measure of self-control.

H4c: The SJT measures will have incremental validity over the ACT.

H4d: The SJT measures will have incremental validity over HSGPA.

H4e: The SJT measures will have incremental validity over both ACT and HSGPA.

If the above hypotheses are supported, it will demonstrate that using narrow traits can provide greater criterion-related validities than global conscientiousness. It will also demonstrate that our SJT measures has greater criterion-related validity than traditional self-report measures, and could therefore be more useful in selection.

If the above hypotheses are supported, it will provide evidence supporting the use of our SJT measures measure in graduate admissions, as it provides incremental validity over existing measures.

Parsing method from construct. There is continued debate as to whether SJTs are measures or if they are constructs themselves. Sternberg et al. (2000) contend that all SJTs are measuring a single construct, distinct from cognitive ability, and similar to practical intelligence. However, multiple authors (e.g., Schmitt & Chan, 2006; Whetzel & McDaniel, 2009) have argued that SJTs can be used to measure a variety of constructs, including personality, and are better thought of as a method of testing that can be tailored to tap into already established constructs.

To parse the predictive validity of my SJT from the construct of self-control, I will also administer a validated SJT measure of workplace behaviors that was not developed around a particular construct (Smith & McDaniel, 1998). Differential predictive validity between my self-control SJT and the comparison SJT will establish that the construct of interest is accounting for the ability of the SJT to predict my criteria, rather than simply the SJT format itself.

H5a: The academic SJT measures will have a higher correlation with GPA than Smith and McDaniel's (1998) workplace SJT.

H5b: The workplace SJT measures will have a higher correlation with CWBs than Smith and McDaniel's (1998) workplace SJT.

SJT measures and Adverse Impact. The popularity of SJTs in selection contexts is in part due to reduced adverse impact, and their relatively high degree of content and criterion-related validity, satisfying both organizations and their applicants (Whetzel & McDaniel, 2009). A meta-analysis by McDaniel, Morgeson, Finegan, Campion, and Braverman (2001) estimated the mean validity coefficient of SJTs to be .34, which approaches that of cognitive ability. SJTs have incremental validity over g

and personality (Clevenger et al., 2006; Weekley & Ployhart, 2005). SJTs show less subgroup differences than cognitive and knowledge tests, however these differences might be slightly larger than those seen in conscientiousness measures (Clevenger et al., 2006). Most studies have reported that African-Americans score about .5 standard deviations lower than white candidates on SJTs, however significant score differences between men and women have not been found (Schmitt & Chan, 2007).

Given the above evidence demonstrating the reduced adverse impact of SJTs, the following hypotheses are stated:

H6a: The SJT measures will demonstrate less adverse impact than the ACT and high school GPA.

H6b: The SJT measures will not demonstrate significantly more adverse impact than self-report measures of conscientiousness and self-report measures of self-control.

If the above hypotheses are supported, it will demonstrate that the SJT measures does not show significant adverse impact against women and some minority groups, thus helping to foster a diverse and qualified student body.

Establishing the External Validity of the SJT-CWB

External validity of this study's findings regarding CWB prediction are questionable because it is a student sample (although only data for students who worked at least 30 hours a week were included in the SJT-CWB analyses). Therefore, In addition to testing the hypotheses above, I wanted to evaluate the external validity of the SJT-CWB using full-time employees who were not recruited from an undergraduate population. If the results for the two populations are similar in regard to the correlation patterns observed, incremental validities, and subgroup differences, the SJT-CWB can be

said to have external validity, and can be generalized beyond the undergraduate population.

II. METHOD

Participants

Participants for the academic SJT were Wright State University undergraduates currently enrolled in undergraduate courses. The majority of participants were enrolled in psychology courses. The students must have completed at least one year of undergraduate coursework at Wright State so CGPA information would be available for them. I recorded demographics information, including age, race, gender, and family income (self-reported). Participants completed the SJT-CWB and SJT-GPA, the counterproductive work behavior checklist, self-report measures of self-control, conscientiousness, extraversion, openness to experience, impulsivity, and dominance measures through an online survey.

As stated in the previous section, I wanted to examine the external validity of the SJT-CWB. Therefore, an additional dataset was collected from participants who were recruited through Amazon's Mechanical Turk. Before the measures were administered, a screener survey was used to identify participants who were employed at least 30 hours per week. Participants were compensated 1 dollar for taking the survey. I recorded demographics information, including age, race, gender, and family income (self-reported). Participants completed the SJT-CWB, the CWB checklist, the self-report measure of self-control, the self-report conscientiousness measure, and Smith and McDaniel's (1998) WJP through an online survey.

Measures

Conscientiousness. Ten self-report conscientiousness items were taken from the IPIP (Goldberg, 2006) were administered. Participants indicated the extent to which they

agreed or disagreed with statements, using a five-point graphic rating scale. The reported Cronbach's alpha for this measure is .79. The conscientiousness items (along with those of the other big-five measures) can be found in appendix A.

Openness to experience. The openness to experience measure was taken from IPIP (Goldberg, 2006). Participants indicated the extent to which they agree with ten items on a 7-point scale. Example items include "I enjoy hearing new ideas" and "I do not like art" (reverse-keyed). The Cronbach's alpha reported for this measure is .82. Openness to experience items are in appendix A.

Extraversion. The extraversion measure was taken from IPIP (Goldberg, 2006). Participants indicated the extent to which they agree with ten items on a 7-point scale. Example items include "I Talk to a lot of different people at parties" and "I keep in the background" (reverse-keyed). The Cronbach's alpha reported for this measure is .87. Extraversion items are in appendix A.

Dominance. The dominance measure was taken from IPIP. Participants indicated the extent to which they agree with eleven items on a 7-point scale. Example items include "I Lay down the law to others" and "I hate to seem pushy" (reverse-keyed). The Cronbach's alpha reported for this measure is .82. The dominance measure's items can be found in appendix B.

Self-control (self-report). Self-report items of self-control were adapted to a undergraduate context from the self-control scale developed by Tangney, Baumeister, and Boone (2004). The Cronbach's alpha reported for this measure is .84. The self-control self-report measure's items can be found in appendix C.

Impulsivity. Impulsivity items were taken from Cloninger's (1994) Temperament and Character Inventory (TCI). The alpha reported for this measure is .78. The items used in this measure can be found in appendix D.

ACT/SAT. Test scores were obtained through Wright State's admissions. Verbal and quantitative scores were used to form a composite score that were be used in analyses. The data did not include names to ensure anonymity.

CGPA. With the participant's consent, CGPA was obtained through Wright State's admissions. CGPA scores were on a 4.0 scale. The data did not include names, to ensure anonymity. Students' course-load and number of extra-curricular responsibilities were collected via self-report as these variables could partially explain differences in CPGA.

HSGPA. HSGPA was obtained through Wright State's admissions office. HSGPA scores were based on a 4.0 scale. When possible, HSGPAs from institutions that use some other scale to a 4.0 scale were transformed to a 4.0 scale. Names of participants were removed from the data to ensure anonymity.

Situational judgement test of self-control (SJT-CWB and SJT-GPA). SJT measures Items were developed according to methods used by Bledow & Frese (2009). First, self-control items were developed based on the critical incidents provided by subject matter experts (SMEs) who have experience in an undergraduate context. As a second step, graduate psychology students, serving as subject matter experts, rated response options to each scenario based on how much each response option reflected the construct of self-control. A total of 23 SJT-GPA and 42 SJT-CWB items were developed (See appendices D and E).

SJT Pilot study. As part of SJT development, a pilot study was conducted using 51 undergraduates. Participants who participated in the study were given extra credit towards their grade in Psychology 2110. The original 60 SJT items were administered to participants.

HSGPA, CGPA, and ACT/SAT were collected via self-report. IPIP measures of conscientiousness, and self-control were also administered. Correlation and regression analyses were conducted to determine the relationship between participants' scores on these variables.

Following the model of Bledow & Frese (2009), five participated in interviews with the researcher to understand the cognitive processes behind their responses. Participants responded to the SJT items while thinking aloud. Participants were then asked to explain how they arrived at their selected responses. The results of the pilot study were used to further develop refine the SJT that was used in further data collection.

Scoring the Situational Judgment Tests of Self-Control (SJT-GPA and SJT-CWB). When assigning points to the SJT responses, two of the most prominent scoring methods identified in the literature were used—empirical scoring, and rational scoring.

Empirical scoring ('dustbowl empiricism'). With this method, each response option is weighted according to its correlation with the criterion (Hogan, 1994; Bergman et al., 2006). Following the steps outlined by Smith & McDaniel (1998), response options were dummy-coded into dichotomous variables (0 or 1) and correlated the criterion (i.e. CGPA for the SJT-GPA, CWB-checklist for the SJT-CWB). Response options were weighted according to these correlations.

The response options were weighted as follows: if the response option correlated .15 or higher, but less than .20 with the criteria, it was given a weight of 1. If the response option correlated .20 or higher, but less than .30 with the criteria, it was given a weight of 2. If the response option correlated .30 or higher, but less than .40 with the criteria, it was given a weight of 4. If the response option correlated .40 or higher, but less than .50 with the criteria, it was given a weight of 4. No response options had correlations equal to or exceeding .50. Response options that were negatively correlated with the criterion were given negative values according to the same scheme (e.g. if the response option correlated between -.40 and -.50 with the criteria, it was given a weight of -4).

Empirical scoring of the SJT-CWB resulted in a 25 item scale with a Cronbach's alpha of .75. Empirical scoring of the SJT-GPA resulted in a nine item scale with a Cronbach's alpha of .18.

Rational scoring ('rainforest empiricism'). Rational scoring is the opposite of empirical scoring. With this technique, response options are weighted according to the correlation with the construct of interest (i.e. self-control for both the SJT-GPA and the SJT-CWB; Bergman, 2009). Each response option was dummy-coded into a dichotomous variable (0 or 1) and correlated them with the self-report measure of self-control. Response options were weighted according to these correlations.

For the rational key, the response options were weighted as follows: if the response option correlated .15 or higher, but less than .20 with self-report self-control, it was given a weight of 1. If the response option correlated .20 or higher, but less than .30 with self-report self-control, it was given a weight of 2. If the response option correlated .3 or higher, but less than .30 with self-report self-control, it was given a weight of 3. No

response options had correlations equal to or exceeding .39. Response options that were negatively correlated with self-report self-control were given negative values according to the same scheme (e.g. if the response option correlated between -.14 and -.2 with self-report self-control, it was given a weight of -1). As has been noted in previous research (e.g. Bergman, et al. 2006), it is challenging to determine where the cutoff for different scores should be when weighting items (e.g. the difference between a .14 and .16 item is likely miniscule).

Rational scoring of the SJT-CWB resulted in a 19 item scale with a Cronbach's alpha of .56. Rational scoring of the SJT-GPA resulted in a 17 item scale with a Cronbach's alpha of .64.

Work Judgment Profile. To further compare the SJT measures with SJTs that are not based on the self-control construct, I administered Smith and McDaniel's (1998) Work Judgment Profile (WJP). The WJP does not attempt to measure any particular construct. It is designed to predict performance across a variety of service industry jobs. Based on a student sample, the authors report an alpha of .76 for this measure (see appendix G).

The Smith and McDaniel measure was empirically keyed according to the method used by the authors—dichotomous-coded response options with correlations between .15 to .19 with GPA were weighted with 1 point; response options with correlations between .20 and .29 were weighted with 2 points; response options with correlations between .30 and .39 were weighted with 3 points (no response options had correlations exceeding .39).

Analyses

Three types of analyses were used to test hypotheses. Analyses included correlations, hierarchical regression, and t-tests.

Testing hypotheses one and two. Correlation analyses were conducted to determine the relationship between SJT measures and self-report self-control; as well as SJT measures and self-report conscientiousness.

Testing hypothesis three. Correlation analyses were conducted to determine the direction and significance of relationships among all variables. Steiger's (1980) test (equations 3 and 10) was then used to determine if the correlations were significantly different from each other (Lee & Preacher, 2013).

Testing hypothesis four. Hierarchical multiple-regression analyses were conducted to demonstrate the extent to which each variable contributes the prediction of CGPA.

Testing hypothesis five. For all measures, t-tests were conducted to compare the scores of minority participants to majority participants.

Establishing the External Validity of the SJT-CWB. Participants first completed a screening survey, asking them how many hours they work per week. Those who were employed at least 30 hours per week were sent a follow-up survey that consisted of the SJT-CWB and the self-report personality measures.

Importantly, when running these analyses, we did not alter the scoring key that was created using the data from the WSU student sample. This cross-validation will provide evidence as to the external validity of the SJT developed using the student sample. Data presented in the hypothesis tests below does not include the data collected from Mechanical Turk. The Mechanical Turk data is presented at the end of the results

section to provide evidence that the results found for the SJT-CWB generalize to an outside sample.

III. RESULTS

Data Cleaning

Participant responses were examined for evidence of insufficient effort responding (IER). Participants who responded by choosing the same option for every question, and/or spent extraordinarily little time to complete the survey (i.e. less than 15 minutes compared to the 66 minute median completion time). Outliers were removed before analyses were conducted. Scores on measures were considered outliers if they fell more than two standard deviations away from the mean. Participants who did not include a valid UID number were excluded from the study since their information could not be obtained from student records.

Scale Construction

Alphas for the predictor measures were as follows: SJT-GPA (empirical) ($\alpha = .18$) SJT-CWB (rational) ($\alpha = .62$), conscientiousness ($\alpha = .82$), self-report measure of self-control ($\alpha = .90$), and dominance ($\alpha = .82$)

Variances for the predictor measures were as follows: ACT ($s^2 = 14.29$), HSGPA ($s^2 = 0.36$), SJT-GPA (empirical) ($s^2 = 7.57$), SJT-CWB (empirical) ($s^2 = 32.40$), conscientiousness ($s^2 = .428$), self-report measure of self-control ($s^2 = 0.26$).

Variances for the outcome measures were as follows: CGPA ($S^2 = 0.69$), CWB-Checklist ($S^2 = 774.50$).

Sample Characteristics

Undergraduate Sample characteristics. Data were collected from an undergraduate sample at a medium-sized Midwestern university. The sample consisted of

198 males (29.3% of sample), 424 females (67% of sample), 4 identifying as transgender (0.6% of the population), and 2 indicating “other” (0.3% of sample).

The racial makeup of the student sample was 73.1% Caucasian, 15.2% African-American, 2.9% Asian, 2.7% Hispanic, 0.2% Native American or Alaskan Native, 4.5% two or more other races, and 1.4% identifying as “Other.”

The undergraduate dataset was used to formally test the hypotheses. Where results pertaining to each hypothesis are presented below, these results only include data from the undergraduate sample, and not the Mechanical Turk dataset. The external validity results from the Mechanical Turk dataset are presented at the end of the results section.

Mechanical Turk sample characteristics. Data was collected from 253 people using Mechanical Turk. Males comprised 49.8% of the dataset. The average age of the participants was 37, with a standard deviation of 10 years. The racial makeup of the participants was 63.7 percent white, 4.7 percent African-American, 28.5 percent Asian, and 1.6 percent Hispanic.

Participants worked a mean of 41.11 hours per week. Eighty-three percent of participants had at least a college education. The average income was approximately 50,000 dollars a year, with a standard deviation of 33,600 dollars.

As stated above, the results of analyses conducted using the Mechanical Turk dataset are presented at the end of the results section, after hypothesis six. The Mechanical Turk dataset was not used to formally test the hypotheses. When the results pertaining to each hypothesis are described below, the Mechanical Turk data was not included in these analyses.

Hypothesis One: Correlations between Personality Measures and the SJTs

Hypothesis 1 predicted that the SJT measures will have a statistically significant, positive correlation with self-report self-control (H1a); the SJT measures will have a statistically significant, positive correlation with self-report conscientiousness (H1b); the SJT measures will be unrelated to extraversion (H1c), openness to experience (H1d), and dominance (H1e); and the SJT measures will be negatively related to impulsivity (H1f).

Hypothesis 1a. The correlation between the SJT-GPA (empirical) and the self-report measure of self-control was significant and positive ($r = .20, p < .01$). The correlation between the SJT-GPA (rational) and the self-report measure of self-control was significant and positive ($r = .49, p < .01$).

The correlation between the SJT-CWB (empirical) and the self-report measure of self-control was significant and positive ($r = .31, p < .01$). The correlation between the SJT-CWB (rational) and the self-report measure of self-control was significant and positive ($r = -.49, p < .01$). All of these results support hypothesis 1a (see Table 1).

Hypothesis 1b. The correlation between the SJT-CWB (empirical) and self-report conscientiousness was positive and significant ($r = .18, p < .01$). The correlation between the SJT-CWB (rational) and self-report conscientiousness was positive and significant ($r = .39, p < .01$).

The correlation between the SJT-GPA (empirical) and self-report conscientiousness was positive and significant ($r = .18, p < .01$). The correlation between the SJT-GPA (rational) and self-report conscientiousness was also positive ($r = .38, p < .01$). All of these results support hypothesis 1b (see Table 1).

Hypothesis 1c. The correlation between the SJT-GPA (empirical) and self-report extraversion was not significant ($r = -.06, p > .05$). The correlation between the SJT-GPA (rational) and self-report extraversion was not significant ($r = -.05, p > .05$).

The correlation between the SJT-CWB (empirical) and self-report extraversion was significant ($r = -.10, p < .05$). The correlation between the SJT-CWB (rational) and self-report extraversion was not significant ($r = -.03, p > .05$). These results mostly support hypothesis 1c, with the exception of the significant correlation between the SJT-CWB (empirical) and extraversion (see Table 1).

The correlation between the SJT-GPA (empirical) and self-report openness to experience was also not significant ($r = .04, p > .05$). The correlation between the SJT-GPA (rational) and self-report openness to experience was also not significant ($r = .06, p > .05$).

Hypothesis 1d. The correlation between the SJT-CWB (empirical) and self-report openness to experience was not significant ($r = .06, p > .05$). The correlation between the SJT-CWB (empirical) and self-report openness to experience was not significant ($r = .03, p > .05$). These results all support hypothesis 1d (see Table 1).

Hypothesis 1e. The correlation between the SJT-GPA (empirical) and self-report impulsivity was negative and significant ($r = -.21, p < .01$). The correlation between the SJT-GPA (rational) and self-report impulsivity was negative and significant ($r = -.48, p < .01$).

The correlation between the SJT-CWB (empirical) and self-report impulsivity was negative and significant ($r = -.30, p < .01$). The correlation between the SJT-CWB (rational) and self-report impulsivity was negative and significant ($r = -.48, p < .01$).

These results all support hypothesis 1e (see Table 1). Although supportive of the hypothesis, these correlations were not as robust as we expected.

Hypothesis 1f. The correlation between the SJT-GPA (empirical) and self-report dominance was significant ($r = .13, p < .01$). The correlation between the SJT-GPA (rational) and self-report dominance was significant ($r = .10, p < .05$).

The correlation between the SJT-CWB (empirical) and self-report dominance was significant ($r = .11, p < .05$). The correlation between the SJT-CWB (rational) and self-report dominance was significant ($r = .12, p < .05$). These results do not support hypothesis 1f. It is important to note that there was a positive significant correlation between the self-report measure of self-control and dominance ($r = .22, p < .01$; see Table 1).

Hypothesis set one summary. The above results show that all but hypothesis 1f were at least partially supported. Hypothesis 1c was not entirely supported, as there was a significant correlation between the SJT-CWB (empirical) and extraversion. Hypothesis 1f was not supported, as the correlation between dominance and self-control was significant. Hypotheses set (1a, 1b, 1d, and 1e) were fully supported by the results. Thus, the SJT measures had a statistically significant positive correlation with self-report self-control and conscientiousness, but did not have a statistically significant positive correlation with self-report openness to experience or impulsivity.

Hypothesis Two: Correlations among Personality, SJTs, and Criteria

Hypothesis 2a. Hypothesis 2a predicted that the correlation between the self-report measure of conscientiousness and CGPA will be statistically significant. The

correlation between the self-report measure of conscientiousness and CGPA was significant ($r = .14, p < .01$). This supports hypothesis 2a (see Table 1).

Hypothesis 2b. Hypothesis 2b predicted that the correlation between the self-report measure of self-control and CGPA will be statistically significant. The correlation between self-report self-control and CGPA was significant ($r = .20, p < .01$). This supports hypothesis 2b. .

Hypothesis 2c. Hypothesis 2c predicted that the correlation between the SJT-GPA and CGPA will be statistically significant. The SJT-GPA (empirical) had a significant correlation with CGPA ($r = .37, p < .01$). The SJT-GPA (rational) had a significant correlation with CGPA ($r = .11, p < .05$). This supports hypothesis 2c (see Table 1).

Hypothesis 2d. Hypothesis 2d predicted that the correlation between the self-report measure of self-control and the CWB-checklist will be statistically significant. The self-report measure of self-control had a negative and significant correlation with the CWB-checklist ($r = -.26, p < .01$). This supports hypothesis 2d (see Table 1).

Hypothesis 2e. Hypothesis 2e predicted that the correlation between the SJT-CWB and CWBs will be statistically significant. The correlation between the SJT-CWB (empirical) and the CWB-checklist was significant ($r = -.61, p < .01$). The correlation between the SJT-CWB (rational) and the CWB-checklist was significant ($r = -.35, p < .01$). This supports hypothesis 2e (see Table 1). Thus, all hypotheses in hypothesis set two were supported.

Hypothesis Three: Correlations among Personality, SJTs, and Criteria

Hypothesis set 3 predicted that the correlation between the SJT-GPA and CGPA will be higher than that of self-report conscientiousness and CGPA (3a); the correlation between the SJT-GPA and CGPA will be higher than that of self-report self-control and CGPA (3b); the correlation between the SJT-CWB and the CWB-checklist will be higher than that of self-report self-control and the CWB-checklist; and the SJT-CWB will have a stronger correlation with the CWB-checklist than the SJT-GPA will, the SJT-GPA will have a stronger correlation with CGPA than the SJT-CWB will (3d).

Hypothesis 3a. Hypothesis 3a predicted that the academic SJT measures will have a higher correlation with CGPA than the self-report measure conscientiousness. The correlation between self-report conscientiousness and CGPA was .14 ($p < .01$).

SJT-GPA (empirical)'s correlation with CGPA. The correlation between the SJT-GPA (empirical) and CGPA was .37. Steiger's (1980) two-tailed test for equality of correlations indicated that the correlation between SJT-GPA and GPA was statistically significantly larger than the correlation between conscientiousness and CGPA ($z = 4.72, p < .01$).

SJT-GPA (rational)'s correlation with CGPA. The correlation between the SJT-GPA (rational) and CGPA was .11 ($p < .05$). Although this is slightly smaller than the correlation between conscientiousness and CGPA, these correlations with CGPA are not significantly different ($z = -0.63, p > .05$).

Thus, hypothesis 3a was mostly supported, as the SJT-GPA (empirical) had a much larger correlation with CGPA than conscientiousness did, while there was not a statistically significant difference between these correlations for the SJT-GPA (rational).

Hypothesis 3b. Hypothesis 3b predicted that the SJT-GPA will have a higher correlation with CGPA than the self-report measures of self-control. The correlation between the self-report measure of self-control and CGPA was .20 ($p < .01$).

SJT-GPA (empirical)'s correlation with CGPA. The empirically scored SJT-GPA had a correlation of .36 ($p < .01$). Steiger's (1980) two-tailed test for equality of correlations indicated that the correlation between the SJT-GPA (empirical) and CGPA was significantly different than the correlation between self-control and CGPA ($z = 3.59$, $p < .01$).

SJT-GPA (rational)'s correlation with CGPA. The SJT-GPA (rational) had a *smaller* correlation ($r = .11$, $p < .05$) with CGPA than self-control did. Steiger's (1980) two-tailed test for equality of correlations indicated that the correlation between the SJT-GPA (rational) and CGPA was significantly different than the correlation between self-control and CGPA ($z = -2.06$, $p < .01$). Therefore, hypothesis 3b had mixed support, since the correlation was only larger for the SJT-GPA when empirical scoring was used. This difference makes sense given the slight correlation between CGPA and self-report self-control. The more our measure correlates with self-control, the less it correlates with CGPA.

Hypothesis 3c. Hypothesis 3c predicted that the SJT-CWB will have a higher correlation with the CWB-checklist than the self-report measure of self-control. The correlation between the self-report measure of self-control and the CWB-checklist was -.26 ($p < .01$).

SJT-CWB (empirical)'s correlation with the CWB-checklist. The correlation between the SJT-CWB (empirical) and the CWB-checklist was -.61 ($p < .01$). Steiger's

(1980) two-tailed test for equality of correlations indicated that the correlation between the SJT-CWB (empirical) and the CWB-checklist was significantly different than the correlation between self-control and the CWB-checklist ($z = -7.50, p < .01$, table 2).

SJT-CWB (rational)'s correlation with the CWB-checklist. Similar results were found for the SJT-CWB (rational), which correlated $-.35$ ($p < .01$) with the CWB-checklist. Steiger's (1980) two-tailed test indicated that the correlation between the SJT-CWB (rational) and the CWB-checklist was significantly different than the correlation between self-control and the CWB-checklist ($z = -2.00, p < .05$, table 2). Thus, hypothesis 3c was supported.

Hypothesis 3d. Hypothesis 3d predicted that the SJT-CWB will have a stronger correlation with CWBs than the SJT-GPA will, and vice versa. The correlation between the SJT-CWB (empirical) and the CWB checklist was $-.61$ ($p < .01$), while the correlation between the SJT-GPA (empirical) and CWB-checklist was $-.30$ ($p < .01$). Steiger's (1980) two-tailed test for equality of correlations indicated that the correlation between the SJT-CWB (empirical) and the CWB-checklist was significantly different than the correlation between SJT-GPA (empirical) ($z = 7.22, p < .01$, table 2). These results were not contradicted when rational scoring was used.

The correlation between the SJT-GPA (empirical) and CGPA was $.37$ ($p < .01$), while the correlation between the SJT-CWB (empirical) and CGPA was $.25$ ($p < .01$). Steiger's (1980) two-tailed test for equality of correlations indicated that the correlation between the SJT-GPA (empirical) and the CGPA was not significantly different than the correlation between the SJT-CWB (empirical) and CGPA ($z = .47, p = .64$, table 2). These

results were not contradicted when rational scoring was used. Thus, hypothesis 3d was fully supported.

Hypothesis set three summary. Hypotheses 3a and 3b were mostly supported. While the results of the empirically keyed SJT-GPA had higher correlations with CGPA than did conscientiousness and self-report self-control, the rationally keyed SJT-GPA had slightly smaller correlations with CGPA than these self-report measures. Hypothesis 3c was fully supported—both the empirically and rationally scored SJT-CWB had higher correlations with the CWB-Checklist than did conscientiousness and self-report self-control. Hypothesis 3d was partially supported, the SJT-CWB had a significantly stronger correlation with the CWB-checklist than the SJT-GPA and the CWB-checklist had; but there was no significant difference in correlations between these SJTs and CGPA. Taken as a whole, the results indicate differential prediction of the outcomes, such that the SJT predicts the more relevant criteria better than the less relevant one.

Summarizing Hypotheses One through Three

Hypothesis set 1. With minor exception, hypotheses one through three were generally supported. Both the SJT-GPA and SJT-CWB had significant positive correlations with self-control and conscientiousness, negative correlations with impulsivity, and had much smaller correlations with the theoretically unrelated traits of extraversion (although the correlation between the empirically scored SJT-CWB and extraversion was significant; $r = .10, p < .05$), openness to experience. Counter to our prediction, the SJT-GPA and SJT-CWB had significant positive correlations with dominance, which might be explained by the unexpected significant positive correlation between self-report self-control and dominance ($r = .22, p < .01$).

Hypothesis set 2. Hypothesis set two was wholly supported. Self-report self-control, conscientiousness, and the SJT-GPA (both empirical and rational) all had significant positive correlations with CGPA. Self-report self-control, conscientiousness, and the SJT-CWB (both empirical and rational) all had significant positive correlations with the CWB-Checklist.

Hypothesis set 3. Hypothesis set three was mostly supported. The empirically scored SJT-GPA had higher correlations with CGPA than the self-report personality measures. Both the rationally and empirically scored SJT-CWB had higher correlations with the CWB-checklist than the self-report personality measures did.

Hypothesis Four: Incremental Validity of the SJT-GPA and SJT-CWB

Hypothesis set 4 predicted that the SJT measures will have incremental validity over self-report conscientiousness (H4a) and self-report self-control (H4b); and incremental validity over ACT/SAT and HSGPA in the prediction of CGPA (H4c-H4e).

Incremental validity of the SJT-GPA. A hierarchical regression was conducted and R^2 , adjusted R^2 , and betas were observed to test these hypotheses. After including HSGPA, ACT, self-control, and conscientiousness in the model, adding the SJT-GPA (empirical) significantly improved the prediction of CGPA (improving R^2 from .54 to .59; $F\text{-Change} = 34.28, p < .01$; see Table 3). Thus, the SJT-GPA (empirical) accounted for unique variance over and above that of HSGPA, ACT, self-control, and conscientiousness. The SJT-GPA (rational) did not show the same significant incremental validity ($R^2\text{-Change} = .00, F\text{-Change} = .59, p = .44$). See tables 6a and 6b for a summary of these analyses.

Comparing the regression coefficients provides further evidence of the predictive validity of the SJT-GPA (empirical). While controlling for the other variables in the model, CGPA went up by .24 per every standard deviation increase in SJT-GPA (empirical) score ($\beta = .24$). The standardized beta coefficients for conscientiousness and self-control were much smaller ($\beta = -.04$, $\beta = .15$ respectively). The ACT had an equal standardized beta to the empirically scored SJT-GPA ($\beta = .24$), and HSGPA only had a slightly higher coefficient ($\beta = .28$; see Table 4). Thus, the results of the SJT-GPA (empirical) supports hypotheses H4a and H4b, while the SJT-GPA (rational) does not.

Incremental validity of the SJT-CWB. Results related to the incremental validity of the SJT-CWB in the prediction of CWBs provided further support for hypothesis set four.

After including HSGPA, ACT, self-control, and conscientiousness in the model, adding the SJT-CWB (empirical) significantly improved the prediction of CWBs (improving R^2 from .10 to .38; $F\text{-Change} = 121.25$, $p < .01$; see Table 5). Thus, the SJT-CWB (empirical) had incremental validity above and beyond that of HSGPA, ACT, self-control, and conscientiousness. When rationally scored, the SJT-CWB (rational) significantly improved the prediction of CWBs (improving R^2 from .10 to .14; $F\text{-Change} = 10.89$, $p < .01$). Thus, both the SJT-CWB (empirical) and SJT-CWB (rational) both support hypotheses 4a and 4b.

Comparing the regression coefficients provides further evidence of the predictive validity of the SJT-CWB. While controlling for the other variables in the model, CWB-checklist score decreased by .30 per every standard deviation increase in SJT-CWB score ($\beta = .30$) The standardized beta coefficients for conscientiousness and self-control were

much smaller ($\beta = -.07$, $\beta = -.05$ respectively). As would be expected the ACT and HSGPA also had much smaller standardized beta coefficients ($\beta = -.07$ and $\beta = -.06$ respectively; see Table 6).

To summarize the results of hypotheses 4, both the SJT-GPA and SJT-CWB mostly support the hypotheses, showing incremental validity over HSGPA, ACT, self-control, and conscientiousness. The only instance that did not support the hypotheses was the SJT-GPA (rational), which did not show incremental validity over the traditional predictors (HSGPA and ACT), nor the personality self-report predictors (self-control and conscientiousness).

Hypothesis Five: Comparing Smith and McDaniel's (1998) WJP to the our SJTs

Hypothesis 5 predicted that the SJT-GPA will have a higher correlation with CGPA than Smith and McDaniel's (1998) WJP (H5a); and the SJT-CWB will have a higher correlation with CWBs than Smith and McDaniel's (1998) WJP (H5b).

The Smith and McDaniel measure was empirically keyed according to the method used by the authors: dichotomously-coded response options with correlations between .15 and .19 with GPA were weighted with 1 point; response options with correlations between .20 and .29 were weighted with 2 points; response options with correlations between .30 and .39 were weighted with 3 points.

Hypothesis 5a. The correlation between Smith and McDaniel's (1998) WJP and CGPA was .33 ($p < .01$). Comparisons to the SJT-GPA are below.

SJT-GPA (empirical). The correlation between our SJT-GPA (empirical) and CGPA (empirical; $r = .37$, $p < .01$) was slightly stronger than that between the WJP and

CGPA. Steiger's (1980) two-tailed test indicated that these were not significantly different correlations ($z = .55, p = .58$; table 2).

The correlation between the SJT-GPA (rational) ($r = .11, p < .05$) and CGPA was lower than that of the WJP and CGPA. Steiger's (1980) two-tailed test indicated a significant difference between these correlations ($z = -5.86, p < .01$). As a whole, hypothesis 5a was not supported.

Hypothesis 5b. The correlation between Smith and McDaniel's (1998) WJP and the CWB-checklist was .53 ($p < .01$). Comparisons to the SJT-CWB are below.

SJT-CWB (empirical). The correlation between our SJT-CWB (empirical) and the CWB-checklist ($r = .61, p < .01$) was stronger than that of Smith and McDaniel's (1998) WJP. Steiger's (1980) one-tailed and two-tailed tests did not indicate a significant difference between these correlations ($z = 1.57, p > .05$; table 2).

SJT-CWB (rational). The SJT-CWB (rational) had a smaller correlation with the CWB-checklist ($r = .35, p < .01$) than the WJP did. The Steiger (1980) two-tailed test indicated a significant difference between these correlations ($z = -2.74, p < .01$). Together, these results do not support hypothesis 5b.

While the results do not support hypothesis set five, it should be noted that the Smith and McDaniel (1998) SJT had an advantage over our SJT measures, because it had many more items and response options from which to select the strongest criterion correlations. The Smith and McDaniel (1998) SJT had 62 items total: 31 scenarios with two items—one asking for the 'best' response and one asking for the 'worst' response to the scenario. The SJT-GPA and SJT-CWB had 23 and 42 items, respectively. In addition, the Smith and McDaniel (1998) SJT had five response options per item,

whereas the SJT-GPA and the SJT-CWB only had four response options per item (with the exception of one SJT-GPA item that had five response options). Thus, the Smith and McDaniel (1998) SJT had 310 response option-criterion correlations from which to cull the strongest (62 question stems x 5 response options = 310 response option-criterion correlations). This is in contrast to the SJT-GPA, which respectively had 93 and 168 response option-criterion correlations.

Hypothesis Six: Testing for Subgroup differences

Hypothesis 6 predicted that the SJT measures will demonstrate less adverse impact than the ACT and high school GPA (H6a); and the SJT measures will not demonstrate significantly more adverse impact than self-report measures of conscientiousness and self-report measures of self-control (H6b). Results of t-tests for differences between Caucasians and African-Americans, and differences between males and females can be found in table 7 and 8, respectively.

SJT-GPA (empirical) t-test for race and gender differences. A two-tailed t-test did not indicate statistically significant differences between the SJT-GPA (empirical) scores of Caucasians and African-Americans (see table 7). However, a one-tailed t-test showed a statistically significant difference between the SJT-GPA (empirical) scores of Caucasians ($M = 3.24$, $SD = 2.67$) and African Americans ($M = 2.64$, $SD = 3.11$), such that the mean score for Caucasians was .60 points higher than that of African Americans ($t(548) = 1.81$, $p .05$).

A one-tailed t-test also showed a statistically significant difference between the SJT-GPA (empirical) scores of Caucasians ($M = 3.24$, $SD = 2.67$) and Asians ($M = 2.17$; $SD = 3.45$), such that the mean score for Caucasians was 1.07 points higher than that of

Asians ($t(471) = 1.98, p = .05$). A two-tailed t-test also showed a significant difference between these groups ($p < .05$).

Thus, the only racial differences on the SJT-GPA (empirical) were between Caucasians and African-Americans; and Caucasians and Asians. There were no significant differences between males and females on the SJT-GPA (empirical).

SJT-GPA (rational) t-test for race and gender differences. When rational scoring was used, the SJT-GPA (rational) a one-tailed t-test did not indicate statistically significant differences between African Americans and Caucasians ($t(548) = .88, p > .05$), or Asians and Caucasians ($t(471) = 1.29, p > .05$). The one-tailed t-test did not show significant score differences between men and women on the SJT-GPA (rational). Similarly, two-tailed t-tests did not find statistically significant differences between these groups.

SJT-CWB (empirical) t-tests for race and gender differences. The results of the t-tests showed significant score differences between racial groups and gender. Results are detailed below.

Caucasian and African-American SJT-CWB (empirical) score differences.

Levene's test for equality of variances indicated that the two groups did not have equal variances ($F = 5.28, p < .05$). The results of the one-tailed t-test show a statistically significant difference between the SJT-CWB (empirical) scores for Caucasians ($M = 18.16, SD = 8.60$) and African Americans ($M = 12.67, SD = 10.47$) such that the mean score for Caucasians was higher than that of African Americans ($t(84.67) = 4.03, p < .01$). A two-tailed t-test also showed a significant difference between these groups ($p < .01$; see table 7).

Male and female SJT-CWB (empirical) score differences. However, the results of the one-tailed t-test showed a statistically significant difference between the SJT-CWB (empirical) scores for women ($M = 17.80$, $SD = 5.71$) and men ($M = 15.53$, $SD = 9.53$) such that the mean score for women was 3.15 points higher than that of men; $t(450) = -2.41$, $p < .05$. A two-tailed t-test also indicated significant differences between male and female SJT-CWB (empirical) scores ($p < .05$; table 8).

ACT t-test for race and gender differences. The results of the t-tests showed significant score differences between the following groups: Caucasians and African-Americans (Caucasians higher), Caucasians and Hispanics (Caucasians higher), African-Americans and Asians (Asians higher), African-Americans and Hispanics (Hispanics higher), and males and females (males higher). Results for each difference are detailed below.

Caucasian and African-American ACT score differences. Levene's test for equality of variances was significant ($p = .049$), these are results for when equal variances are not assumed. A one-tailed t-test showed a statistically significant difference between the ACT scores of Caucasians ($M = 21.84$, $SD = 3.58$) and African Americans ($M = 17.89$, $SD = 2.90$), such that the mean score for Caucasians was 3.96 points higher than that of African Americans ($t(137.82) = 10.54$, $p < .01$). A two-tailed t-test also showed a significant difference between these groups ($p < .01$; table 7).

Caucasian and Hispanic ACT score differences. A one-tailed t-test showed a statistically significant difference between the ACT scores of Caucasians ($M = 21.84$, $SD = 3.58$) and Hispanics ($M = 19.79$, $SD = 3.47$), such that the mean score for Caucasians

was 2.04 points higher than that of Hispanics ($t(352) = 2.08, p < .05$). A two-tailed test also indicated significant differences ($p = .04$).

Asian and African-American ACT score differences. Levene's test for equality of variances was significant ($p = .05$), these are results for when equal variances are not assumed. A one-tailed t-test showed a statistically significant difference between the ACT scores of Asians ($M = 22.29, SD = 3.50$) and African Americans ($M = 17.89, SD = 2.90$), such that the mean score for Caucasians was 4.36 points higher than that of African Americans ($t(76) = -3.62, p < .01$). A two-tailed test also indicated significant differences ($p < .01$).

African-American and Hispanic ACT score differences. However, A one-tailed t-test showed a statistically significant difference between the ACT scores of African-Americans ($M = 17.89, SD = 2.90$), and Hispanics ($M = 19.79, SD = 3.47$), such that the mean score for Hispanics was 1.86 points higher than that of African-Americans ($t(86) = -2.06, p < .05$). A two-tailed t-test also showed statistically significant difference between the ACT scores of these two groups ($p = .04$).

Male and Female ACT score differences. A one-tailed t-test showed a statistically significant difference between the ACT scores of males ($M = 22.52, SD = 3.76$), and females ($M = 20.53, SD = 3.65$), such that the mean score for males was 2.00 points higher than that of females ($t(455) = 5.25, p < .01$). A two-tailed t-test also showed a significant difference between these groups ($p < .01$; table 8).

HSGPA t-test for race and gender differences. The results of the t-tests showed significant score differences between the following groups: Caucasians and

African-Americans (Caucasians higher), Caucasians and Hispanics (Caucasians higher), and males and females (males higher). Results for each difference are detailed below.

Caucasian and African-American HSGPA differences. A one-tailed t-test showed a statistically significant difference between the HSGPAs of Caucasians ($M = 3.39$, $SD = 0.59$) and African Americans ($M = 3.08$, $SD = 0.59$), such that the mean HSGPA for Caucasians was 0.31 points higher than that of African Americans ($t(434) = 4.12$, $p < .01$). A two-tailed t-test was also significant for these groups ($p < .01$; see table 7).

Caucasian and Hispanic HSGPA differences. A two-tailed t-test did not indicate statistically significant differences between the SJT-GPA (empirical) scores of Caucasians and Hispanics ($p = .10$). However, a one-tailed t-test showed a statistically significant difference between the HSGPAs of Caucasians ($M = 3.39$, $SD = 0.59$) and Hispanics ($M = 3.13$, $SD = 0.66$), such that the mean HSGPA for Caucasians was 0.26 points higher than that of Hispanics ($t(376) = 1.67$, $p < .05$).

Male and Female HSGPA differences. A one-tailed t-test showed a statistically significant difference between the HSGPAs of males ($M = 3.22$, $SD = 0.59$) and females ($M = 3.36$, $SD = 0.59$), such that the mean HSGPA for males was 0.14 points higher than that of females ($t(490) = -2.33$, $p < .05$). A two-tailed t-test was also significant for these groups ($p < .05$, see table 8).

Self-report self-control t-test for race and gender differences. The results of the t-tests showed significant score differences between the following groups: Asians and African-Americans (African-Americans higher). Results are detailed below.

African-American and Asian Self-report self-control differences. The only significant racial group differences found for the self-report self-control measure was between Asian participants ($M = 2.94$, $SD = 0.39$) and African American participants ($M = 3.17$, $SD = 0.44$) such that Asian participants had significantly lower scores on this measure; $t(113) = 2.04$, $p = .02$. A two-tailed t-test was also significant for these groups ($p = .04$).

There were no significant differences between male and female participants on the self-report self-control measure.

Self-report conscientiousness t-test for race and gender differences. The results of the t-tests showed significant score differences between the following groups: Caucasians and African-Americans (African-Americans higher). Results are detailed below.

Conscientiousness t-test for race and gender differences. The only significant group difference found for the conscientiousness measure was between Caucasians ($M = 3.60$; $SD = 0.66$) and African-Americans ($M = 3.45$; $SD = 0.66$), such that there was a mean difference of .15 points ($t(542) = 1.99$; $p < .05$). A two-tailed t-test was also significant for these groups ($p < .05$, see table 7).

There were no significant differences between male and female participants on the self-report conscientiousness measure.

Hypothesis six summary. Overall, when it comes to the differences between Caucasians and African-Americans, the empirically scored SJTs showed larger score differences than the rationally scored measures. Such a clear pattern was not seen for

gender differences, as women tended to score higher than men on the rationally scored SJT-GPA.

Hypothesis 6a is partially supported. These results partially support hypothesis 6a, with the exception of the SJT-CWB (empirical) which showed larger differences between Caucasians and African-Americans. The SJT-GPA (rational) and SJT-CWB (empirical) had slightly larger score differences than HSGPA for males and females, with females having higher SJT scores on average.

The results do not support hypothesis 6b. When it comes to race and gender, the SJT measures demonstrated less group differences than the ACT and HSPGA, but demonstrated more group differences than either self-report personality measure (see tables 6 and 7).

Mechanical Turk Results: Testing the External Validity of the SJT-CWB

The following analyses used the scoring key that was based on the data from the WSU student sample as was described previously in the method section. The procedure followed previous SJT developers (Bledow and Frese, 2007), and was used to test the external validity of the SJT developed using the student sample.

Inferential statistics: correlations. The correlation between the SJT-CWB (empirical) and the CWB checklist for the mturk sample was $-.76$ ($p < .01$). This is higher than the correlation between self-report self-control and the CWB checklist ($r = -.63$, $p < .01$) and conscientiousness and the CWB checklist ($r = -.52$, $p < .01$). The self-report personality variables had significant correlations with the CWB checklist, but were mostly smaller than what was found for the SJT-CWB (the exception being the rationally

scored SJT-CWB having a smaller correlation with the CWB checklist than what was found for self-report self-control).

The correlation for the rationally scored SJT-CWB and the CWB checklist was closer to what was observed for self-report personality measures ($r = -.59, p < .01$; see table 8). These correlations provide further support for the hypotheses related to the SJT-CWB (H2d, H2e, and H3b).

Inferential statistics: incremental validity. The external validity study found further support for hypothesis set four. The SJT-CWB (empirical) showed incremental validity over self-report self-control and conscientiousness in the prediction of the CWB-checklist ($F = 224.92, p < .01$). Adjusted R^2 increased from .43 (when only the two self-report measures were included) to .66 when the SJT-CWB (empirical) was included in the model (see table 10a).

Similarly, the rationally scored SJT-CWB (rational) significantly improved model fit ($F = 55.66, p < .01$), raising adjusted R^2 from .53 to .51 (see table 10b).

IV. DISCUSSION

Psychometrics of the SJT measures

The moderate internal consistency of the SJT-CWB (rational) was encouraging, given the nature of SJTs in general. The low internal consistency of the SJT-GPA (empirical) is in line with our expectations. Although Cronbach's alpha is a suitable index for self-report measures, it is not amenable to the SJT (Whetzel & McDaniel, 2009). We concede that an SJT—like an interview—is going to measure multiple constructs. Thus, there is bound to be some contamination of the construct of interest. Because of this, Wetzel & McDaniel (2009) suggest using test-retest or parallel form reliability indices instead of Cronbach's alpha, although this was beyond the scope of this study. Evidence presented in the proceeding paragraphs makes a compelling case that our SJTs are measuring self-control.

Practical Implications

Hypothesis Set One: Construct Validity of the SJT measures. Because Cronbach's alpha has limitations in assessing the reliability of our measure, it is especially important to look to the convergent and discriminant validity of the SJTs to evaluate how well they capture the construct of self-control.

The moderate-strong correlation between self-report self-control and SJT self-control demonstrates that consistent with the findings of Bledow & Frese (2011), the SJT format can be adapted to measure personality. It was anticipated that the correlation between the SJT and self-report measures would not be as strong as one would expect when comparing two self-report measures of the same construct, since the different formats likely evoke different cognitive processes in. Brunstein and Maier (2005) made a

similar argument in their comparison of direct and indirect measures of achievement motivation (Bledow & Frese, 2011). We are therefore comfortable stating that the correlation observed between the SJT and self-report measure of self-control indicates that our SJT measure captures the construct of self-control. The SJTs' correlations with other self-report constructs supplements this evidence.

Although hypothesis 1f was not supported, the correlations between dominance and the SJT measures were modest, and significance may have been reached due to the large sample size.

Together, the results for hypothesis set one demonstrates that the SJT measures is not merely reflecting a person's judgement, but is a valid measure of the self-control construct, shedding light on the debate over whether SJTs are a method or construct (Schmitt & Chan, 2013). An SJT can be a method to measure personality traits such as self-control.

Relationships between Variables and Outcomes. The correlations between CPGA and conscientiousness were lower than the findings of a meta-analysis that estimated the corrected correlation to be above .20 (McAbee & Oswald, 2013). It is important to note that the meta-analysis reported correlations that were corrected for sampling error variance and measurement error variance in both the predictor (personality) and outcome (CGPA), whereas the correlations reported in the current study are not. This might explain why the correlations found in this study are lower. Regardless, the fact that self-control had a stronger relationship with CPGA than did conscientiousness is in-line with the theory of narrow traits as more efficient predictors of performance outcomes (Dudley et al., 2006).

The personality variables' relationships with the CWB checklist were contrary to expectations, as conscientiousness had a slightly higher relationship with the CWB checklist than did self-control. It is possible that individuals with a higher level of conscientiousness are more efficient, organized, and detail-oriented at work, which are inverse behaviors to certain CWBs corresponding to withdrawal behaviors such as coming into work late, daydreaming, or trying to look busy while doing nothing (Spector et al., 2006). Indeed, previous research has found conscientiousness to have a moderate correlations with withdrawal-related CWB checklist items ($r = -.31, p < .001$) and with total CWB checklist scores ($r = -.28, p < .001$).

The moderate relationships between our SJT self-control measures and CGPA and the CWB-checklist indicate that the SJTs measure are more criterion-valid than self-report measures while maintaining a relationship with self-control. This is in part due to the apparent lack of criterion-related validity of self-control to CGPA (as demonstrated by the modest yet significant correlation indicates).

This modest correlation between self-control and CGPA made scoring the SJT-GPA problematic. Because self-control is not highly predictive of GPA for this particular population, the more the SJT-GPA correlated with the construct, the less it was correlated with CGPA. This demonstrates the importance of understanding the context domain when developing a construct-driven SJT.

Prediction of Outcomes. The results supporting hypothesis 4 demonstrate that the SJT measures of self-control are efficient predictors of important outcomes such as college student performance and CWBs in the workplace, and could therefore be a useful selection and evaluation tool for organizations. The SJT-GPA (empirical) significantly

improved the prediction of CGPA above and beyond the traditional selection measures (i.e. HSGPA and ACT) and the self-report personality measures. The standardized beta's revealed that the SJT-GPA (empirical) was a more efficient predictor than the two self-report measures, and was nearly equal to the ACT in its prediction of CGPA. Likewise, the SJT-CWB was a better predictor of the CWB checklist than any other measure (although we would not expect HSGPA and ACT to be predictive of CWBs).

The results of the correlational and regression analyses testing hypotheses one through 4 provide compelling evidence that our SJTs are able to measure self-control while being predictive of the outcomes of interest. The extent to which it can do both of these simultaneously depends on the strength of the relationship between the construct and the criterion.

Adverse impact of the SJT measures of self-control. Although only partial support was found for hypothesis set six, the rational scoring of the SJTs tended to show less adverse impact, especially when it comes to race, which would be expected given that personality measures tend to show lower adverse impact in general. This could help inform the development of SJTs to minimize adverse impact without sacrificing criterion-related validity.

Theoretical Implications

The strong relationship between our SJT measure of self-control and the self-report measure, as well as the evidence provided by the nomological network suggests that we successfully measured the construct of self-control. This demonstrates the possibility of continued innovation in the realm of personality measurement, particularly in personnel selection.

Results of the first set of hypotheses supports the notion that using traits outside of the big five provides greater criterion-related validity than global measures. Also, using traits outside of the big five allows for greater understanding of the performance domain, resulting in greater construct validity.

Shedding light on the SJT as method versus construct debate. In regards to the “method vs. construct” debate of SJTs, it would appear that to the extent that the criterion and construct overlap, the SJT is able to be a method, but when built around a modestly criterion-valid personality variable, we must treat the SJT more as a construct if we wish to predict the outcome of interest. As it turns out, the relationship between self-control and CGPA was not strong for this particular sample. Thus, when empirically scored to maximize prediction of CGPA, the SJT-GPA (empirical) was more of a construct in and of itself than it was a method of measuring self-control. Thus, for the SJT-GPA, there was a “Sophie’s Choice” of measuring self-control or efficiently predicting CGPA.

The SJT-GPA’s (empirical) prediction of CGPA is due to its relationship with several variables related to CGPA. The SJT-GPA (empirical) appeared to be a hodgepodge of constructs such as conscientiousness, self-control, impulsivity, and (surprisingly) extraversion. With a relatively heterogeneous criterion such as CGPA (as opposed to CWBs which are more is much more specific), such a method is likely more advantageous than a single construct, since it can capture several facets of the criterion space. Importantly, the mix of constructs measured by the SJT-GPA (empirical) did not overlap much with the ACT and HSGPA, and had less adverse impact, thus still serving as a useful predictor of CGPA.

Its modest yet significant correlation with ACT suggests it might be measuring some aspect of intelligence due to the ACT's strong relationship with intelligence. Koenig, Frey, & Detterman, (2008) found a correlation of .77 between ACT and general cognitive ability. The SJT-GPA (empirical) is likely also be measuring the ability to make good decisions in an academic context (i.e. judgment) which of course would make it predictive of CGPA.

Should self-report measures be the standard by which to compare new measures? A challenge for this line of research is that any innovative personality measure is going to be examined by comparing it to its self-report counterpart. A central premise of this study is that personality has not lived up to its promise as a predictor, an issue that has a large consensus among researchers and practitioners alike (e.g. Morgeson et al, 2007; White, Young, Hunter, & Young, 2008). When we place too much weight on self-report measures as the standard by which to compare new measures, we are anchoring ourselves to a broken system of measurement. The more we improve personality measurement, the less these new measures will correlate with traditional self-report measures. Self-report measures should not be treated as true scores.

There are several reasons to question whether the self-report measure of self-control is doing a better job of measuring the construct than our SJT measure. For instance, the correlations between dominance and the SJT measures was half that of the correlation between dominance and self-control, however theoretically there is little basis for these traits to be related, thus bringing into question the assumption that the self-report measure ought to be the standard with which to compare new measures such as the SJT of self-control, since these constructs should theoretically be uncorrelated.

As stated previously, self-report measures require a level of personal insight on behalf of participants, many of whom do not have the life experience to be able to report their true level of a construct. Self-report also might lead people to rate themselves in comparison to their peers or according to their personal narrative they would like to believe about themselves. SJTs require provide a clear scenario and asks participants to choose specific behaviors they would engage in. The results of this study show that when designed using a construct-driven approach, these choices can reflect participants' personalities.

Limitations

One limitation of this study is that not all students were far along in their undergraduate career (e.g., freshmen, sophomores), resulting in limited GPA information for these participants.

Another limitation is that our sample was from a university that does not have high ACT cut-off scores, with some students not being required to take the test for admission. Future research should test hypotheses 1 and 2 at institutions with more moderate or higher ACT cut scores.

Although the results for the SJT-CWB were encouraging, the results are likely inflated by same-source bias. It is not surprising that participants who were willing to commit CWBs on the SJT measure were also willing to admit to committing CWBs on the CWB-checklist. This is a common shortcoming of CWB research, which relies heavily on self-report criteria measures (Penney & Spector, 2005). Although other methods besides self-report have been attempted (e.g. absences, warning letters), these criteria do not detect milder forms of CWBs (e.g. purposefully ignoring a coworker) and

probably do not include a majority of the CWBs that an employee commits (Fox & Spector, 1999).

Future Research

Future research should use examine the reliability of the SJT measures using alternative reliability indices in place of Cronbach's alpha. Although outside the scope of this study, test-retest or parallel form reliability indices are likely more suitable SJTs since there are more factors involved in choosing a course of action in a scenario than there are on a simple self-report measure (Whetzel & McDaniel, 2009).

The results found in this study are encouraging and should be expanded upon to include other predictors and outcomes. Future research should examine other personality traits and measurement methods that might predict undergraduate performance more efficiently than self-control. Other narrow traits of conscientiousness should be considered in the development of personality SJTs. The results of the SJT-CWB were stronger in part because the construct (self-control) they were based on was more predictive of the criteria. Traits such as grit or perseverance are promising constructs that might be amenable to measurement via the SJT format.

In addition, researchers should examine the criterion-related validity of personality-driven SJTs using a wide range of criteria measures other than CGPA and the CWB-checklist. There are numerous possibilities, such as customer ratings, sales performance, turnover, subordinate ratings of managers, and burnout.

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Table 1a

Bivariate correlations among variables. Reliability for each measure are on the diagonal

	Mean	SD	1	2	3	4	5	6	7	8
1. CGPA	2.81	0.83	—							
2. CWB Checklist	63.81	27.83	.17**	(.98)						
3. HSGPA	3.32	.60	.44**	-.15*	—					
4. ACT	21.12	3.78	.41**	-.08	.52**	—				
5. SJT GPA (Empirical)	3.14	2.75	.37**	-.30**	.19**	.15**	(.18)			
6. SJT GPA (Rational)	7.33	7.42	.11*	-.23**	.05	-.06	.34**	(.49)		
7. SJT CWB (Empirical)	-17.11	9.20	.25**	-.61**	.21**	.13*	.39**	.36**	(.75)	
8. SJT CWB (Rational)	4.87	5.06	.16**	-.35**	.11*	-.09	.20**	.45**	.63**	(.64)
9. SJT McDaniel GPA (Empirical)	3.42	2.00	.33**	-.35**	.21**	.20**	.21**	.12*	.44**	.19**
10. SJT McDaniel CWB (Empirical)	-20.37	14.09	.18**	-.53**	-.16**	-.22**	-.26**	-.21*	-.58**	-.25**
11. Conscientiousness	3.57	0.65	.14**	-.27**	.15**	.04	.18**	.38**	.30**	.39**
12. Openness	3.60	0.61	.01	-.01	.01	.18**	.05	.06	.06	.03
13. Extraversion	3.01	0.86	.01	.08	-.04	-.08	-.06	-.05	-.10*	-.03
14. Self-Control	3.18	0.51	.20**	-.26**	.16**	-.03	.20**	.49**	.31**	.49**
15. Impulsivity	2.83	0.49	-.20**	.26**	-.15**	.02	.43**	-.48**	-.30**	-.48**
16. Dominance	3.61	0.62	.05	-.03	.01	.02	.13**	.10*	.11*	.12*

Note. $p < .05$, ** $p < .01$. SJT McDaniel = Smith and McDaniel's (1998) WJP

Table 1b

Bivariate correlations among variables. Reliability for each measure are on the diagonal

	Mean	SD	9	10	11	12	13	14	15	16
1. CGPA	2.81	0.83								
2. CWB Checklist	63.81	27.83								
3. HSGPA	3.32	0.60								
4. ACT	21.12	3.78								
5. SJT GPA (Empirical)	3.14	2.75								
6. SJT GPA (Rational)	7.33	7.42								
7. SJT CWB (Empirical)	-17.11	9.20								
8. SJT CWB (Rational)	4.87	5.06								
9. SJT McDaniel GPA (Empirical)	3.42	2.00	(.28)							
10. SJT McDaniel CWB (Empirical)	-20.37	14.09	-.71**	(.89)						
11. Conscientiousness	3.57	0.65	.10*	-.21**	(.82)					
12. Openness	3.60	0.61	.01	-.06	.20**	(.82)				
13. Extraversion	3.01	0.86	-.15**	.14**	.09*	.16**	(.90)			
14. Self-Control	3.18	0.51	.12*	-.14**	.60**	.02	-.01	(.90)		
15. Impulsivity	2.83	0.49	-.13**	.14**	-.55**	-.01	.01	-.99**	(.89)	
16. Dominance	3.61	0.62	.04	-.08	.30**	.43**	.53**	.22**	-.20**	(.81)

Note. * $p < .05$, ** $p < .01$. SJT McDaniel = Smith and McDaniel's (1998) WJP

Table 2.

Steiger's test for equality of correlations: comparing variables' criteria correlations

Criteria	Measure	$R_{CGPA/CWB}$	z-score	p-value (one-tailed)	p-value (two-tailed)
CGPA	SJT-GPA (empirical)	.37			
	Conscientiousness	.14	4.72	.00	.00
	Self-Control	.20	3.59	.00	.00
	SJT-CWB (empirical)	.25	2.42	.01	.02
	Smith & McDaniel's WJP (GPA)	.33	.55	.29	.58
CWB	SJT-CWB (empirical)	.61			
	Conscientiousness	-.27	7.32	.00	.00
	Self-Control	-.26	7.83	.00	.00
	SJT-GPA (empirical)	-.30	7.22	.00	.00
	Smith & McDaniel's WJP (CWB)	.53	1.56	.06	.12

Note. r = correlation with CGPA. Z-score = critical value of Steiger's Z-test.
p-value = significance value of the z-score.

Table 3a.

Results of regression analyses, showing the variance in CGPA accounted for by traditional predictors, personality, and the SJT-GPA (empirical) CGPA.

Model	R	R ²	Adjusted R ²	Standard Error of the Estimate	F-Change	Sig. F-Change
HSGPA	.47	.22	.22	.73	116.47**	.00
ACT	.51	.26	.26	.71	22.23**	.00
Self-Control	.54	.29	.28	.70	16.50**	.00
Conscientiousness	.54	.29	.28	.70	.45	.50
SJT-GPA (Empirical)	.59	.34	.34	.68	34.28**	.00

Note. * $p < .05$, ** $p < .01$

Table 3b.

Results of regression analyses, showing the variance in CGPA accounted for by traditional predictors, personality, and the SJT-GPA (rational) CGPA.

Model	R	R ²	Adjusted R ²	Standard Error of the Estimate	F-Change	Sig. F-Change
HSGPA	.47	.22	.22	.73	116.47**	.00
ACT	.51	.26	.26	.71	22.23**	.00
Self-Control	.54	.29	.28	.70	16.50**	.00
Conscientiousness	.54	.29	.28	.70	.45	.50
SJT-GPA (Rational)	.54	.29	.28	.70	.59	.44

Note. * $p < .05$, ** $p < .01$

Table 4.

Summary of Hierarchical Regression Analysis using the SJT-GPA (empirical), for Variables Predicting GPA

	Model 1			Model 2			Model 3			Model 4			Model 5		
Variable	<i>B</i>	<i>SE</i> (<i>B</i>)	β	<i>B</i>	<i>SE</i> (<i>B</i>)	β	<i>B</i>	<i>SE</i> (<i>B</i>)	β	<i>B</i>	<i>SE</i> (<i>B</i>)	β	<i>B</i>	<i>SE</i> (<i>B</i>)	β
HSGPA	.69	.06	.47**	.52	.07	.35**	.45	.07	.31**	.46	.07	.31**	.41	.07	.28**
ACT				.05	.01	.23**	.06	.01	.26**	.06	.01	.26**	.05	.01	.24**
Self-control							.28	.07	.17**	.31	.09	.19**	.24	.08	.15**
Conscientiousness										-.05	.07	-.04	-.05	.07	-.04
SJT-GPA (empirical)													.08	.01	.24**

Note. * $p < .05$. ** $p < .01$. SE = Standard error of Beta

Table 5a.

Results of regression analyses using the SJT-CWB (empirical), showing the variance accounted for by predictors of the CWB-Checklist.

Model	R	R ²	Adjusted R ²	Std. Error of Estimate	F-Change	Sig. F-Change
HSGPA	.18	.03	.03	28.35	6.62*	.01
ACT	.18	.03	.02	28.42	.02	.89
Self-Control	.30	.09	.08	27.59	13.48**	.00
Conscientiousness	.31	.10	.08	27.59	1.07	.30
SJT-CWB (Empirical)	.58	.34	.32	23.67	73.72**	.00

Note. * $p < .05$. ** $p < .01$. SE = Standard error of Beta

Table 5b.

Results of regression analyses using the SJT-CWB (rational), showing the variance accounted for by predictors of the CWB-Checklist.

Model	R	R ²	Adjusted R ²	Std. Error of Estimate	F-Change	Sig. F-Change
HSGPA	.18	.03	.03	28.35	6.62*	.01
ACT	.18	.03	.02	28.42	.02	.89
Self-Control	.30	.09	.08	27.59	13.48**	.00
Conscientiousness	.31	.10	.08	27.59	1.07	.30
SJT-CWB (rational)	.38	.14	.12	26.94	10.86**	.00

Note. * $p < .05$. ** $p < .01$. SE = Standard error of Beta

Table 6.

Summary of Hierarchical Regression Analysis for Variables Predicting the CWB-Checklist

Variable	Model 1			Model 2			Model 3			Model 4			Model 5		
	<i>B</i>	<i>SE</i> (<i>B</i>)	β	<i>B</i>	<i>SE</i> (<i>B</i>)	β	<i>B</i>	<i>SE</i> (<i>B</i>)	β	<i>B</i>	<i>SE</i> (<i>B</i>)	β	<i>B</i>	<i>SE</i> (<i>B</i>)	β
HSGPA	-9.31	3.62	-.18*	-9.62	4.23	-.18*	-5.50	4.30	-.10	-5.09	4.27	-.10	-2.23	3.68	-.04
ACT				.08	.59	.01	-.39	.59	-.05	-.34	.59	-.05	.16	.51	.02
Self-control							-13.18	3.59	-.26**	-10.36	4.50	-.20*	-3.20	3.95	-.06
Consc.										-3.74	3.61	-.09	-.67	3.12	-.02
SJT-CWB (empirical)													1.57	.18	.54**

Note. * $p < .05$. ** $p < .01$. Consc. = Conscientiousness. SE = Standard error of Beta

Table 7.

Results of t-tests and Cohen's d for race differences among variables

Variable	Group				<i>t</i>	<i>df</i>	Sig. (two-tailed)	Sig. (one-tailed)	<i>d</i>
	Caucasians		African-Americans						
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>					
CGPA	2.95	0.77	2.36	0.78	5.76**	453	.00	.00	.76
HSGPA	3.39	0.59	3.08	0.59	4.12**	434	.00	.00	0.53
ACT	21.84	3.58	17.89	2.90	9.60**	137.82	.00	.00	1.21
SJT-GPA (Empirical)	3.24	2.67	2.64	3.11	1.81	548	.07	.04	.21
SJT-GPA (Rational)	7.36	7.27	6.35	7.79	0.86	548	.39	.20	.13
SJT-CWB (Empirical)	18.16	8.60	12.67	10.47	4.03**	84.67	.00	.00	.57
SJT-CWB (Rational)	5.22	5.10	3.85	4.70	2.04*	399	.04	.02	.28
Self-control (self-report)	3.20	.53	3.17	0.45	0.76	462	.45	.22	.06
Conscientiousness	3.60	.66	3.45	0.66	1.99*	542	.05	.02	.15

Note. * p (two-tailed) < .05; ** p (two-tailed) < .01. *M* = Mean. *SD* = Standard Deviation. *t* = One-tailed *t* value. *d* = Cohen's *d*.

Table 8.

Results of t-tests and Cohen's d for sex differences among variables

Variable	Group				<i>t</i>	<i>df</i>	Sig (two-tailed)	Sig (one-tailed)	<i>d</i>
	Males		Females						
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>					
CGPA	2.72	.78	2.85	.85	-1.67*	510	.10	.05	0.16
HSGPA	3.22	.59	3.36	.59	-2.33*	490	.02	.01	0.24
ACT	22.52	3.76	20.53	3.65	5.25**	455	.00	.00	-0.54
SJT-GPA (Empirical)	2.9	2.91	3.25	2.67	-1.48	618	.14	.07	0.13
SJT-GPA (Rational)	15.53	7.42	17.80	7.41	-1.50	615	.12	.06	0.31
SJT-CWB (Empirical)	15.53	9.53	17.80	9.00	2.41*	450	.02	.01	0.25
SJT-CWB (Rational)	4.08	5.08	5.20	4.93	-2.13	449	.03	.02	0.22
Self-control (self-report)	3.16	.48	3.19	.52	-0.76	606	.45	.24	0.06
Conscientiousness	3.58	.64	3.56	.66	0.33	537	.74	.35	-0.03

Note. **p* (two-tailed) < .05. ***p* (two-tailed) < .01. *M* = Mean. *SD* = Standard Deviation.

t = *t* value. Sig = *p*-value. *d* = Cohen's *d*.

Table 9.

Bivariate correlations among variables. Reliability for each measure are on the diagonal

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5
Criteria							
1. CWB Checklist	84.17	44.70	(.99)				
SJT Measures							
2. SJT CWB (Empirical)	9.91	10.72	-.76**	(.77)			
3. SJT CWB (Rational)	3.36	5.47	-.59**	.73**	(.68)		
Personality Measures							
4. Conscientiousness	3.62	0.64	-.52**	.55**	.48**	(.77)	
5. Self-Control	3.44	0.63	-.63**	.55**	.53**	.66**	(.93)

Note. * $p < .05$. ** $p < .01$. *M* = Mean. *SD* = Standard deviation

Table 10a.

Results of regression analyses using the SJT-CWB (empirical), showing the variance accounted for by predictors of the CWB-Checklist.

Model	R	R ²	Adjusted R ²	Standard Error of the Estimate	F-Change	Sig. F-Change
Self-Control	.65	.420	.42	37.01	240.16**	.00
Conscientiousness	.66	.436	.43	36.53	9.67**	.00
SJT-CWB (empirical)	.815	.67	.66	28.21	224.92**	.00

Note. * $p < .05$. ** $p < .01$.

Table 10b.

Results of regression analyses using the SJT-CWB (rational), showing the variance accounted for by predictors of the CWB-Checklist.

Model	R	R ²	Adjusted R ²	Standard Error of the Estimate	F-Change	Sig. F-Change
Self-Control	.65	.42	.42	37.01	240.16	.00
Conscientiousness	.66	.44	.43	36.53	9.67	.00
SJT-CWB (rational)	.72	.52	.51	33.84	55.66	.00

Note. * $p < .05$. ** $p < .01$.

APPENDIX A

Big Five Personality Measures

Factor I (Extraversion)

10-item scale (Alpha = .87)

- + keyed Am the life of the party.
Feel comfortable around people.
Start conversations.
Talk to a lot of different people at parties.
Don't mind being the center of attention.
- keyed Don't talk a lot.
Keep in the background.
Have little to say.
Don't like to draw attention to myself.
Am quiet around strangers.

Factor II (Agreeableness)

10-item scale (Alpha = .82)

- + keyed Am interested in people.
Sympathize with others' feelings.
Have a soft heart.
Take time out for others.
Feel others' emotions.
Make people feel at ease.
- keyed Am not really interested in others.
Insult people.
Am not interested in other people's problems.
Feel little concern for others.

APPENDIX A (Continued)

Big Five Personality Measures

Factor III (Conscientiousness)

10-item scale (Alpha = .79)

- + keyed Am always prepared.
Pay attention to details.
Get chores done right away.
Like order.
Follow a schedule.
Am exacting in my work.
- keyed Leave my belongings around.
Make a mess of things.
Often forget to put things back in their proper place.
Shirk my duties.

Factor IV (Emotional Stability)

10-item scale (Alpha = .86)

- + keyed Am relaxed most of the time.
Seldom feel blue.
- keyed Get stressed out easily.
Worry about things.
Am easily disturbed.
Get upset easily.
Change my mood a lot.
Have frequent mood swings.
Get irritated easily.
Often feel blue.

APPENDIX A (Continued)

Big Five Personality Measures

Factor V (Openness)

10-item scale (Alpha = .84)

- + keyed
 - Have a rich vocabulary.
 - Have a vivid imagination.
 - Have excellent ideas.
 - Am quick to understand things.
 - Use difficult words.
 - Spend time reflecting on things.
 - Am full of ideas.
- keyed
 - Have difficulty understanding abstract ideas.
 - Am not interested in abstract ideas.
 - Do not have a good imagination.

APPENDIX B

Dominance Scale

Dominance Scale Alpha = .80]

Express myself easily.
Try to lead others.
Automatically take charge.
Know how to convince others.
Am the first to act.
Take control of things.
Wait for others to lead the way.
Let others make the decisions.
Am not highly motivated to succeed.
Can't come up with new ideas.

APPENDIX C

Self-Report Self-Control Scale

I am good at resisting temptation.

1——2——3——4——5

I have a hard time breaking bad habits.

1——2——3——4——5

I am lazy.

1——2——3——4——5

I say inappropriate things.

1——2——3——4——5

I never allow myself to lose control.

1——2——3——4——5

I do certain things that are bad for me, if they are fun.

1——2——3——4——5

People can count on me to keep on schedule.

1——2——3——4——5

Getting up in the morning is hard for me.

1——2——3——4——5

I have trouble saying no.

1——2——3——4——5

I change my mind fairly often.

1——2——3——4——5

I blurt out whatever is on my mind.

1——2——3——4——5

People would describe me as impulsive.

1——2——3——4——5

I refuse things that are bad for me.

1——2——3——4——5

I spend too much money.

APPENDIX C (Continued)

Self-Report Self-Control Scale

1——2——3——4——5

I keep everything neat.

1——2——3——4——5

I am self-indulgent at times.

1——2——3——4——5

I wish I had more self-discipline.

1——2——3——4——5

I am reliable.

1——2——3——4——5

I get carried away by my feelings.

1——2——3——4——5

I do many things on the spur of the moment.

1——2——3——4——5

I don't keep secrets very well.

1——2——3——4——5

APPENDIX C (Continued)

Self-Report Self-Control Scale

People would say that I have iron self- discipline.

1——2——3——4——5

I have worked or studied all night at the last minute.

1——2——3——4——5

I'm not easily discouraged.

1——2——3——4——5

I'd be better off if I stopped to think before acting.

1——2——3——4——5

I engage in healthy practices.

1——2——3——4——5

I eat healthy foods.

1——2——3——4——5

Pleasure and fun sometimes keep me from getting work done.

1——2——3——4——5

I have trouble concentrating.

1——2——3——4——5

I am able to work effectively toward long-term goals.

1——2——3——4——5

Sometimes I can't stop myself from doing something, even if I know it is wrong.

1——2——3——4——5

I often act without thinking through all the alternatives.

1——2——3——4——5

I lose my temper too easily.

1——2——3——4——5

I often interrupt people.

1——2——3——4——5

I sometimes drink or use drugs to excess.

1——2——3——4——5

I am always on time

1——2——3——4——5

APPENDIX D

Impulsivity measure

	Very Inaccurate (1)	Moderately Inaccurate (2)	Neither Accurate nor Inaccurate (3)	Moderately Accurate (4)	Very Accurate (5)
Am able to control my cravings. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Easily resist temptations. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Carry out my plans. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Follow through with my plans. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Rarely overindulge. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Don't know why I do some of the things I do. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Habitually blow my chances. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Make a mess of things. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Waste my time. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do things I later regret. (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

APPENDIX E

Situational Judgment Test of Self-Control (SJT measures): GPA

Please respond to the following scenarios as honestly as you can. Think about how YOU would most likely respond in these situations.

1) It is TWO days before the final exam in a college class you have struggled with. Which of the following would YOU most likely do?

Review the notes you took during the semester.

Read the book chapters assigned during the class.

Try to relax by enjoying your favorite activities.

Stay up all night to cram for the exam.

2) You have a final exam in the morning that you need to study for. It is 8pm. Your boss calls to beg you to come into work because they are short-handed. He offers you 200 dollars to come into work. Which of the following would YOU most likely do?

Tell your boss "no." You cannot come into work.

Go into work and stay up all night so you can study after your shift ends.

Help your boss call other employees to see if they can come in.

Go into work and get a good night's sleep when you get home.

3) You are preparing for an important psychology exam. You did not keep good notes during the lectures. Which of the following would YOU most likely do?

Plan a "study party" with friends who are also taking the class.

Ask the professor what to expect on the exam.

Review the assigned readings and homework.

Speak with people who have previously taken the course to get an idea of what the test is like.

APPENDIX E (Continued)

Situational Judgment Test of Self-Control (SJT measures): GPA

4) You are struggling in a class because you are distracted during lecture. You keep getting distracted by your phone and computer (browsing websites, social media, games, etc.). Which of the following would YOU most likely do?

Do not bring a smartphone or laptop to class so that you are not tempted.

Try harder to not get distracted by your smartphone or laptop.

Record the lectures and plan to listen to them in the future.

Study for the final with a friend so that you can use their notes.

5) Your roommate is having his/her birthday party at the apartment you share. You have an exam the next day that you need to study for. You expect the party to be loud. Which of the following would YOU most likely do?

Study in your room even though the party is loud.

Enjoy the party and plan to study in the morning.

Ask your roommate and their guests to keep the noise down.

Study in the library or a coffee shop.

6) It is the beginning of a new semester. You are taking four classes. All four classes require you to write a 10 to 15 page paper that is due at the end of the semester. Which of the following would YOU most likely do?

Immediately make a schedule so that you are able to complete the assignments throughout the semester.

Focus on other priorities until the end of the semester.

Finish writing all of the papers during the first week of the semester.

Drop one of the classes and take it next semester.

APPENDIX E (Continued)

Situational Judgment Test of Self-Control (SJT measures): GPA

7) You are working on a group project and your group members have not been doing their share of the work. The project is due tomorrow. There is approximately 5 hours of work left to do on the project. Your part of the project is done. You have not received any portions of the assignment from your group members. Which of the following would YOU most likely do?

Email the group members and ask them to send what they have completed so far so you can begin putting the project together.

Email the professor to ask for advice on how to handle group projects.

Stay up all night to complete the remaining parts of the project yourself.

Explain to the professor that group projects are unfair for this reason and you expect a good grade for the part of the project you were responsible for.

8) You are having relationship problems. Your significant other is upset that you do not respond to his/her messages quickly enough. You are in class when he/she begins texting you. Which of the following would YOU most likely do?

Read the texts during class but do not reply.

Do not read or reply to the texts until after class.

Read the texts and reply back to let him/her know you are in class.

Read and reply to the texts.

APPENDIX E (Continued)

Situational Judgment Test of Self-Control (SJT measures): GPA

9) It is TWO days before a fifteen page paper is due in a class you have struggled with. Which of the following would YOU most likely do?

Proof-read a rough draft of your paper that you wrote weeks ago.

Begin reviewing sources you will use to write the paper.

Try to relax by enjoying your favorite activities before starting the paper.

Stay up all night to write the paper.

10) You are studying for your final exam to be taken tomorrow morning. A friend calls and says he needs to move out of his apartment by noon tomorrow. He begs you to help him move that night. Which of the following would YOU most likely do?

Tell your friend 'no', you cannot help him move.

Help your friend move, then stay up all night so you can study.

Help your friend call other friends to see if they can help.

Help your friend move and get a good night's sleep when you get home.

11) You are preparing for an important class presentation. The presentation is supposed to be an hour long. The presentation is tomorrow. You have not started working on the presentation and are worried that you will not be able to finish in time. Which of the following would YOU most likely do?

Plan a "study party" with friends.

Ask the professor for an extension.

Stay up all night to prepare the presentation.

Get a good night's sleep and "wing it" on the presentation.

12) You are struggling in a class. Your friend sits next to you during lecture. The two of you keep distracting each other by talking. Which of the following would YOU most likely do?

Tell your friend that you do not want to sit with them anymore.

Try harder to not get distracted during lecture.

Record the lectures and plan to listen to them in the future.

Have someone tutor you before the final exam.

APPENDIX E (Continued)

Situational Judgment Test of Self-Control (SJT measures): GPA

13) You are writing a term paper that is due tomorrow and are having trouble focusing. You are spending too much time browsing the internet instead of focusing on your paper. Which of the following would YOU most likely do?

Install software to block distracting websites (example: facebook) from yourself for the next 24 hours.

Try harder to focus on your paper.

Browse the internet until you get bored and then focus on writing the paper.

Allow yourself to browse the internet for ten minutes every hour.

14) You are working on a group project and your group members have not been doing their share. The project is due in two weeks and you have not heard anything from your group members. Your part of the project is done. You have not received any portions of the assignment from your group members. Which of the following would YOU most likely do?

Email the professor to ask for advice on how to handle group projects.

Email the professor your portion of the project and explain that the other parts were the responsibility of the other group members.

Stay up all night to complete the remaining parts of the project yourself.

Explain to the professor that group projects are unfair and you expect a good grade for the part of the project you were responsible for.

15) Your roommate is being very loud when you are trying to get work done. You have asked him to keep the noise down three times, but he is still playing loud music and talking on the phone. You have a ton of work to complete by morning. Which of the following would YOU most likely do?

Threaten to hit your roommate if he doesn't keep the noise down.

Hang out with your roommate and plan to work in the morning.

Leave the apartment and find a quieter place to study, such as the library.

Call the police to file a noise complaint.

APPENDIX E (Continued)

Situational Judgment Test of Self-Control (SJT measures): GPA

16) Your best friend is upset about their relationship problems. You have been texting with them a lot to support them. You are in an important class when he/she begins texting you. Which of the following would YOU most likely do?

Read the texts during class but do not reply.

Do not read or reply to the texts until after class.

Read the texts and reply back to let him/her know you are in class.

Read and reply to the texts during class.

17) You are taking a very difficult class. You did not perform well on the midterm. You will need to earn an A on the final in order to get a B in the class. The final is in one month. Which of the following would YOU most likely do?

Drop the class.

Form a study group with other classmates that meets every week.

Speak with people who have previously taken the course to get an idea of what the test is like.

Ask the professor what to expect on the final.

18) You are very hungry before class and do not have time to eat. It is 2pm and you haven't had anything to eat all day. You did not bring any snacks to campus with you. Which of the following would YOU most likely do?

Skip class and get something to eat.

Quickly get something to eat and be late for class.

Go to class on time and get something to eat after class.

Announce to the class that you are hungry and ask if anyone can lend you some food.

APPENDIX E

Situational Judgment Test of Self-Control (SJT measures): GPA (Continued)

19) You think your psychology professor has made a mistake in the gradebook. You remember receiving a B on a paper, but the gradebook says you got a C. Which of the following would YOU most likely do?

Email the professor to explain the error.

Email the head of the department to explain the professor made a mistake.

Find the copy of your paper to double-check that you received a B.

Ask other students if they also were given a lower grade in the gradebook than they originally received.

20) You have performed very poorly on a test worth 15% of your final grade. The course is required for your major. Which of the following would YOU most likely do?

Make a strategy to be more prepared for class by doing the reading ahead of time.

Talk to classmates to ask for advice on studying.

Drop the class and take it with an easier instructor next time.

Focus all of your efforts on this class and less on other classes.

Plan to study at least 3 hours per day for the rest of the semester.

21) You are choosing classes for next semester. There is a difficult class being taught by an unhelpful professor known for giving difficult tests. The professor is an extremely harsh grader. You are told that the class is being offered again next year by an easier professor, but would result in you getting your degree a semester later than planned. Which of the following would YOU most likely do?

Take the class next year and receive your degree a few months later than planned.

Speak with your adviser about your concerns.

Talk to students who have taken the course with the difficult professor.

Take the class and hope for the best.

APPENDIX E

Situational Judgment Test of Self-Control (SJT measures): GPA (Continued)

22) You are struggling in a class. Your professor has offered extra tutoring during his/her office hours for the rest of the semester. The office hours are from 9 to 11 am. You usually do not arrive on campus until 1pm, because you work a late shift at work and like to get at least 7 hours of sleep. Which of the following would YOU most likely do?

Ask another student to tutor you.

Ask the professor if he/she can meet with you later in the day.

Get only 5 hours of sleep so you can attend your professor's office hours.

Study harder for the class instead of attending your professor's office hours.

23) You have a light course load this semester. You can have a fun relaxing semester or take an extra class and graduate sooner. The class is being taught by a professor you strongly dislike. A different professor will be teaching the course next semester. Which of the following would YOU most likely do?

Take the class so you can graduate early.

Wait to take the class next semester and DO NOT graduate early.

Sit in on the class so you are prepared to take it next semester.

Talk to your adviser to see if you can graduate early without taking the class.

APPENDIX F

Situational Judgment Test of Self-Control (SJT measures): CWB

Instructions: Please respond to the following scenarios as honestly as you can. Think about how YOU would most likely respond in these situations.

1) Your paycheck was for less than you thought it would be. You think the company did not include pay for three hours of overtime that you worked. You suspect your supervisor did not pay you for those hours on purpose. Which of the following would YOU most likely do?

Put an extra three hours of overtime on your next timesheet to make up for the time you weren't paid for.

Talk about it with your supervisor.

Complain to your coworkers.

Take extra materials or supplies from work to make up for the money you weren't paid.

2) You work in a restaurant. You owe your friend 20 dollars for a meal that he bought you. He comes into your place of work and asks if he can have a free alcoholic drink. He reminds you that he bought you a meal and you have not paid him yet. Other servers give their friends free drinks and no one has ever made a big deal of it. Which of the following would YOU most likely do?

Ask the other servers if you can give your friend a free drink.

Give your friend a free drink.

Tell your friend that you cannot give him a free drink.

Ask your shift supervisor if you can give your friend a free drink.

3) You work in a nursing home. You are in charge of grocery shopping for the home. You are supposed to use the company credit card to make grocery purchases. While you are shopping, you decide to buy some items for yourself, totaling five dollars. The cashier rings up all of the items (your personal items, and the items for the nursing home) together. There is a long line of customers behind you. Which of the following would YOU most likely do?

Pay for all of the items (your personal items, and the items for the nursing home) with the company credit card.

Pay for all of the items (your personal items, and the items for the nursing home) with your own money.

Ask the cashier to ring up all of the items again, separating your personal items and the items for the nursing home separately.

Tell the cashier that you will not pay for the personal items, since they should have been separated from the rest of the items.

APPENDIX F (Continued)

Situational Judgment Test of Self-Control (SJT measures): CWB

4) A co-worker has made several mistakes this week. This has caused you to have extra work and added to your stress. Which of the following would YOU most likely do?

Discuss the issue with your supervisor.

Yell at the co-worker causing problems.

Ask your co-worker if they have any problems in their personal life.

Do not do any extra work caused by your co-worker's errors.

5) You have a job that you strongly dislike. You feel you are treated unfairly, and the work is frustrating. A friend is thinking about applying for a job with your employer and wants to know what it's like. Which of the following would YOU most likely do?

Tell them it is a terrible place to work.

Tell them that the job has not been a good fit for you.

Tell them you like the company.

Tell them you hate your job.

6) You are waiting tables in a restaurant. A customer says that you got their order wrong. You are 100% sure you got their order correct. Which of the following would YOU most likely do?

Apologize to the customer and replace their meal.

Confidently tell the customer that you are sure you got their order correct.

Ignore the customer.

Tell the kitchen that the customer is wrong, but you need to replace their meal.

APPENDIX F (Continued)

Situational Judgment Test of Self-Control (SJT measures): CWB

7) A regular customer is unable to pay for their purchase. They left their wallet at home. They ask if you can give them the items for free. They are supposed to pay 10 dollars. Company policy says that you are not allowed to give away items before receiving payment. Which of the following would YOU most likely do?

Explain to the customer that you are not able to give them the items without being paid.

Ask your supervisor if you can give the items for without being paid.

Give the customer the items and ask them to pay later.

Do not ring up the items and allow the customer to have them for free.

8) You did not get enough sleep last night due to a family emergency. You want to go into work late. Your boss will not be at work today. You are paid by the hour. Which of the following would YOU most likely do?

Go into work late but do not tell anyone you were late.

Call into work and say you will be late.

Go into work on time.

Try to take a nap at work.

9) A new coworker named John has a severe lisp. You are hanging out with your coworkers and they begin mocking John's lisp. John is not there to hear them mocking him. It is important to get along with your coworkers. Which of the following would YOU most likely do?

Tell your coworkers that it is not appropriate to mock John.

Do not participate in the joke but do NOT tell them to stop.

Join in on mocking John.

Tell John that he is being mocked by coworkers.

APPENDIX F (Continued)

Situational Judgment Test of Self-Control (SJT measures): CWB

10) You are waiting tables at a restaurant. You think another waiter has stolen your tip left by a customer. The tip was for three dollars. The other waiter denies that they took the money. You told your boss, and he said that he does not want to get involved in the situation. Which of the following would YOU most likely do?

Take the money from the other waiter's wallet.

Take the money from the cash register.

Take no action.

Refuse to return to work until you are given the money.

11) You overhear a coworker call you a hurtful word. Which of the following would YOU most likely do?

Yell at them so they leave you alone in the future.

Pretend you did not hear them.

Warn other coworkers that he/she is not a nice person.

Alert your boss to the situation.

12) Your supervisor has been bullying one of your coworkers, calling him names. Your company has a rule stating that if you see someone being bullied, you must report it. In the past, your supervisor has fired employees for reporting his behavior to corporate. Which of the following would YOU most likely do?

Report the bullying to your supervisor's boss.

Tell your the victim of the bullying that he needs to stand up to the bully.

Do not report the bullying to your supervisor's boss.

Tell your coworker (the victim of the bullying) that it is his responsibility to report the bullying to your supervisor's boss.

APPENDIX F (Continued)

Situational Judgment Test of Self-Control (SJT measures): CWB

13) You are looking for a job that will start in three months. You are not sure if you will be drug tested. Which of the following would YOU most likely do?

Do NOT abstain from drug use.

Look for a job that does not drug test.

Do not do any drugs.

Stop doing drugs two months before the job starts so that you are able to pass the drug test.

14) You are a cashier at a store. One of your close friends cannot pay for his items because he forgot his wallet. Your friend promises to pay you back if you let him take the items now. The items cost about \$10. Company policy says that you are not allowed to give away items before receiving payment. Which of the following would YOU most likely do?

Tell your friend that you are not able to give them the items without being paid.

Ask your supervisor if you can give the items for without being paid.

Give your friend the items and ask them to pay later.

Do not ring up the items and allow your friend to have them for free

15) A co-worker has been very annoying and difficult to work with. This has added to your stress at work and has made your team less efficient. Which of the following would YOU most likely do?

Discuss the issue with your supervisor.

Yell at the co-worker.

Tell your coworker they should take a day off work to rest.

Try to ignore your coworker.

16) You are working in an office. You think that a coworker stole money from your wallet. They deny that they took the money. Which of the following would YOU most likely do?

Threaten to hit your coworker if he does not give you back the money.

Steal money from your coworker.

Take no action.

Refuse to return to work until you are given the money.

APPENDIX F (Continued)

Situational Judgment Test of Self-Control (SJT measures): CWB

17) You have a supervisor whom you strongly dislike. They are rude, and make your job more difficult. A friend is thinking about getting a job where you work. They ask if you like your supervisor. Which of the following would YOU most likely do?

- Tell them that your supervisor is not a good person.
- Tell them that you and your supervisor are not a good fit.
- Tell them that your supervisor is great.
- Tell them you do not want to talk about it.

18) A coworker has been spreading a rumor about you. Which of the following would YOU most likely do?

- Threaten to hit them if they ever do it again.
- Ignore the rumors.
- Get revenge by spreading a rumor about your coworker.
- Alert your boss to the situation.

19) A new coworker named John has body odor. You are not sure if other people can smell it or not. Which of the following would YOU most likely do?

- Warn your coworkers that John has body odor.
- Take no action until someone else notices the body odor as well.
- Talk to your supervisor about John's body odor.
- Tell John to take a shower.

20) After graduation, you are offered your "dream job." The pay is double what you expected to make. The job does not allow you to drink alcohol on weeknights. Which of the following would YOU most likely do?

- Drink on the weeknights secretly.
- Tell management that it is none of their business what you do after work.
- Do not drink on weeknights.
- Look for another job, even if it pays less.

APPENDIX F (Continued)

Situational Judgment Test of Self-Control (SJT measures): CWB

21) You are at work and are feeling very tired. You only slept for two hours last night. Your boss is concerned about meeting a deadline for a client that is due in three days. She specifically wants YOU to complete the project (not one of your coworkers). If you sleep better tonight, you think you will be able to meet the deadline if you start the project tomorrow. Which of the following would YOU most likely do?

Focus on simple tasks that are less urgent but will need to be done at some point (e.g. filing papers).

Tell your boss you are sick and need to go home.

Work on the project with the deadline.

Assign a coworker to work on the project with the deadline while you focus on other tasks.

22) Your boss tells you to have inventory completed by tomorrow morning. You know he will not be at work tomorrow. You have had a very busy shift and do not want to stay late to do inventory. Which of the following would YOU most likely do?

Go to work early tomorrow morning and complete the inventory.

Complete the inventory before you leave work tonight.

Complete the inventory before your boss returns to work in two days.

Ask your boss to direct one of your coworkers to complete the inventory since you do not have time.

23) You overhear three coworkers making racist jokes. You are not offended, but you know the jokes are making customers uncomfortable. You do not want to seem uptight to your coworkers. Which of the following would YOU most likely do?

Ignore the jokes and do not report them.

Join in on making the jokes.

Report your coworkers to your boss.

Ask your coworkers to speak more quietly or stop.

24) You don't get along with coworkers assigned to your project. You do not expect to get along with them while you work on the project. Which of the following would YOU most likely do?

Ask your boss to assign you to a different project.

Ask your boss to assign the coworker to a different project.

Choose to ignore the coworker while you work on the project.

Pretend to get along with the coworker while you work on the project.

APPENDIX F (Continued)

Situational Judgment Test of Self-Control (SJT measures): CWB

25) You are at work. Tomorrow morning, you have a final exam for a college course you are taking. You do not feel ready to take the test and are worried you will fail. You have a shift at work until 11pm. You have the course notes with you on your phone. Which of the following are YOU most likely to do?

Leave your phone in your car so you won't be tempted to study at work.

Use your phone to study in the bathroom so no one will see you studying at work.

Explain to your boss that you need to study while you work.

Take your phone into work but do not use it to study.

26) One of your coworkers (his name is Jim) is bullying another coworker (his name is Matt). Jim has been calling Matt profane names and physically intimidating him. In the past, Jim has been warned before that he would be fired if he was reported for bullying again. Jim says he will give you a large amount of money if you do not report the bullying to your supervisor. You are behind on loan payments and the money he's offering you would be very helpful. Which of the following would YOU most likely do?

Report the bullying to your supervisor but do not say that you were offered money to not report it.

Report the bullying to your supervisor and say that you were offered money to not report it.

Do not report the bullying to your supervisor.

Accept the money, then report the bullying to your supervisor anyway.

27) You are offered your "dream job." The pay is double what you currently make. The job does not allow you to drink alcohol on weeknights. Which of the following would YOU most likely do?

Drink on the weeknights secretly.

Tell management that it is none of their business what you do after work.

Do not drink on weeknights.

Look for another job, even if it pays less.

APPENDIX F (Continued)

Situational Judgment Test of Self-Control (SJT measures): CWB

28) You and your team are falling behind at work. A coworker who you trust teaches you and your coworkers a faster way to accomplish a task. The method they teach you does not follow the company policy and goes against the way you were trained by the company. Which of the following would YOU most likely do?

Tell your coworkers to follow company policy.

Start using your coworker's method to complete the task.

Try to develop a faster method that also follows company policy.

Strictly follow the company's policy when completing the task.

29) Your boss has been disorganized during the past week, resulting in extra work for you. Your boss is usually very good at their job. You are stressed out and do not think you can keep up. Which of the following would YOU most likely do?

Explain to your coworkers that your boss is disorganized and ask if they can take part of the work load.

Speak to your boss's supervisor about the situation.

Ask your coworkers for help with the work load, without explaining that your boss is at fault.

Try your best to keep up with the workload without asking for help.

30) It is the day before you have a final and you are at work. You would like to study for an exam tomorrow but do not have your notes or books with you at work. It is a slow day at work and you only have two hours left in your shift. Your coworker says they don't care if you leave early. Which of the following would YOU most likely do?

Stay at work and hope you have enough time to study after your shift.

Leave work before your shift ends so you can study.

Leave work early and tell your coworker to call you if it gets busy.

Call your boss and ask if you can leave early.

31) You are at work. Tomorrow you have a final exam for a college course you are taking. You would like to study for the exam, but do not have your notes or books with you at work. It is a slow day at work and you only have two hours left in your shift. Your coworker says they don't care if you leave early. Which of the following would YOU most likely do?

Stay at work and hope you have enough time to study after your shift.

Leave work before your shift ends so you can study.

Leave work early and tell your coworker to call you if it gets busy.

Call your boss and ask if you can leave early.

APPENDIX F (Continued)

Situational Judgment Test of Self-Control (SJT measures): CWB

32) You have a paper due for a college course your are taking. The paper is due tomorrow at 10:00 am. Your computer has broken. The library is closed. Your workplace has laptops that are not used very often. Your company has a policy of never allowing employees to take equipment home, however many people do. Which of the following would YOU most likely do?

Take a work computer home and return it as soon as you have finished the paper.

Plan to wake up early tomorrow morning and try to finish the paper at the library.

Start calling friends to see if you can borrow one of their computers.

Ask your immediate supervisor if you can take a computer as long as you return it in the morning.

33) You are a student who works part time. You have been working hard during finals week and are very tired. You have a work shift in the morning. Morning shifts are usually slow, so there will probably not be much work for you to do. You have to write a paper due in two days and worry you will not have the energy to write it. Which of the following would YOU most likely do?

Make sure you get enough sleep, even if you have to be a few minutes late for work.

Make sure you get to work on time and hope you are able to finish the paper in time.

Call your supervisor to say that you need some sleep and will be running late.

Explain the situation to your professor and ask for a one-day extension.

34) You are at work. The phone at work is ringing and the person who usually answers it is out of the office. As the phone continues to ring, a coworker screams at you “just answer the phone!” Which of the following would YOU most likely do?

Answer the phone.

Ignore your coworker and allow the phone to ring.

Yell back at the coworker that he should answer the phone.

Report the incident to your supervisor.

35) You work in a shoe store. You have been wanting to buy an expensive pair of shoes that are for sale at your workplace. The shoes go on sale this Friday. There is only one pair in your size. Which of the following would YOU most likely do?

Hide the shoes in the back so you can buy them when the sale arrives.

Hope that no customers buy the shoes before you have the opportunity to buy them.

Ask your manager if you can buy the shoes early at the sale price.

Take the shoes home and pay for them on the day of the sale.

APPENDIX F (Continued)

Situational Judgment Test of Self-Control (SJT measures): CWB

36) Your job allows you to have a free meal on your break on days when you are working a double shift. Company policy states that you can only have the free meal if you eat during your break. You were not hungry during your break so you did not eat. At the end of your shift, you are feeling very hungry. Which of the following would YOU most likely do?

Take a free meal home and record it as your break meal.

Do not take the free meal.

Ask your coworker if you should take the free meal.

Call your supervisor and ask if you can take a free meal.

37) You overhear three coworkers making sexual jokes that you know are making other people uncomfortable. Which of the following would YOU most likely do?

Ignore the jokes and do not report them.

Join in on making the jokes.

Report your coworkers to your boss.

Let your coworkers know that other people can hear them and ask them to speak more quietly or stop.

38) You work at a clothing store. Your manager has given you more tasks than you can handle. He wants you to hang new clothes in the racks for customers before you leave for the day. You will not be able to hang the clothes in the rack before your shift ends. Which of the following would YOU most likely do?

Explain to your manager that you are too busy to hang clothes.

Ask a coworker to hang the clothes.

Hide the clothes in the storage room and hang them tomorrow.

Stay after your shift to hang the clothes.

39) You are very hungry before your shift at work. If you stop to eat before work, you will be late. You did not bring any snacks with you. Which of the following would YOU most likely do?

Be late to work and get something to eat.

Drive over the speed limit and try to eat without being late.

Go to work on time and get something to eat after your shift.

Go to work on time and ask your supervisor if he has anything for you to eat.

APPENDIX F (Continued)

Situational Judgment Test of Self-Control (SJT measures): CWB

40) Your coworker is being very loud when you are trying to get work done. You have asked him to keep the noise down three times, but he is still playing loud music and talking on the phone. You have ton of work to complete by morning. Which of the following would YOU most likely do?

Threaten to hit your coworker if he doesn't keep the noise down.

Hang out with your coworker and plan to finish the work later.

Find a quieter place to work, such as a coffee shop.

Complain to your supervisor.

41) Your best friend is upset about their relationship problems. You have been texting with them a lot to support them. You are at work when he/she begins texting you. Texting at work is against the rules, but most of your coworkers text anyway. Which of the following would YOU most likely do?

Read the texts at work, but do not reply.

Do not read or reply to the texts until after work.

Read the texts and reply back to let him/her know you are at work and cannot text.

Read and reply to the texts at work.

42) You are having relationship problems. Your significant other is upset that you do not respond to his/her messages quickly enough. You are in a meeting with your boss when he/she begins texting you. Which of the following would YOU most likely do?

Read the texts during the meeting, but do not reply back.

Do not read or reply to the texts until the meeting is over.

Read the texts and reply back to let him/her know you cannot text right now.

Read and reply back to the texts during the meeting.

APPENDIX G

Work Judgment Profile

INSTRUCTIONS: *This survey presents you with situations that you might experience on the job. Each situation is followed by several possible actions. Identify which action would be the BEST ACTION and which would be the WORST ACTION to take in the situation. It is very important that you answer as honestly as possible even if you think the action is negative or unflattering. Remember that your responses will be used for research purposes only and no one will have access to your responses. Use separate answer sheets to record your responses.*

Below is a sample question:

Question:

You want to get off work next Friday so you can get an early start on a vacation.

- A. Ask your boss for the day off
- B. Call in sick
- C. Don't show up
- D. Call in Friday morning and say you can't come to work because of a death in the family
- E. Tell your boss on Thursday afternoon that you will not be in on Friday.

Answers:

<u>BEST ACTION</u>					<u>WORST ACTION</u>				
A	B	C	D	E	1. A	B	C	D	E

This person circled A for BEST ACTION and C for WORST ACTION.

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APPENDIX G

Work Judgment Profile (Continued)

1. You are overqualified for your job and this makes you bored and unhappy. In the near future you intend to look for another job but that does not help you right now.
 - a. Keep quiet and do your work
 - b. Ask your boss for more challenging work
 - c. Begin looking around for other jobs for the next year
 - d. Involve yourself in enjoyable activities outside work
 - e. Just give up and quit.
2. You are in the middle of a difficult job and you ask your boss for help. Your boss won't help.
 - a. Get help from someone else
 - b. Tell the boss you don't like the boss' attitude
 - c. Go to the boss' supervisor and complain
 - d. Refuse to do the work
 - e. Ask for a meeting with your boss' supervisor
3. You need new equipment and supplies to get the job done right, but your boss does not want to spend the money. The work and morale of your work group are suffering.
 - a. Explain the situation to your boss' supervisor
 - b. Do your job and mind your own business
 - c. Get together with your co-workers and meet with the boss to demand changes
 - d. Show the boss how spending money will actually help save money by buying faster equipment, etc.
 - e. Spend some of your own money to buy supplies
4. Your boss has demanded you make many changes at once. These changes do not improve performance and everyone is unhappy.
 - a. Wait to see what happens.
 - b. Get together with some other unhappy employees and complain to the boss
 - c. Write up a different plan and present it to the boss
 - d. Give the changes time to work and keep a good attitude
 - e. Keep doing things the old way
5. Your company has laid off workers. Now you have more work to do.
 - a. Work the longer hours it takes to get the job done.
 - b. Do the same amount of work you did before
 - c. Organize company picnics and social events to improve morale
 - d. Look for another job
 - e. Try to work harder and smarter by finding faster and simpler ways to get your job done

APPENDIX G

Work Judgment Profile (Continued)

6. Your boss is not happy about the amount of work you are doing. The boss wants you to work faster.
 - a. Accept the challenge and work as fast as you can
 - b. Explain that quantity does not replace quality and keep working at the same speed
 - c. Make a list of your work and do the most important work first
 - d. Ask your boss to tell you how to do it faster
 - e. Try to give some of your work to your co-workers
7. Your boss is impossible to please. Your boss constantly picks on you and you have a personality clash. You just cannot get along.
 - a. Be patient and try to do better
 - b. Tell your boss this hurts your work and you would do better if you were left alone
 - c. Talk to your co-workers to see if anyone else is having the same problem; as a group confront the boss
 - d. Go to the Human Resource department and ask for help
 - e. Ask to be reassigned to a different department and a different boss
8. You have to work with a co-worker with whom you have a personality clash. You just cannot get along.
 - a. Avoid and ignore this co-worker
 - b. Talk to your boss about the problem and try to find a solution
 - c. Talk to the co-worker and try to solve the problem
 - d. Be nice at work but have no other contact with this co-worker
 - e. Wait, it will get better
9. Your work is shared with a co-worker. You work every afternoon and the co-worker works every morning. The co-worker is not doing a fair share of the work and as a result you have too much to do in the afternoon.
 - a. ask the boss to handle it
 - b. Talk with the co-worker and demand that the co-worker do more work
 - c. Decrease the amount of work you do
 - d. Try to have a friendly, non-threatening meeting with the co-worker to divide the tasks
 - e. Ask the boss to assign a different co-worker to you

APPENDIX G (Continued)

Work Judgment Profile

10. One of your co-workers is always late, misses meetings and does not work toward group goals.
 - a. Ask the co-worker to leave the group
 - b. As a group speak to the co-worker about the problem
 - c. Speak to the co-worker privately about the problems
 - d. Ask the boss to handle it
 - e. Ignore the co-worker and do the work
11. Your co-worker handles the initial stages of a work task and then you finish the job. Unfortunately, your co-worker is lazy and only works when the boss is watching. This makes it difficult for you to do your work.
 - a. Ask your other co-workers to help motivate this slow worker
 - b. Bring the situation to the boss' attention.
 - c. Go directly to the co-worker and complain
 - d. Help the co-worker with the work
 - e. Ask the boss if you can switch jobs with the co-worker so you do not have to depend on the co-worker
12. Your boss was laid off and no one was hired to replace the boss. It is the busiest time of the year.
 - a. Work as hard as you can. You might get a promotion
 - b. Try to get everyone to work hard as a team
 - c. Pressure someone higher up to hire a new boss
 - d. Take charge and manage everyone yourself
 - e. Do your own work at your own pace
13. A co-worker refuses to stay late to finish critical work. Other employees must work late to get it done.
 - a. Ask your boss to handle it
 - b. Speak with this co-worker and ask the co-worker to stay and help
 - c. Refuse to do the work
 - d. Do the work without complaining
 - e. Bring the subject up during an employee meeting
14. Many of your co-workers gossip about other employees
 - a. Ignore them because this is a common problem
 - b. Don't join in the gossip
 - c. Ask them to stop because it hurts everyone
 - d. Ask your boss to tell them to stop
 - e. Get everyone together to discuss the problem

APPENDIX G (Continued)

Work Judgment Profile

15. Your boss assigns you work to do that is not part of your usual job
 - a. Do the new work one time and then refuse to do it again
 - b. Ask the boss for an explanation
 - c. Do the work to the best of your ability
 - d. Have a discussion with your boss about what the boss wants and expects you to do
 - e. Ask the boss to take away some of your other assignments

16. One of the co-owners of your company is very rude and yells all the time. Many employees are afraid of this person.
 - a. Don't talk about the problem and avoid this person
 - b. Gather other employees together to tell the other co-owner about this person's behavior
 - c. Quit
 - d. Threaten to file a law suit
 - e. In a non-threatening way talk to the co-owner

17. Your boss treats you and your co-workers with little respect. The boss always criticizes your work.
 - a. Get all the co-workers together to confront the boss
 - b. Search for a new job
 - c. Approach the boss and state your concerns
 - d. Complain to the boss' supervisor
 - e. Try to get along and improve your work

18. You are working overtime and your work performance is suffering
 - a. Continue working but refuse the overtime
 - b. Explain the situation to your boss and ask that your overtime be cut
 - c. Take some vacation time or a few sick days
 - d. Ask the boss to assign extra help in your area
 - e. Take more frequent breaks

19. You have been given new work to do and you are bored
 - a. Ask to be given different work
 - b. Finish the new work but tell your boss how you feel
 - c. Try to be moved back to your old job
 - d. Work very hard to look good
 - e. Just relax and take it easy on the new work

APPENDIX G (Continued)

Work Judgment Profile

20. Your group leader does not give direction to your group. There is not a plan to get the work done.
 - a. Talk with the group and vote in a new leader
 - b. Volunteer to help lead the group
 - c. Ask the boss to pick a new leader
 - d. Take charge and begin to lead the group
 - e. As a group, without the leader, make a plan to get the work done
21. Your boss expects you to do different work than you usually do on your job. The boss lends you to other departments without consulting you. This interrupts the work you are already doing.
 - a. Demand a raise
 - b. Look at it as a chance to learn new things
 - c. Work hard and hope to be noticed
 - d. Talk to your boss and try to agree on what you are to do
 - e. Quit
22. You have been working at the same job for over a year and feel ready for more responsibility.
 - a. Ask for a promotion
 - b. Apply for a different position within the company
 - c. Discuss your feelings with your boss and ask your boss to evaluate your work
 - d. Start looking for a new job with a different company
 - e. Wait, work hard, and see what happens
23. Co-workers gossip and take sides against other co-workers. Work is not getting done because the employees are distracted.
 - a. Get everyone together to handle the problem
 - b. Don't take sides
 - c. Tell the boss about the problems
 - d. Ask the boss to make them quit gossiping
 - e. Choose to join the most powerful side
24. A co-worker asked you to lie to cover up the co-worker's absence.
 - a. Agree to do it once but never again
 - b. Refuse to lie
 - c. Do it; it's no big deal
 - d. Refuse and tell the co-worker that lying could cause trouble
 - e. Tell the boss about the co-worker's request

APPENDIX G (Continued)

Work Judgment Profile

25. Your boss is showing favoritism to some co-workers. They get easier work and better hours.
- Ignore it
 - Discuss your feelings with your boss
 - Ask your boss to treat everyone fairly
 - Tell your boss' supervisor of this unfair treatment
 - Talk to your co-workers and tell them how you feel
26. Your boss gave you a new project. As you look over the details, you see that the only way to meet the deadline would be to skip your lunches and breaks for the next two weeks.
- Work very hard even if it means you skip your lunches and breaks
 - Make sure your boss realizes the difficult situation and assigns someone to help you
 - Tell your boss the project is impossible to complete in two weeks and refuse to do it
 - Ask your boss to give you a more reasonable deadline
 - Complain to the boss' supervisor about the way the boss assigns work
27. Your boss reassigned you to a new job. Your old job gave you freedom and responsibility. Your new job does not make use of your skills.
- Be content and do your best
 - Ask your boss for the reasoning behind the move
 - Ask to be moved back to your old job
 - Take it easy at work
 - Start looking for another job
28. You have suggested a great idea to your company but due to political reasons your idea was not used
- There's nothing you can do so forget it
 - Wait six months and offer the idea again
 - Suggest your idea to a more friendly boss
 - Try to build support from nay areas before you suggest the idea again
 - Wait three months and then suggest the idea again.
29. You were promised a raise if you developed a plan to improve productivity. You have worked many hours on this project. Your plan works, but you have not received your raise.
- Be patient and continue to wait
 - Meet with your boss and demand the raise
 - Go to your boss' supervisor and complain
 - Document the improvements and discuss it with the boss
 - Look for another job

APPENDIX G (Continued)

Work Judgment Profile

30. Yesterday you heard your boss yell at your friend for taking some time off when your friend was supposed to be working. Today you noticed the boss left work to go to the mall on a personal errand.
- a. Let it go because supervisors get privileges
 - b. Tell your co-workers about it
 - c. Complain to your boss' supervisor
 - d. Confront the boss and ask the boss to do the same thing expected from other workers
 - e. Take some time off yourself
31. Your place of work is being updated but you have not received the same new equipment as your co-workers
- a. Refuse to do your work until you get new equipment
 - b. Do the best with what you have
 - c. Assume this was a mistake and ask the boss about it
 - d. Take another worker's new equipment when the worker is absent
 - e. Meet with the boss and demand new equipment.