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A TAXOMETRIC ANALYSIS OF THE LATENT STRUCTURE OF THE REPRESSOR PERSONALITY CONSTRUCT

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Abstract

A taxometric analysis of the latent structure of the repressor construct was conducted using original indices derived from both the Marlowe-Crowne Social Desirability Scale (MCSDS: Crowne & Marlowe, 1964) and the trait version of the State-Trait Anxiety Inventory (STAI: Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983). Both Mean Above Minus Below A Cut (MAMBAC: Meehl & Yonce, 1994) and Maximum Slope (MAXSLOPE: Grove & Meehl, 1992) analyses were conducted with data from 1040 undergraduates who completed a battery of self-report questionnaires that included the MCSDS, STAI, and the NEO-Five Factor Inventory (NEO-FFI) (Costa & McCrae, 1992). Results were interpreted using simulated data that matched parameters of the collected data. Findings with traditional indices of the repressor construct did not support the hypothesis that the repressor construct is taxonic, and rather provided some evidence in support of a dimensional latent structure. Findings indicated that both the stability and agreeableness personality scales of the NEO-FFI, as well as traditional indices, capture core features of the repressor construct. Repressors reported above average levels of both stability and agreeableness, but normal levels of extraversion, openness, and conscientiousness. Findings from the NEO-FFI suggest that repressors may have difficulties asserting needs in relationships and that the denial of negative emotions may be more central to the repressor construct than the claiming of positive emotions. Implications of findings from the current study for choices about research design, analysis, and interpretation of studies about the repressor construct are discussed.

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The Repressor Construct

The repressor construct captures the characteristic tendency of some individuals to disown the conscious experience of anxiety and other socially undesirable aspects of the self (Weinberger, 1990). Individuals who disown negative emotions and other negative self-attributes are said to *repress* the unwanted material (A. Freud, 1966; S. Freud, 1957); are called *repressors* (Weinberger); and compose twenty percent of the general population (Myers, 2000). Repressors resemble extremely anxious individuals on indices of anxiety that do not require self-awareness (Weinberger). In particular, although repressors report a low level of anxiety, they exhibit signs of anxiety comparable to that shown by highly anxious people on behavioral, physiological, and information processing indices of anxiety. Despite repressors' similarity to those who are highly anxious, repressors are often mistakenly classified as members of the low anxious group when information from self-report anxiety measures alone is used to group experimental participants. This inclusion of repressors contributes to the formation of a low anxious group that lacks validity because it is not solely composed of truly low anxious individuals. Such inclusion may account for the oft-reported lack of differences between the high and low anxious (Brown, Tomarken, Orth, Loosen, Kalin, & Davidson, 1996). Further, it provides one potential explanation for the often-found discordance, or lack of relationship, between self-report and non-self-report indices of anxiety (Miller & Kozak, 1995; Rachman & Hodgson, 1973). Unfortunately, most anxiety researchers do not factor the repressor construct into their research designs, data analyses, and interpretations. Rather, they mistakenly assign repressors to low anxious groups. This inattention to the repressor construct has probably precluded an accurate understanding of anxiety.

One potential reason for the failure of researchers to account for repressors is the history of difficulties associated with measuring the repressor construct and its correlates. This history includes Freud's (1957) impossible-to-falsify hypotheses about people such as repressors who avoid awareness of negative emotions and findings that the repressor construct, as it was originally measured by the repression-sensitization self-report scale (1961), lacked discriminant validity from the construct of trait anxiety (Golin, Herron, Lakota, & Reineck, 1964; Sullivan & Roberts, 1969).

Freud's arguments were tautological: If someone denied avoidance of anxiety he asserted this denial was itself evidence of avoidance. Fortunately, theorists refined the concept of emotion so that its presence or absence could be inferred by the presence or absence of three types of indices. Specifically, Lang (1978) introduced the idea that emotion could be inferred through physiological, behavioral, and cognitive response indices. This multi-method approach to assessment of emotion has been refined and extended by other investigators (Eysenck, 1997; Kozak & Miller, 1993; Foa & Kozak, 1986) so that it has become possible to step outside of Freud's tautological reasoning loop and to ultimately identify repressors based upon discrepancies between their reports of low levels of negative emotion and responses in other domains that belie those reports (Gudjonsson, 1981; Weinberger, Schwartz, & Davidson, 1979).

Even with advances in the conceptualization and measurement of emotion, however, investigators who did not have the means to measure behavioral or physiological indices could not include the repressor construct in their research designs. This was partly because the most commonly used self-report measure to identify repressors did not discriminate them from truly low anxious (LA) individuals. In fact,

Byrne's (1961) repression-sensitization scale correlated r = -.91 with a measure of trait anxiety (Weinberger, 1990). Therefore, it was impossible to isolate repressors from the LA using Byrne's scale alone. Consequently, anxiety investigators without access to multiple measurement resources continued to include repressors in low anxiety comparison groups.

This problem was resolved, however, when Weinberger, Schwartz, and Davidson (1979) observed that the Marlowe-Crowne Social Desirability Scale (MCSDS) could be combined with a measure of trait anxiety to identify repressors. The MCSDS is a self-report measure of defensiveness that can validly classify individuals as repressors. Defensiveness is defined as the characteristic tendency to automatically process information in a way that leads to a very positive perception of the self and the maintenance of self-esteem (Crowne & Marlowe, 1964; Weinberger, 1990). The MCSDS correlates around *r* = -. 20 with trait anxiety measures (Derakshan & Eysenck, 1997d) and therefore has discriminant validity from them. As well, it is not a face valid measure of the tendency to experience negative or positive emotions as measures of trait anxiety are. Thus, it is not clear to the respondent that it can be combined with a measure of trait anxiety to identify individuals that avoid the experience of anxiety.

Identifying Repressors

Weinberger et al.'s (1979) classification system defined repressors as those who reported an extremely high level of defensiveness on the MCSDS along with a low level of trait anxiety. Although both repressors and the low anxious (LA) reported low levels of anxiety, Weinberger found that repressors could be distinguished from the truly low anxious by their extremely high levels of defensiveness (See Table 1). Weinberger et

al.'s classification system also resulted in identification of two other groups of individuals, the defensive high anxious (DHA) and the traditionally high anxious (HA). Both of these groups acknowledged the experience of high levels of anxiety, but only the DHA reported extremely high levels of defensiveness. Thus, both repressors and the DHA share a characteristic tendency to view information in a biased fashion that results in the preservation of self-esteem and an idealized self-concept.

Efforts have been made to refine the repressor classification system, however, none have provided incremental validity to the original system, which continues to be used by the majority of investigators (Derakshan & Eysenck, 1997b; Furnham & Traynar, 1999; Turvey & Salovey, 1993). An alternative classification of the repressor construct that defines repressors as individuals below the median on a distress factor and in the upper third of the distribution on a restraint factor is depicted in Table 2 because some of the studies described below rely on this six group classification system.

Construct Validity of the Repressor Construct

Several investigations have provided support for the validity of Weinberger et al's (1979) conceptualization of the repressor construct (Weinberger, 1990). Initial research showed that whereas repressors reported low levels of anxiety they showed greater behavioral and physiological correlates of anxiety during stressful phrase association tasks when compared to HA and LA groups (Weinberger et al., 1979). Behaviorally, repressors exhibited more verbal disturbance and slower responses. Physiologically, repressors showed greater muscle tension in the frontalis muscles (an index of negative affectivity: Cacioppo, Tassinary, & Fridland, 1990) than the HA and LA groups, and trends for greater levels of heart rate and electrodermal activity than the LA group. After

the association tasks, self-report ratings of state anxiety decreased for the repressor group, increased for the HA group, and remained the same for the LA group. Thus repressors tendency to underreport anxiety was responsive to, and exacerbated by, a stressful situation. The failure of Weinberger et al.'s (1979) study to include a DHA group left open an important alternative explanation for findings. Specifically, defensiveness alone, rather than a discrete repressor personality type, could have accounted for the findings that repressors were more reactive to a stressful task than the low defensive HA and LA groups. Nonetheless, several additional reports from independent laboratories have provided evidence that repressors differ not only from the HA and LA, but also the DHA group on indices of anxiety (see Furnham & Traynar, 1999, for a review).

Physiological indices. Examination of physiological research has also shown that repressors can be discriminated from non-repressors and are more physiologically reactive on measures of cardiovascular activity (Asendorpf & Scherer, 1983; Newton & Contrada, 1992; Weinberger & Davidson, 1994), vascular activity (Asendorpf & Scherer, 1983), skin conductance (Barger, Kircher, & Croyle, 1997; Benjamins, Schuurs, & Hoogstraten, 1994; Brosschot & Jansen, 1998; Gudjonsson, 1981; Sparks, Pellechia, & Irvine, 1999), electromyographic activity (Weinberger et al., 1979), electroencephalograph activity (Davidson, 1983), stress hormone levels (Brown, Tomarken, Orth, Loosen, Kalin, & Davidson, 1996), blood lipid levels (Niaura, Herbert, McMahon, & Sommerville, 1992) and immune function (Jamner, Schwartz, & Leigh, 1988). Notably, manipulations that involved putting repressors in social evaluative contexts and instructing them to self-disclose information about their personalities resulted in robust physiological activity. Repressors showed greater heart rate increases

during a public social evaluative condition where they were instructed to deliver a self-disclosing speech about the most undesirable aspect of their personality than when they delivered the same speech during a private condition (Newton & Contrada, 1992). Heart rate increase during the public condition was also significantly greater than that evidenced by non-repressor groups. Nevertheless, repressors reported much less distress than was evident on physiological indices of their emotional response in the public condition. Similar results were reported by Weinberger and Davidson (1994): Repressors showed significantly more physiological reactivity than non-repressors when asked to disclose information about their personality, but did not interpret it as reflecting anxiety when this reactivity was pointed out to them. These results suggest that self-disclosure of socially undesirable self-attributes such as the experience of anxiety may be threatening to repressors.

Behavioral indices. Behavioral indices can be used to discriminate repressors from non-repressors. For example, repressors' facial expressions were rated by judges as indicating high anxiety despite reports of low anxiety (Asendorpf & Scherer, 1983). Specifically, judges rated them as showing anxiety comparable to that exhibited by the HA group and significantly more than that seen in the LA group. Ratings of facial anxiety in the DHA group did not differ from any comparison group. Another study also indicated that observational ratings of behavioral anxiety in repressors were comparable to that seen in the HA and significantly greater than in the LA group (Fox, O'Boyle, Barry, & McCreary, 1989). Additional findings showed that repressors were willing to expose themselves to higher levels of shock than non-repressors (Jamner & Schwartz, 1986, cited in Jamner & Leigh, 1999) and that repressors had a poor behavioral outcome

following a multidisciplinary treatment for chronic pain (Burns, 2000). Repressors also showed a behavioral delay, compared to non-repressors, in rating the valence of ambiguous sentences that could have either a threatening or a non-threatening meaning (Hock, Krohne, & Kaiser, 1996).

Behavioral anxiety in repressors has also been found in studies evaluating time spent reading negative information about the self. Repressors who received primarily negative feedback about their personality (a measure of self-concept: Costa & McCrae, 1992) spent significantly less time reading this feedback in a private condition than in a public condition where they thought another person would have the information about them (Baumeister & Cairns, 1992). In fact, repressors reported worrying about how that person would view them. These results suggest that repressors are distressed when they think others have access to negative information about them, but that they avoid processing negative information about the self if others are not also exposed to it.

In addition to the direct assessment of behavioral anxiety, studies have also examined indirect indices. For example, psychotherapy is a situation marked by sharing of negative information about the self . Individuals high in defensiveness, a hallmark of the repressor construct, show a high likelihood of terminating therapy prematurely (Strickland & Crowne, 1963). Such premature termination suggests that the self-concept of highly defensive individuals is threatened by the work of therapy that involves honest self-evaluation, disclosure, and acceptance of many facets of the self not typically acknowledged outside of the therapy context. Such self-acceptance must include incorporation, into the self-concept, of less desirable parts associated with sexual and aggressive impulses and of negative emotions in general (Freud, 1957; Jourard, 1971,

Newman, Castonguay, Borkovec, & Molnar, in press; Perls, 1969; Perls, Hefferline, & Goodman, 1951; Rogers, 1951,1961). This would be expected to be especially difficult in the context of an intimate therapeutic relationship.

Early relationships and the presentation of a positive self to others. One theory of the etiology of repression is that these individuals were exposed to emotionally unavailable caregivers in childhood. Evidence for this theory includes findings that repressors tend to report both idealized attachment histories and avoidant attachment features when given the opportunity to also endorse some items that reflect secure attachment on the same measure (Vetere & Myers, 2000). As well, behaviorally specific examples of repressors' interactions with caregivers have been rated by judges as characterized by the lack of an emotionally available caregiver (Myers & Brewin, 1994). Lack of an emotionally available caregiver to validate and affirm the self's experience and to teach emotion regulation strategies presents children with major challenges in developing a positive view of the self and adaptive emotion management strategies (see Bowlby, 1988; Cassiday, 1999, for reviews). Additionally, children whose caregivers neglect them emotionally must learn to behave and self-present in ways that will maintain attachment with and acceptance by caregivers. Without attachment to caregivers, through socially desirable and positive behaviors, children will perceive a threat to self-survival. Thus, such children develop a habit of focusing on the caregiver's desires and behaving in ways acceptable to the caregiver because such behavior helps to maintain attachment and to eliminate the anxiety of an anticipated absent caregiver. Children who find that displays of negative emotions such as anxiety and fear lead to unavailable caregivers may become disconnected from the needs of the self because they learn to focus on others'

needs instead. Such children will lack awareness of emotional experience and the need status that emotions signal. For example, fear signals threat to the self and thus a need to think, feel, and behave in self-protective ways, thus if it is rigidly avoided by someone without emotion management strategies then that person will lack exposure to information relevant to self-protection (Greenberg & Paivio, 1997). Moreover, to experience negative emotions such as fear without emotion management strategies is perceived by children as threatening to the cohesiveness of the self. Thus, it is plausible that repressors repeatedly practice positive self-presentation in order to manage the anxiety associated with an absent caregiver. This conceivably results in the very positive self-concept found in adult repressors. Repeated suppression of awareness of undesirable aspects of the self is practiced repeatedly and so well that it becomes an automatic process of which the repressor lacks awareness. Indeed, evidence suggests that repressors' reports about the self do not change in situations where they think others will know if they are being deceptive (Millham & Kellogg, 1980). Finally, individuals high in defensiveness are rated by others as often engaging in extremely self-neglecting behaviors (Crowne & Marlowe, 1964). Such self-neglect is consistent with theories that posit that individuals treat the self with the same neglect behaviors received from early caregivers (Benjamin, 1996). Together, theories about the formation of attachment with important others and the development of emotion regulation abilities provide a plausible motivation for repressor's tendencies to avoid awareness of negative attributes and to claim possession of extremely positive ones.

Evidence reviewed to this point suggests that repressors have reported levels of anxiety comparable to that reported by the LA, but exhibited more anxiety than this

group on measures of physiology and behavior. Further, repressors levels of physiological and behavioral anxiety have been comparable to, or greater than levels found in HA individuals and DHA individuals do not tend to differ from the repressor or the LA group on such indices (see Derakshan & Eysenck, 1997ab; Eysenck, 1997; Weinberger, 1990; Furnham & Traynar, for reviews). Taken together, this indicates that repressors are unique kinds of anxious individuals who should be discriminated from the truly LA and who differ from HA individuals. Much less is known about the DHA group, however, they typically show levels of anxiety in between that found in repressors and the HA.

Information processing indices. Measures of information processing serve as useful indices of anxiety when they do not require awareness of distress. On these measures, repressors exhibit biased processing marked by avoidance of the perception of social threat to self, avoidance of negative emotions evoked by threat to self, and attention toward information consistent with an overly positive self-concept / personality. These cognitive biases have been found on measures of attention (e.g., Calvo & Eysenck, 2000), encoding (e.g., Hansen, Hansen, & Shantz, 1992), and retrieval (e.g., Davis, 1990).

To manipulate attention, investigators have used dichotic listening tasks (Bonnano, Davis, Singer, & Schwartz, 1991; Calvo & Eysenck, 2000; Poppell & Farmer, 2000) and visual scanning tasks (Fox, 1993,1994; Myers & McKenna, 1996) and showed that repressors direct attention away from information that is threatening to the self. For example, repressors read rapidly displayed threat words more quickly than HA and LA groups, suggesting that they were initially primed to perceive such words (Calvo &

Eysenck). However, when the threat words were presented with a greater time delay, repressors did not differ from the LA group, and both the repressor and LA groups read more slowly than the HA group. These results suggest that repressors showed early and more automatic vigilance to, and then later avoidance of, threat information. In contrast, the HA group showed a later vigilance to threat (Calvo & Eysenck). Interestingly, the LA group read delayed ambiguous words more rapidly than both the repressor and HA groups who did not differ from each other, suggesting that LA were primed to expect non-threatening outcomes and that repressors perceived the ambiguous words as threatening as did the HA group.

Evidence for encoding differences show that when repressors attend to threat information, it is encoded differently than in non-repressors and in a way that decreases how much of it is retrieved. These results have been found in an autobiographical memory task (Hansen & Hansen, 1988) and a task that required visual encoding of emotional stimuli (Hansen et al., 1992). For example, compared with non-repressors, repressors described memories with fewer emotion descriptors and as less multi-dimensional. Although repressors encoded dominant facial emotions of happiness, anger, sadness, and fear similarly to non-repressors, they encoded fewer of the visually presented non-dominant emotions. This effect of less encoding for non-dominant emotions was especially strong when the non-dominant emotion was fear and almost nonexistent when the non-dominant emotion was happiness. This suggests a discrete and less complex encoding process that could lead to an associative network that lacks rich retrieval cues for negative emotional states in the self. Thus, negative material would be more difficult for repressors to access during retrieval tasks.

In fact, retrieval differences for negative material between repressors and non-repressors have been found in studies of autobiographical memory. For example, repressors, compared to non-repressors, retrieved fewer memories of times when they felt negative emotions. Additionally, repressors were significantly older than comparison groups at the time these negative events occurred (Davis, 1990; Myers & Brewin, 1995). Interestingly, when the retrieved event evoked positive emotions, group differences were not found for recall and age at the time of the recalled event. Even when researchers provided repressors with retrieval cues that included descriptions of events typically associated with different emotions, repressors continued to retrieve fewer negative personal memories (Newman & Hedberg, 1999). Further, Davis (1987) found that repressors recalled fewer negative memories only for the self and not for others. Her results thus ruled out the possibility that repressors merely lacked labels for negative emotions because they used such labels to describe others' negative experiences. In another experiment, repressors recalled less personal negative feedback than positive feedback in a condition where feedback was primarily negative (Baumeister & Cairns, 1992). In comparison, when repressors received primarily positive feedback about the self (i.e., information that evoked a positive emotional state), they were less able to recall positive information than the negative feedback embossed within it. These results suggested the possibility that in comparison to information that evoked a negative emotional state, repressors more readily attended to, encoded, and retrieved information that evoked a positive emotional state within the self. In another study, repressors increased their recall of negative emotional material when asked to repeatedly engage in efforts to recall such information (Davis, 1990). This increase in recall associated with

repeated attempts is referred to as hyperamnesia (Payne, 1987; Scrivner & Safer, 1988) and has also been found in highly anxious individuals who acknowledged motivation to avoid recall of memories in which the self was threatened (Foa, Molnar, & Cashman, 1995).

Repressors' selective recall may be due to retrieval inhibition (Myers, Brewin, & Power, 1998), a process that involves active efforts to avoid retrieval of information. In one experiment, a directed forgetting task along with the list method of stimuli presentation was used. This method strengthens the inference that retrieval inhibition, rather than lack of encoding, is measured. It was found that repressors forgot more of the negative to-be-forgotten words than did non-repressors, even when encoding was increased via the list method of stimulus presentation. No group differences were found when the stimuli to be forgotten were positive, thus further suggesting that retrieval inhibition of negative material had occurred: Such inhibition of retrieval is viewed by cognitive researchers as motivated forgetting (Myers et al.). Also consistent with the finding that repressors attempt to inhibit retrieval of threatening information are findings from a separate experiment in which repressors were instructed to listen to an audio taped recording of a story in which critical, positive, or indifferent parental behaviors were described (Myers & Brewin, 1995). They were further instructed to imagine that the story was their own personal experience. Repressors recalled fewer of the critical parental behaviors than non-repressors, while they did not differ in recall of positive behaviors. These results were especially interesting in light of the already-described findings that judges rated behaviorally specific examples of repressors' memories as marked by lack of caregiver emotional availability (Myers & Brewin, 1994). Thus, it is especially

interesting that repressors recalled less negative material about the unavailable caregiver of another when the material was encoded as if it was the self's personal experience.

In summary, results from investigations of information processing suggest that, compared to non-repressors, repressors attend early to negative emotional material and then avoid attention to it later (Calvo & Eysenck, 2000). This later avoidance may rely on a process whereby repressors encode information less complexly in associative networks so that it is not easily retrievable (Hansen & Hansen, 1988). As well, repressor's avoidance may rely on retrieval inhibition that is motivated by a desire to protect the self (Myers et al., 1998). Interestingly, repressors can recall negative emotional material when it is presented within the context of primarily positive information about the self (Baumeister & Cairns, 1992) and when asked to engage in repeated retrieval efforts (Davis, 1990). Especially noteworthy is the general finding that less information that has a negative valence and threatens the self is attended to, encoded, and retrieved than is information with a positive valence (Davis, 1987; 1990; Hansen & Hansen, 1988; Hansen, Hansen, & Schantz, 1992). Eysenck's observation that repressors engage in systematic distortions when processing information has resulted in the unified theory of anxiety. This theory accounts for both the discordance found between self-report indices of anxiety and indices of anxiety that do not rely on self-awareness (Eysenck, 1997) and for the information processing mechanisms used by repressors to maintain an overly positive self-concept.

Eysenck's Unified Theory of Anxiety

Eysenck holds that repressors, in contrast to the HA, reliably avoid attending to and interpreting both internal and external information that can be used to surmise anxiety within the self. The specific internal sources of information include both cognition (i.e., information attained via attention, encoding, and retrieval processes) and physiology. The external information includes both environmental stimuli and behavioral responses. Four types of cognitive biases have been identified in HA and repressor individuals. Whereas HA exhibit (1) selective attentional bias; "the tendency to attend selectively to potentially threatening information or stimuli, repressors show (2) opposite attentional bias; "the tendency to avoid attending to potentially threatening information or stimuli." Additionally, HA exhibit (3) interpretive bias; "the tendency to interpret ambiguous information or stimuli in a threatening fashion," and "repressors show (4) opposite interpretive bias; "the tendency to interpret ambiguous information or stimuli in a non-threatening fashion." Eysenck's theory has outlined how repressors attention and interpretive biases can account for their reports of low anxiety despite evidence to the contrary. Although it is not explicitly stated in his theory, the object perceived as threatened by both the high anxious and repressors is the self, however each group copes differently with it. Interestingly, the creators of the MCSDS viewed it as a measure of "defensiveness and protection of self-esteem" (Crowne & Marlowe, 1964, p. 206) and the manual for one of the most popular measures of trait anxiety (Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983) asserts that anxiety is in response to either social or physical threat to the self. The instruments used to identify repressors thus collectively measure a motivation to view the self positively in the service of self-protection.

Self-Concept of The Repressor and the Five Factor Model of Personality

Consistent with the assumption that repressors are motivated to protect the self by presenting with extremely desirable traits are findings from self-report studies. These findings (see Weinberger & Schwartz, 1990, for a review) suggest that repressors' information processing biases are also applied to processing of internal or external information about their personality. Personality has been defined as the characteristic styles of thinking, feeling, and behaving in which an individual engages (McCrae & Costa, 1990) and is largely tantamount to one's self-concept (McCrae & Costa). Before presentation of findings about how repressors view their self-concept, it is important to review the theory known as the *five-factor model* (FFM) of personality or *the big five* (Costa & McCrae, 1992; Digman, 1990; Goldberg, 1990; McCrae & Costa, 1990, 1997; Wiggins & Trapnell, 1997). The FFM derives its name from repeated findings across independent groups of investigators that five personality domains consistently emerge in factor analyses of responses from a range of inventories that measure styles of thinking, feeling, and behaving (Costa & McCrae, 1992; Watson, 2000). These five personality domains include neuroticism, extraversion, openness, agreeableness, and conscientiousness.

Neuroticism. Individuals who score high on Neuroticism (N) are characterized by the pervasive experience of negative emotions such as fear, sadness, embarrassment, anger, guilt, and disgust. They often have difficulty controlling their impulses and coping with stress. In comparison to those high in N, those low in N are calm, relaxed, and even-tempered. They are stable people who cope well with, and do not become overwhelmed by, negative emotions that can be associated with stress. Those low in N

can keep their impulses in check and are less prone to the vicissitudes of chronic negative emotions (Costa & McCrae, 1992). Neuroticism is composed of six traits that include anxiety, angry hostility, depression, self-consciousness, impulsiveness, and vulnerability.

Extraversion. Individuals who score high on Extraversion (E) are sociable, assertive, active, energetic, talkative, and optimistic and tend to experience positive emotions such as joy, happiness, love, and excitement. In comparison, those low in E are reserved; seek out fewer interactions with others and less excitement and stimulation. Additionally, they do not experience the intensity of positive affect or the high energy levels of those high in extraversion. The tendency to experience distress also includes a low well-being dimension related to sociability (Costa & McCrae, 1992). Extraversion is composed of six traits that include warmth, gregariousness, assertiveness, activity, excitement-seeking, and positive emotions.

Openness. Individuals who score high on Openness (O) are characterized by their active imagination and curiosity about both internal and external events. They attend to inner feelings and thus experience both positive and negative emotions intensely. They are characterized by their aesthetic sensitivity, preference for variety, intellectual curiosity, independence of judgment, and willingness to adapt less traditional values. In comparison, those low in O are described as more conservative in their views and conventional in their behaviors. They have a preference for what is familiar. In specific environments extremely high and low levels of overall openness could be considered socially desirable, however in general such extremes are viewed as undesirable (Costa & McCrae, 1992). Openness is composed of six traits that include fantasy, aesthetics, feelings, actions, ideas, and values.

Agreeableness. Individuals who are high on Agreeableness (A) are characterized by their ingenuousness, willingness to help others and expectations that others will be just as helpful, sympathy and concern for others in need, willingness to defer to others to decrease interpersonal conflict, and modesty. In comparison to those high in A, those low in A are described as cynical and critical of others, skeptical, antagonistic, willing to manipulate interpersonal scenarios to obtain desired outcomes, self-focused, willing to fight for their beliefs, arrogant, hard-headed, and realists (Costa & McCrae, 1992). Agreeableness is composed of six traits that include trust, straightforwardness, altruism, compliance, modesty, and tender-mindedness.

Conscientiousness. Individuals who score high on Conscientiousness (C) are characterized by their self-control including their ability to control their impulses. This control of impulses contributes to their ability to complete tasks in an orderly fashion, their reliability, their morality, and to their description by others as organized and disciplined (Costa & McCrae, 1992). Their discipline contributes to their tendency to be high achievers and, at extreme levels of C, workaholics. In comparison to those high in C, those low in C are described as less disciplined and less organized, less exacting in their work, more spontaneous and hedonistic. Conscientiousness is composed of six traits that include competence, order, dutifulness, achievement striving, self-discipline, and deliberation.

The FFM of personality is related to the degree to which a person generally experiences both positive and negative emotion, referred to as positive and negative trait emotionality, respectively (Watson, 2000). Negative emotionality is the "glue" that holds together all of the traits that compose neuroticism whereas positive emotionality is the

"glue" that holds together the higher order traits of E (Watson). Trait emotionality is also related to A and C, even after controlling for variance from the other three personality domains (Watson). However, trait emotionality is not related to the openness personality domain (Watson). Thus, four of the big five personality domains are linked to an individual's tendency to experience both positive and negative emotions.

Big five personality. Two laboratories have examined how repressors responded on measures of the FFM (Pincus & Boekman, 1993; Ramanaiah, Byravan, & ThuHien, 1996). In the first investigation, repressors, and the other two WAI (see Table 2) low distress groups, reported significantly less neuroticism than all three of the high distress groups (Pincus & Boekman). A similar pattern of results was found for extraversion such that all low distress groups reported significantly more E than all high distress groups. No group differences were detected for openness. Of the five personality domains, agreeableness (A) distinguished repressors best from all of the other groups. Repressors reported significantly more A than all WAI-comparison groups. Both the repressor and self-assured groups reported significantly more conscientiousness than all three high distress groups, the latter of which did not differ from each other. Repressors also scored 1.5 standard deviations higher on agreeableness than a normative comparison group. Repressors were in the average range on the N, E, O, and C personality domains.

The only other investigators to measure repressor's responses on a measure of the big five did not find that repressors differed from any of the WAI comparison groups (Ramanaiah et al., 1996). Unexpectedly, repressors actually reported the lowest mean level of agreeableness as indicated by an examination of means. Also unexpectedly, the undersocialized group scored significantly higher on agreeableness than the

oversocialized group. These findings were inconsistent with those reported by Pincus and Boekman (1993). Another surprising finding was revealed upon inspection of conscientiousness means. Specifically, the highest conscientiousness mean was found in the undersocialized group and the lowest in the oversocialized group. These results are extremely surprising in light of reports that some restraint is necessary for conscientiousness (i.e., impulse control) and that high levels of distress make self-restraint difficult (Weinberger & Schwartz, 1990). The undersocialized group, by definition, has the lowest, and the oversocialized group, the highest levels of restraint and distress, respectively (Weinberger & Schwartz). Thus, the undersocialized group would have been expected to have a lower conscientiousness score than the oversocialized group. No overall group differences were found for the openness domain. Overall, findings from this study suggest the possibility of data processing errors.

Another personality trait measure, the Eysenck Personality Questionnaire (EPQ-R: Eysenck, Eysenck, and Barrett, 1995), was administered to repressors who reported significantly lower levels of neuroticism than the DHA and the HA (Furnham and Traynar, 1999). Repressors and the DHA had significantly higher Lie scores than the LA and HA. The Lie scale is a measure of defensiveness that correlates highly with the MCSDS (Gudjonsson, 1981). Psychoticism, a trait that reflects low levels of both agreeableness and conscientiousness (McCrae & Costa, 1985), was also measured. The HA reported a significantly higher level of psychoticism than the DHA only. No group differences were found for the extraversion scale or on variables related to extraversion: behavioral activation including drive, fun, and reward. On behavioral inhibition, the two high anxious groups were significantly higher than the LA group.

Measures of Personality in Addition to The Big Five

Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV: American Psychiatric Association, 1994) Axis II personality disorder traits. Personality disorders listed in the DSM-IV have parallels to the big five model of personality (Costa & Widiger, 2002) and can contribute to an understanding of the self-concept of the repressor. Repressors have reported significantly more features of compulsive personality than the WAI reactive group described in Table 2 (Weinberger & Schwartz, 1990). This suggests they will score high on the conscientiousness facets of competence, order, dutifulness, and achievement striving and low on openness to values (Costa & Widiger, 2002). In the same study, repressors reported a significantly lower level of borderline, hysterical, and avoidant personality features than the oversocialized and reactive groups. This suggests that, in comparison to the two latter groups, repressors will report a low level of neuroticism and a high level of agreeableness (Costa & Widiger). Both the oversocialized and reactive groups reported significantly higher dependent features than the self-assured, but not the repressor, group. Repressors were not distinguishable from other groups in terms of narcissism, sociopathic, or dependent personality features and often did not differ from the self-assured group on personality variables (Weinberger & Schwartz).

Self-descriptions. An informal assessment of self-concept in Weinberger et al.'s seminal 1979 study required participants to describe, in a few words, "the most outstanding or important characteristics" of their personality. Repressors gave self-descriptions that reflected, "preoccupation with mastering negative emotion" and rigid self-restraint. Repressors self-descriptions were markedly different from those of the LA,

who gave self-descriptions marked by a flexible approach to life, openness to experience in general, extraversion and associated positive emotionality. Repressors were also markedly different from the HA, who tended to provide self-descriptions that reflected a vulnerable view of self and a tendency toward inhibition in relationships. Weinberger and his colleagues provided no description of the DHA group, but this group has been described by Myers (2000) as uncomfortable disclosing information, embarrassed and worried.

Repressors also describe the self more positively and less negatively generally than do non-repressors (Kreitler & Kreitler, 1990; Myers & Brewin, 1996; Weinberger & Schwartz, 1990). Repressors reported significantly more positive self-references than did both the DHA and the HA (Krietler & Krietler). In a later experiment participants rated the degree to which negative and positive descriptors were true of both self and others (Myers & Brewin): Repressors were compared to a combined group of non-repressors from which sub-threshold repressors had been omitted. All participants showed a bias whereby positive words were rated as more, and negative words as less, true of the self with no group differences for either the degree of discrepancy between self and other ratings for positive words or how much each group rated positive words as true of the self. Repressors, however, reported a significant discrepancy between self and other ratings for negative words and reported significantly fewer negative words were true of the self than of others. Finally, repressors, as well as the other two WAI low distress groups, described the self with significantly greater self-esteem than did all three high distress groups (Weinberger and Schwartz). Repressors have also described the self as less likely to experience negative events than each of Weinberger et al.'s original (1979)

comparison groups and than a non-extreme comparison group composed of participants who reported average levels of trait anxiety and defensiveness (Myers & Brewin, 1996). Moreover, repressors reported a belief that significantly more positive events would happen to them than the non-extreme comparison group.

Self-restraint. Repressors have reported a significantly higher level of self-control of emotions, significantly less sexual activity and delinquency, and therefore more control over sexual and aggressive impulses, than all comparison WAI-classified groups but the oversocialized (Weinberger and Schwartz, 1990). Repressors also reported significantly less alcohol use than the two other low distress groups and significantly less aggression than the reactive group (Weinberger & Schwartz). In another study, repressors reported significantly more attentional control than all comparison groups classified using Weinberger et al.'s (1979) original system (Krietler & Krietler, 1990). They also reported significantly less negative daydreaming than the DHA and the HA and more control over unpleasant and unwanted thoughts and images than non-repressors (Myers, 1998). In addition, repressors reported using significantly more distraction and less punishment to control unwanted cognition than all of Weinberger's original comparison groups.

Worry. Repressors reported using significantly less worry to control thoughts than the reactive, the group that reported significantly more worry than all comparison groups. An independent research group reported similar findings (Eysenck & VanBerkum, 1992). Finally, Weinberger and Schwartz found that the self-assured, but not repressors, reported significantly less obsessive worrying than the oversocialized.

Interpersonal functioning. In a separately reported investigation that used the same participants as Pincus & Boekman (1993), Pincus and Boekman (1995) described

repressors responses on a measure of the superordinate interpersonal dimensions of dominance (status) and nurturance (love or affiliation). These dimensions, in combination, map onto the Big Five domains of E and A. Specifically, groups high in both dominance and nurturance are expected to be high in E. Groups high in nurturance, but low in dominance, should be high in agreeableness. Moreover, groups extremely low in dominance and high in nurturance and therefore agreeableness are expected to have difficulties with assertive behaviors (Pincus & Boekman, 1995). Repressors reported significantly higher nurturance scores than the undersocialized and reactive group, but did not differ from groups on dominance with one exception. All groups including repressors reported lower dominance than the undersocialized group.

Assertiveness in relationships was more directly measured in two separate studies. Repressors reported significantly more assertive behaviors and less aggressive / hostile and aggressive / manipulative behaviors than the HA and significantly less passive behavior than the DHA in one study (Furnham and Traynar, 1999). In the other study, repressors did not differ from the five WAI comparison groups on a measure of assertiveness (Weinberger and Schwartz, 1990). Finally, on a measure called rationality / emotional defensiveness designed to measure the tendency to avoid negative emotions in interpersonal conflicts and to use logic and reason to cope with conflicts and life in general, repressors reported significantly higher levels of rationality / emotional defensiveness than non-repressors (Ritz & Dahme, 1996). In that avoidance of assertive behaviors is a means of not evoking negative emotions related to assertion of needs in relationships, this indirectly suggests that repressors have assertiveness difficulties.

Coping. Repressors have reported more total coping resources than all of Weinberger et al. (1979) original comparison groups (Myers and Vetere, 2000). Specific coping resources measured included physical (e.g., jogging), cognitive (e.g., looking for the positive side of people and situations), emotional (e.g., ability to cry when sad), social (e.g., enjoying being with people), and spiritual / philosophical (e.g., praying). On specific coping scales repressors reported significantly more cognitive and emotional coping resources than the HA and DHA; significantly more spiritual / philosophical coping resources than both the LA and HA; and significantly more social and physical coping than both the LA and the DHA. Finally, repressors reported significantly more of all types of coping than a combined non-repressor group that was composed of individuals from the entire screening pool from which the extreme comparison groups were derived.

Repressors have also reported significantly more problem-focused coping (i.e., active coping, planning, seeking instrumental support), positive reinterpretation and growth, and acceptance than the DHA and HA groups and significantly less emotion-focused coping (i.e., seeking emotional support, suppression of competing activities, restraint, focus on and venting of emotions, denial, and behavioral disengagement) than the HA group (Myers and Derakshan, 2000). Furnham and Traynar (1999) reported similar results. Repressors did not differ from the LA in either of these studies (Furnham & Traynar; Myers & Derakshan).

The tendency to attend toward or away from information to cope with stressful situations is known as monitoring and blunting, respectively, (Miller, 1996). Repressors reported significantly less monitoring than the HA group, and no group differences were

detected on the blunting scale (Fuller and Conner, 1990). Proportion of Monitors and Blunters, as operationalized by Miller's (1996) cut-off scores, was also calculated in this study and found to differ across groups. Repressors composed 65% of the Blunter and 35% of the Monitor group. In contrast, the HA composed only 17% of the Blunter and 83% of the Monitor group. The LA composed 54% of the Blunter and 46% of the Monitor group. Proportion of both repressors and LA did not differ significantly in either the Blunter or the Monitor group. In a more recent investigation that included a DHA group, repressors reported significantly less monitoring than the DHA and HA groups, and showed a trend to monitor less than the LA (Myers and Derakshan, 2000). Consistent with Fuller and Conner's (1990) findings, no group differences were found for blunting.

Emotionality. Repressors have reported significantly more overall positive and less overall negative emotions than the DHA (Krietler & Krietler, 1990). In particular, repressors reported significantly more joy, contentment and vigor, and less fatigue and depression than the DHA group. Jealousy was the only specific negative emotion that repressors reported significantly less of than all traditional (Weinberger et al., 1979) comparison groups. All groups reported significantly less negative emotions overall than the HA group. Particular negative emotions that repressors reported significantly less of than the HA included depression, anxiety, fatigue, and fear. No group differences were found for alexithymia, a lack of words for feeling states (Krietler & Krietler, 1990). In a separate study, repressors did report a significantly higher level of alexithymia than the WAI reactive group.

Attributional style. Myers (1996) measured attributional style, also called locus of control, in a repressor and a combined non-repressor group. Attributional style refers to

the explanations that people devise to account for outcomes. Depressive individuals tend to attribute negative outcomes to internal characteristics of the self (verses external) that are both stable (verses unstable) and present across situations (i.e., global verses specific). Repressors exhibited an opposite attributional pattern from depressive individuals. Specifically, repressors reported the belief that significantly more negative events were due to a combination of external, unstable, and specific factors than did a comparison group of non-repressors composed of Weinberger et al.'s (1979) original comparison groups. Two separate research groups did not report group differences in attributional style when comparisons were made between repressors and each of Weinberger et al.'s (1979) original groups separately (Furnham and Traynar, 1999; Kreitler & Krietler, 1990).

Physical Health. One source of information indicative of threat to the self, for which repressors would be expected to exhibit the opposite attention and interpretive biases proposed by Eysenck (1997), is information about negative physical health. Such biased information processing would be expected to result in optimistic reports about physical health-related variables. Indeed, repressors reported fewer negative physical symptoms and a more positive physical health status than a combined non-repressor group (Myers & Vetere, 1997) despite lack of published evidence of superior health. In a separate study, repressors reported significantly fewer health problems than the DHA in the following areas: digestion, breathing, skin problems, and lassitude (Krietler & Krietler, 1990). Repressors also reported significantly fewer health problems than the HA in the following areas: circulation, digestion, temperature changes, mouth, eyes, muscular tension, pain, being sick, sleep problems, and total somatic complaints.

Repressors did not differ from the LA on any reported health problems (Krietler & Krietler).

Repressors have also reported a significantly greater belief in their ability to control important health outcomes than all of Weinberger et al.'s original comparison groups (Krietler & Krietler, 1990). In yet another study, repressors reported greater beliefs in their ability to control conditions such as skin and lung cancer and heart attacks than did non-repressors (Myers & Reynolds, 2000). Repressors' beliefs in control over health outcome are suggestive of an idealized self-view that extends to physical health. Repressors' health beliefs are alarming because they are combined with a bias against noticing potentially negative physical symptoms and a tendency to not experience the distress that often motivates seeking of preventive health care (Watson & Pennebaker, 1989). This combination of factors may allow for the progression of disease states to a point where intervention is more challenging. Consistent with this possibility were findings from two studies: repressors diagnosed with coronary heart disease or cancer had a greater mortality rate than did non-repressors (Frasure-Smith et al., 2002; Jensen, 1987, respectively). Also consistent were findings that repressors engaged less than non-repressors in the proactive behaviors necessary to cope with stressful medical conditions such as asthma (Lehrer, 1999; Steiner, Higgs, Fritz, Laszlo, & Harvey, 1988) and cardiovascular problems (Denolett, 1992).

The tendency to notice and respond with fear toward physical symptoms that are characteristic of increased sympathetic and decreased parasympathetic activity is called anxiety sensitivity (Taylor, 1995). Those low in anxiety sensitivity tend not to be vigilant toward such physiological information and also tend not to interpret it negatively if it is

noticed. It would be expected that those lowest in anxiety sensitivity would report the lowest level of physical symptoms and therefore report the fewest health problems. When anxiety sensitivity groups were formed using tercile splits, repressors composed 27% of the lowest, 17% of the middle, and none of the high anxiety sensitivity group (Wehrun and Cox, 1999). Consistent with these findings that many repressors were biased against noticing signs of anxiety were findings from an experiment in which anxiety was evoked and repressors were informed of their physiological reactivity and asked to explain it (Weinberger & Davidson, 1994). Repressors attributed physiological reactivity in response to an anxiety provocation to external and non-emotional causes such as caffeine intake.

Taken together, findings about repressors' self-reported personality-related characteristics suggest that the information processing biases described by Eysenck (1997) influence how repressors' present the self on self-report measures. Repressors appear to selectively attend toward, encode, and retrieve information that allows for the maintenance of an extremely positive self-concept (e.g., Myers & Brewin, 1994; 1995). Notably, A emerged as a hallmark of the repressor construct that discriminated repressors from non-repressors as well as scores on N or neuroticism-related variables did (Pincus & Boekman, 1993). Reports of high levels of A can be viewed as either acknowledgment that one strives to maintain relatedness with others or, conversely, as the denial of interpersonal manipulation behaviors aimed at achieving one's goals. Not surprisingly, the denial of negative emotion or, conversely, the report of high levels of stability remained central to the repressor construct. Personality research suggests that conscientiousness, or the tendency to show self-restraint (Weinberger & Schwartz, 1990),

also captures an important component of the repressor construct. Although repressors reported more extraversion-related characteristics than did non-repressors, this personality characteristic did not strongly distinguish them (Pincus & Boekman, 1993). Finally, openness did not distinguish repressors from non-repressors (Pincus & Boekman). This is not surprising in light of findings that the openness personality domain is not associated with emotionality (Watson, 2000).

Limitations of Strategies Used to Examine the Nature of the Repressor Construct

To date, analytic strategies used to infer the nature of the repressor construct have been inadequate. To determine the nature of a construct is to determine not only the characteristics of a construct, but also its latent structure. To do so is to determine whether it is taxonic (i.e., a discrete type), dimensional, or a combination of both. Without such information researchers cannot confidently make inferences about a construct. One strategy researchers have used to study repressors has been to conduct two-way ANOVAs with trait anxiety and defensiveness or with distress and restraint as the two factors, depending on which classification system is used to identify repressors (see Tables 1-2). The two-way ANOVA approach misses important interactions that may be attributable to a subset of groups that score similarly on one of the two factors (Tabachnick & Fidell, 2001). For example, repressors, self-assured, and undersocialized WAI groups all score below the median on the distress factor (see Table 2). Consider an investigator who uses the WAI six-group model of the repressor construct and finds no interaction between distress and restraint and assumes that no support for the discreteness of the repressor construct has been obtained. This assumption is not justified because the two-way ANOVA approach is insensitive to detecting several group differences because

it assigns variance to main effects of independent factors even when variance is due to a particular group cell. In other words, ANOVAs carry an assumption of linearity for each factor and often interaction effects are not sensitive to nonlinear patterns among groups which score similarly on a particular factor. An alternative analytic strategy that allows for detection of group differences is to assign participants to discrete groups and to conduct a one-way ANOVA with only one independent factor of group. Weinberger and Schwartz have directly compared the one- and two- way ANOVA approaches using either distress and restraint as the factors in a two-way ANOVA, or WAI group as the factor in a one-way ANOVA. They found the former approach was insensitive to particular nonlinear group differences detectable when a one-way ANOVA with group as the independent variable with six levels (i.e., WAI groups) was used. The two-way ANOVA analytic strategy did not detect differences between repressors and either the self-assured or the oversocialized groups because it attributed cell variance to a main effect of restraint on which all three groups scored high. Although use of the one-way ANOVA is superior to the two-way ANOVA to make inferences about the repressor construct if it is in fact taxonic, the fact remains that any ANOVA assumes a categorical latent structure without providing empirical support for this assumption. Only one analytic strategy can evaluate hypotheses about the latent structure of a construct: taxometric analysis (Waller & Meehl, 1998). Although other analytic strategies have been developed to search for the existence of types, these approaches cannot provide empirical evidence regarding a construct's latent structure (Meehl, 1995). Only taxometric analysis allows for an empirical determination of the true nature of the

repressor construct and will therefore assist researchers in developing an accurate understanding of the nature of both it and anxiety.

Taxometric Analysis and its Contributions to Theory About Psychological Constructs

Paul Meehl (1962, 1990) and his colleagues (Meehl & Grove, 1993; Meehl & Yonce, 1994; 1996; Waller & Meehl, 1998) developed taxometric analyses to examine the hypothesis that a discrete type of person called the schizotype existed (Meehl, 1990). To determine the latent structure of the schizotype personality construct, Meehl and others applied the mathematical procedures of taxometric analysis to self-report indices referred to as *indicator* variables of the unique styles of thinking, feeling, and behaving that best-captured the core of the schizotype construct and then empirically determined its latent structure (Golden & Meehl, 1979; Lenzenweger; Lenzenweger & Korfine; Tyrka, Haslam, & Cannon, 1995). Taxometric analysis procedures can also be applied to variables that capture the repressor construct to determine it's latent structure. Such knowledge will contribute to selection of the most appropriate research design, analytic, and data interpretation strategies (Ruscio & Ruscio, in press) for investigating the repressor construct.

Results from taxometric analyses have presented great challenges for theorists who have presumed that many psychological constructs are taxonic. The presumption of taxonicity is most obvious in the pages of the American Psychiatric Association's (APA) fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV: 1994) in which hundreds of discrete diagnostic entities have been delineated despite a lack of empirical evidence for the discreteness of the majority of these entities. Consider the finding that the general construct of depression is dimensional (Ruscio & Ruscio,

2000). Moreover, hypomanic temperament / disposition has emerged as dimensional (Meyer & Keller, in press) calling into question the taxonicity of at least one type of bipolar disorder that is diagnosed using the DSM-IV (APA, 1994) via the presence of a hypomanic period that was presumed to be discrete and to cycle with discrete non-hypomanic periods. Consider also the preliminary findings that many DSM-IV anxiety disorders are not discrete entities, but rather are dimensional in nature. Specifically, PTSD and GAD have emerged as dimensional in both clinical and nonclinical samples (Ruscio, Borkovec, & Ruscio, 2001; Ruscio, Ruscio, & Keane, 2001). Moreover, although anxiety sensitivity is not an anxiety disorder, it is the hallmark of panic disorder and is dimensional (Taylor, Rabian & Fedoroff, 1999). Taxometric analyses of eating disorder diagnoses in the DSM-IV have revealed the need to modify diagnostic criteria as well (Gleaves et al., 2000; Gleaves et al., 2002; Williamson et al., 2002). Additionally, a personality disorder presumed to be discrete, borderline personality disorder, has emerged as dimensional. Interestingly, only a few of the presumably discrete diagnostic categories described in the DSM have emerged as taxonic. These have included schizotpye (Lezenweger, 1999) and antisocial personality disorder (Harris, Rice, & Quinsey, 1994; Skilling, Quinsey, & Craig, 2001), dementia (Golden, 1982), dissociation (Waller, Putnam & Carlson, 1996; Waller & Meehl, 1997; Waller & Ross, 1997), and a subtype of depression (Ambrosini, Bennett, Cleland, & Haslam, in press; Haslam, Kim, Cleland, Steer, & Beck, in press).

Other psychological constructs that have emerged as dimensional that were presumed to be taxonic include attachment style (Fraley & Waller, 1998) and Jungian personality types (Arnau, Green, Rosen, Gleaves, & Melancon, in press). In addition,

sexual orientation (Gangestad et al., 2000) is taxonic, but gender identity (Gangestad et al, 2000) is dimensional. Taxometric analysis has also been applied to the emotions of envy and jealousy and both have emerged as taxonic (Haslam & Bornstein, 1996), thus providing some support for discrete emotions theory (Keltner & Ekman, 2000).

Finally, taxometric analysis has also been used to improve efficiency of measurement for dissociation (Waller et al., 1996; Waller & Meehl, 1997; Waller & Ross, 1997). Specifically, efficient indicators were drawn from a popular self-report measure of dissociation thereby shortening the assessment time needed to identify individuals with pathological dissociation. As well, the construct of pathological dissociation was further refined through the finding of taxonicity only with items designed to assess pathological dissociation and not with the dimensional and non-pathological dissociation factors of absorption and imaginative involvement.

In sum, findings from taxometric analyses are forcing theorists to rethink conceptions of mental disorders and other psychological constructs and leading investigators to refine theory (Haslam & Kim, in press). Of course all of these findings are in need of replication with different samples and indicators. Moreover, many of these findings are difficult to interpret without the provision of specific data that is rarely presented in publications (Ruscio, Ruscio, & Meron, in press). Nevertheless, the findings of taxometric analyses are challenging researchers to rethink the nature of several constructs.

Overall Summary

A review of research related to the validity of the repressor construct suggests that repressors are a unique type of anxious individual who should be separated from truly low anxious groups if an accurate understanding of the nature of anxiety is to be achieved. This is because repressors possess distinct information processing biases for both internal and external information sources. These biases result in reports about their functioning that are inconsistent with evidence from non-self-report indices (Weinberger, 1990). Even though repressors report inaccurately about their functioning, they nevertheless present themselves in a distinct way on personality-related variables that actually lead them to differ even from those who are truly not distressed on some key self-report variables (e.g., Pincus & Boekman, 1993,1995). Repressors' distinct response patterns suggest that they view the self in an idealized fashion marked by extreme levels of positive emotions, few negative emotions, an invulnerability to distressing emotions and the impulse control problems that can be associated with them, a high level of self-restraint, and a tendency to engage in behaviors that will lead to others viewing them positively and therefore to maintenance of relationships with others. Notably, on a measure of the Big Five that measures characteristic styles of thinking, feeling, and behaving, repressors were most distinguishable from non-repressors on the agreeableness personality domain (Pincus & Boekman, 1993). Such high levels of agreeableness reflect high levels of pro-social behaviors that will lead to acceptance by others.

Despite their reports of low distress, repressors actually appear to be similar to HA persons in some ways. For example, they experience social threat as reflected on indices of negative emotion that do not require awareness (Baumeister & Cairns, 1992).

In fact, repressors expect self-threat and process evidence of it even more rapidly than do the traditionally HA (Calvo & Eysenck, 2000). Some evidence suggests that repressors lacked emotionally available caregivers during their childhoods (Myers & Brewin, 1994; 1995). Therefore, it is possible that repressors have a developmental history similar to that of the traditionally high anxious who acknowledge challenges in managing distressing emotions. Consistent with this possibility are findings that features of the same avoidant attachment style that has been found in anxious individuals (Bowlby, 1988) have been found in repressors (Vetere & Myers, 2002). Repressors' information processing biases probably provide a mechanism through which they manage the experience of distressing emotions. To the degree that the avoidance of negative emotions seen in anxious populations is similar to that seen in repressors, the repressor group again emerges as an important group for anxiety researchers to understand.

Despite findings of the validity of the repressor construct, the majority of anxiety researchers choose not to remove repressors from low anxious comparison groups and therefore develop inaccurate results. Thus, it is extremely important that anxiety researchers better understand the nature of the repressor construct. An essential first step to understanding the nature of the construct is an analysis of its latent or true structure (Waller & Meehl, 1998). In particular, it is unknown if the construct is dimensional or if it represents a discrete type of person (i.e., a taxon) that should be removed from LA comparison groups. If the former is true, then analytic strategies that assume a dimensional construct are appropriate for researchers interested in studying both the repressor construct and anxiety in general. If the latter is true, then analytic strategies that assume the presence of a discrete repressor and subsequent removal of this type from LA

group is warranted. Although the majority of researchers' designs reflect an assumption that the repressor construct is a type or taxon, no empirical evidence about the latent structure of the construct is available to date to support this assumption. In fact, application of taxometric analysis to several presumably taxonic constructs has revealed that assumptions about psychological constructs have often been incorrect (Haslam & Kim, in press). Thus, it is important to apply taxometric analysis procedures to indices of the repressor construct to determine its true nature (Ruscio & Ruscio, in press).

Goals

Taxometric analysis procedures will be used to evaluate the latent structure of the repressor construct using traditional measures of it. In particular, taxometric analysis will be applied to indices of trait anxiety and defensiveness to examine the latent structure as put forth by Weinberger et al's original (1979) model. Use of this model will allow for application of results about latent structure to the largest possible number of studies conducted to date that focused on the repressor construct. This is because the majority of researchers use the original repressor classification system. Additionally, theory about the repressor construct will be broadened by examining the construct in terms of the FFM of personality and then using those personality variables that best-discriminate repressors from nonrepressors to conduct a second set of confirmatory taxometric analyses. Regardless of latent structure findings, results from the current study will inform investigators about the most appropriate and powerful research designs, data analysis and interpretation strategies (Ruscio & Ruscio, in press) to use to study the repressor construct. Finally, the results of this study will provide a bridge between the repressor literature and a large literature about the FFM of personality that can also serve to

broaden investigator's understanding of both the repressor construct and anxiety in general.

Hypotheses

Latent structure using Weinberger et al. indices of the repressor construct. It is hypothesized that the latent structure of the repressor construct will be taxonic when composite indicators are derived from the traditional model that relies on the combination of trait anxiety and defensiveness. This hypothesis is based on findings that repressors identified using the combination of low scores on trait anxiety and high scores on defensiveness exhibit discrete patterns of thinking (see Eysenck, 1997; Hansen et al., 1992, for reviews), feeling (see Derakshan & Eysenck, 1997ab; Kreitler & Kreitler, 1990 and Mendolia, 1999, for reviews), and behaving (see Furnham & Traynar, 1999, for a review) and thus personality compared to non-repressor groups. As well, multiple investigations have revealed discrete patterns of physiological responding between repressors and non-repressors (see Derakshan & Eysenck, 1997a; Furnham & Traynar, 1999; Weinberger, 1990, for reviews). Moreover, many investigations have included the DHA group to rule out the possibility that the dimension of defensiveness alone can account for the patterns of discrete styles of responding that consistently differentiate repressor from non-repressor groups (e.g., Kreitler & Kreitler, 1990; Pincus & Boekman, 1993;1995).

Latent structure using five factor model indices of the repressor construct. It is hypothesized that the repressor construct will also emerge as taxonic when composite indicator variables from the FFM are used. This hypothesis is derived from findings that extreme levels of all but the openness Big Five personality domain capture the core

features of the repressor construct. These core features include the tendency to experience both positive and negative emotions (Watson, 2000; Weinberger, 1990), self-restraint and a focus on maintaining acceptance by others and map onto extraversion, neuroticism, conscientiousness, and agreeableness, respectively (Costa & McCrae; Watson; Weinberger & Schwartz, 1990). These results are also expected because repressors exhibit biases in information processing (Eysenck, 1997) that will presumably result in reports marked by a denial of negative and a claiming of positive characteristics. Moreover, these reports also are discrete and distinguish repressors from nonrepressors (Pincus & Boekman, 1993; Kreitler & Krietler, 1990; Weinberger & Schwartz). Therefore, repressor's information processing biases are expected to result in taxonic structural findings.

Five factor model (FFM) personality domains and the repressor construct. On FFM personality domains repressors information processing biases (Eysenck, 1997) are expected to result in significantly lower levels of neuroticism than non-repressors because repressors tend not to report the negative emotions and vulnerability that are at the core of the neuroticism personality domain (Costa & McCrae, 1992). These same biases lead repressors to report an overly positive self-concept and are expected to therefore result in significantly higher levels of extraversion than are found in non-repressors. This is expected because the high levels of positive emotionality reported by repressors are at the core of the extraversion domain (Watson, 2000). Agreeableness distinguished repressors from non-repressors even better than N (Pincus & Boekman, 1993). Moreover, it captures the focus on behaving in ways that promote acceptance by and connection with others and is this central to the repressor construct (Costa &

McCrae; Weinberger & Schwartz, 1990). For these reasons, repressors are expected to report significantly more agreeableness than non-repressors. The self-restraint of impulses central to the repressor construct is central to the conscientiousness domain (Costa & McCrae). Therefore, repressors are expected to report significantly more conscientiousness than non-repressors. Repressors and non-repressors are not expected to differ on openness because trait emotionality is not related to openness (Watson), extremes in openness are not socially desirable (Costa & McCrae), and openness did not distinguish repressors from non-repressors (Pincus & Boekman).

Method

Participants

One thousand and forty undergraduate introductory psychology students from a large Northeastern university participated. Sixty-seven percent of the population, mean age 18, was composed of women. Data regarding ethnic origin was not collected.

Procedure

A series of questionnaires completed in group-testing sessions that lasted two hours were used. Participants received extra credit for participation.

Self-Report Measures

Marlowe-Crowne Social-Desirability Scale (MCSDS: Crowne & Marlowe, 1964). The MCSDS is a 33 item self-report scale that was originally designed to measure socially desirable responding independently of psychopathology. Research has indicated that the MCSDS actually measures defensive responding, or the tendency to avoid processing of information threatening to self-esteem (Furnham, Petrides, & Spencer-Bowdage, 2002; Graziano & Tobin, 2002; McCrae & Costa, 1983; Pauls & Stemmler, in press). The MCSDS includes both positively- and negatively-keyed items, the latter of which are reverse scored. In its original format it contained true and false response options, but its format in the current study required the respondent to indicate the degree to which each item was applicable to them on a five point scale that ranged from 1 (definitely false) to 5 (definitely true). Thus, scores could range from 5 to 165. Higher scores indicate greater levels of defensive responding. Factor analysis has revealed two factors of the MCSDS: the self-deception factor that is also considered defensiveness and the other-deception factor that is seen as motivated by conscious efforts to obtain

approval from others and the contingent self-esteem that can follow such approval (Paulhus, 1984). These factors have also been called self deceptive enhancement (SDE) and impression management (IM), respectively (Paulhus & Reid, 1989). Evidence for the reliability of the MCSDS has been found with college students as indicated by an internal consistency alpha coefficient of .88. Additionally, the MCSDS has test-retest reliability of .88 over a one-month time interval with college students. Evidence for discriminant validity of the scale from that of trait anxiety scales is reflected in an inverse relationship between it and popular measures of trait anxiety: Values from -.22 to -.32 have been reported (Derakshan & Eysenck, 1997d; Egloff & Hock, 1997; Ritz & Dahme, 1996).

State-Trait Anxiety Inventory (STAI: Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983). The trait version of the STAI (STAI-T, Form Y-2) is a 20 item self-report scale designed to measure primarily the cognitive components of trait anxiety with a combination of positively- and negatively-keyed items, the latter of which are reverse scored. Individuals indicate the frequency with which they generally feel each item on a scale that ranges from 1 (almost never) to 4 (almost always). The STAI-T scale descriptors used in the present study were slightly modified to range from 1 (not at all) to 5 (all the time). Scores could range from 20 to 100, with higher numbers indicating higher levels of trait anxiety. The STAI-T is a reliable and valid measure. Test-retest reliability of the STAI-T ranged from .73 over a period of 104 days to .86 over a period of 20 days in college students. Internal consistency has also been found as evidenced by a median alpha coefficient of .90 in several samples including college students. Evidence also supports the validity of the STAI-T with college students as indicated by a positive correlation of .80 with the Manifest Anxiety Scale (Taylor, 1953). The STAI-T correlates

between -.22 and -.32 with the MCDSD (Derakshan & Eysenck, 1997; Egloff & Hock, 1997; Ritz & Dahme, 1996) and remains relatively stable despite exposure to situations that arouse stress in individuals.

NEO Five-Factor Inventory Form S (NEO-FFI: Costa & McCrae, 1992). The NEO-FFI is a self-report inventory designed to measure the FFM of personality. It is considered a measure of self-concept and was designed for assessment of the big five personality domains. It includes a scale for Neuroticism (N); Extraversion (E); Openness to experience (O); Agreeableness (A) and Conscientiousness (C). It contains 60 items, many of which are negatively keyed and later reverse-scored, that are rated on a scale that ranges from (0) *strongly disagree* to (4) *strongly agree*. Each scale is composed of 12 items and thus ranges from 0 to 48 with high values representing greater levels of the domain assessed. The NEO-FFI is a shortened version of the Revised NEO Personality Inventory (NEO-PI-R: Costa & McCrae, 1992) and was designed to allow for more rapid completion by large numbers of participants.

The NEO-FFI is a valid and reliable measure of the FFM that has been validated in both normal and clinical populations (Costa & McCrae, 1992). Each of the five domains measured via the NEO-FFI is highly correlated with the domains as measured by the longer NEO-PI-R for which extensive validity and reliability data also have been reported (Costa & McCrae, 1992). Correlations between the NEO-FFI domains and the NEO-PI-R domains were .92, .90, .91, .77, and .87 for N, E, O, A, and C respectively. Additionally, evidence of significant correlations between self and other ratings on the NEO-FFI have been found and range from .44 (conscientiousness) to .65 (openness) for spouse ratings and .33 (conscientiousness) to .48 (openness) for single peer ratings.

Internal consistency of each domain measured by the NEO-FFI has also been demonstrated to be acceptable via calculation of coefficient alpha. Specifically, for N, E, O, A, and C the coefficient alpha was .86, .77, .73, .68, and .81 respectively. Retest reliability of the NEO-FFI has been demonstrated over a three-month period in a group of college students. Coefficients were .79, .79, .80, .75, and .83 for N, E, O, A, and C respectively.

Data Analyses and Results

Missing data

Missing data were rare and occurred for 0.34% of NEO-FFI items, 1.1% of MCSDS, and 5.7% of STAI items. Eight percent of the sample did not report information about their sex. Missing data is not tolerated by taxometric analysis software, so each missing data point was replaced with the item series mean as described in George & Mallery (2001) preceding taxometric analyses.

Software used for analyses

All results described below, with the exception of taxometric analysis results, were obtained using the Statistical Package for the Social Sciences (SPSS: Version 10) and were computed based upon the data set that resulted from replacement of missing data with the exception of analysis of variance results. Taxometric analyses were conducted using software written by Ruscio (2002).

Descriptive statistics and psychometric properties

Internal consistency, corrected item-total correlations, skew, and kurtosis estimates for each of the MCSDS, STAI, and for the personality scales of the NEO-FFI were determined. Internal consistency values of .70 are considered acceptable, above .80 good, and above .90 excellent (George & Mallery). As revealed in Table 3, the STAI has an excellent level of internal consistency; the MCSDS, N, and C scales have good internal consistency; and the E, O, and A scales have acceptable internal consistency. These reliability estimates are comparable to normative estimates of the NEO-PI-R (Costa & McCrae, 1992) for all but the openness scale. Due to scale modifications of the MCSDS and the STAI, the psychometric properties of these scales were not compared to

normative estimates. Table 3 also indicates that estimates of the skew and kurtosis for each scale's distribution was acceptable and that data are distributed symmetrically around the mean without extreme values that could have strong influences on mean values. Thus, means can be interpreted as being representative of the sample as a whole. Finally, another index of reliability, corrected item-total correlations are listed for each scale in Tables 4-10.

Grouping. Prior to taxometric analysis, repressors were grouped according to Weinberger et al.'s classification system (Table 1). Repressors scored above the upper quartile of 110 on defensiveness and below the median of 51 on trait anxiety. The non-repressor group, referred to as the *complement* (Waller & Meehl, 1997), was composed of all remaining participants. Mean scores for each group on the STAI and MCSDS are reported in Tables 11 – 12, respectively. Consistent with previous investigations (Myers, 2000), one fifth of the entire sample was classified as belonging to the repressor group (Table 13). Chi square analysis was conducted for participants that reported information about their sex (1, $N = 845$) = 4.39, $p = .04$) and indicated that females were more likely than males to be classified as repressors.

Analyses of Variance (ANOVA)

Defensiveness and trait anxiety ANOVAs. Two separate two-way ANOVAS with group (repressor, non-repressor) and sex (male, female) as the independent variables and each of total STAI and MCSDS scores as the trait anxiety and defensiveness dependent variable respectively, were conducted. For trait anxiety, the expected main effect of group was found, F (1, 841) = 220.87, $p < .001$ with repressors scoring lower than non-repressors. A main effect of gender was also found, F (1, 841) = 9.73, $p < .002$, with

women showing higher trait anxiety than men (Table 11), however gender did not interact with group, F (1, 841) = .670, p = .41). For defensiveness, the expected main effect of group, F (1, 841) = 564.82, p < .001 with repressors scoring higher than non-repressors (Table 12) was found with no main effect of gender, F (1, 841) = .001, p =.97 and no group by gender interaction, F (1, 841) = 3.03, p = .08.

Big five personality MANOVA. A multivariate analysis of variance (MANOVA) with group (repressor, non-repressor) and gender (male, female) as the independent variables and personality domain subscale total scores (N, E, O, A, C) as the dependent variables was conducted.

This revealed an overall main effect of both group, F (6, 791) = 43.43, p < .001 and gender, F (6, 791) = 8.02, p < .02, but no interaction of gender with group, F (6,791) = .16, p = .99. As was predicted, repressors scored significantly lower than non-repressors on N, F (1, 796) = 146.31, p < .001) and significantly higher than non-repressors on E, F (1, 796) = 48.45, p < .001; A, F (1, 796) = 111.30, p < .001 and C, F (1, 796) = 85.68, p < .001. Also as predicted, repressors did not differ from non-repressors on O, F (1, 796) = .62, p = .43. Women scored significantly higher than men on N, E, A and C: Fs (1, 796) = 17.61, 5.07, 10.31, and 5.48, respectively with all ps < .02. Women did not differ from men on O, F (1, 796 = .01, p = .92. Group scores for each of the N, E, O, A, and C personality domains for each sex are summarized in Tables 14 – 18, respectively. A visual depiction of these results appears in Figure 1.

Taxometric Analyses

The STAI trait anxiety and the NEO-FFI N scales were re-scored so that high values reflected high levels of trait stability on each. Trait stability measured by the STAI

will be referred to as *St* and that measured by the NEO-FFI as *S*. This was necessary so that the panels from taxometric analyses would be interpretable. Specifically, graphic output that reflected taxonic structure would be reflected in a peak to the right on the abscissa where scores reflected high levels of both defensiveness and trait stability.

Selection of indicator variables. A first step in conducting taxometric analysis involves selection of indicator variables that measure core features of the construct of interest. Indicator selection is guided by a combination of theoretical and empirical considerations, the second of which maximizes interpretability of graphic output (Meehl, 1992; Ruscio & Ruscio, 2001). Both approaches were used in the current study to screen for and select indicators. Theoretical considerations guided preliminary selection of scales administered. These scales included measures of trait emotionality and defensiveness (Weinberger & Schwartz, 1990). The first empirical approach to screening indicators for adequacy for taxometric analysis involved review of ANOVA results. Those dependent variables that best-discriminated repressors from non-repressors classified according to Weinberger at al. (1979) were selected. This resulted in the decision to eliminate openness from further consideration as an indicator. Second, items with the highest corrected item-total correlations (CITC) on the MCDS, STAI, and the NEO-FFI S, E, A, and C scales were determined and those with the highest values were combined to form the following defensiveness, trait stability, NEO-FFI stability, extraversion, agreeableness, and conscientiousness composite indicators with the highest CITC values (Defc, Stc, Sc, Ec, Ac, Cc). This approach has been used by previous researchers (e.g., Ruscio & Ruscio, 2002) who have proposed that those items with the highest item-total correlations, when combined, should be a good measure of the

construct intended to be measured by a given scale. Item-total correlations for items on all scales are presented in Tables 4 – 10. For each of the Defc and Stc composites, the ten items with the highest corrected item-total correlation values were combined. For each of the NEO-FFI Sc, Ec, Ac, and Cc composites, the six items with the highest corrected item-total correlation values were combined.

Standardized validity, or the separation between the hypothesized taxon and complement groups, was computed for composite indicators formed using CITC information (Table 19) using the formula recommended by Meehl and Yonce (1996, p. 1146). Monte Carlo studies have led to the recommendation that around 1.25 standard deviations separate taxon from complement members in a sample of 300 with a taxon base rate of at least 10 percent (Ruscio & Ruscio). To determine if composite items formed through using CITC values were superior in validity to composites formed through combining all original items on each scale, standardized validity estimates were also computed for composites of the MCSDS, STAI, S, E, A, and C scales formed through combining all items of each original scale. These were named Def, St, S, E, A, and C, respectively, and appear in Table 19. Validity estimates of original scales were superior, or similar to, estimates of composites formed using the traditional approach of selecting only items with the highest CITC values. Moreover, only two (S, A) of the four NEO-FFI personality composites formed using all original scale items yielded a separation between repressors and non-repressors that was close to 1.25 standard deviations. In light of this finding, an additional approach to forming potential composite indicators was used.

Standardized validity estimates were calculated for every item on each scale and those with the highest values were combined into composite indicators. Standardized validity estimates for every scale item are presented in Tables 4-10. For each of the MCSDS and STAI scales, the ten items with the highest standardized validity values were combined to form defensiveness (Defv) and trait stability (Stv) composite indicators, respectively. For each of the S, E, A, and C subscales of the NEO-FFI, the six items with the highest standardized validity values were combined to form the following composite indicators of each personality domain (Sv, Ev, Av, Cv). Standardized validity estimates of composites formed using items with the highest validity estimates are presented in Table 19. This approach to formation of composite indicators yielded the most robust composites for taxometric analysis for all but the MCSDS, for which the composite formed by combining all original scale items was superior. Nevertheless, only the following composites resulted in close to 1.25 standard deviation units of separation between hypothesized taxon from non-taxon members: the Defv composite formed with all original MCSDS scale items, the Stv composite formed using the most valid items of the STAI, and the NEO-FFI Sv and Av composites formed using the most valid items of the NEO-FFI stability and agreeableness personality subscales.

Based upon theory and factor analysis findings that that the MCSDS is really a mix of items that reflect the relatively independent constructs of self-deceptive enhancement (SDE) and impression management (IM) (Paulhus & Reid, 1984), the decision was made to form, and estimate validity for, two final composite indicators that reflected these constructs. Items from the MCSDS were combined to form a SDE and IM

composite using guidelines from Paulhus and Reid (1989). These new composites also yielded acceptable validity estimates (Table 19).

Once potential indicators are selected it is necessary to insure that they are sufficiently independent within the proposed taxon and complement groups before submitting them to taxometric analysis. The degree of relatedness between indicators is measured by what is referred to as *nuisance covariance*. Monte Carlo studies have shown that taxometric analysis procedures are robust enough to detect latent structure accurately for variables related less than around $r = .31$ within each of the hypothesized taxon and complement group. Low levels of relatedness between indicators of a construct are expected within members of the taxon group because a true taxonic construct should have only one true score on a theoretically relevant indicator variable. It is this lack of variability in scores of taxon members that translates into graphic output that reflects taxonicity when one of the indicator variables is ordered on the abscissa and a set of mathematical procedures is performed on what is called the output indicator, the results of which are plotted on the ordinate. If a perfect measure (i.e., a collection of independent indicator variables) of a taxonic personality construct could be developed then there would be a discontinuity (i.e., a break) in the score distribution of participant responses on that measure and graphic output would be easily interpretable (through the appearance of a peak) as reflecting taxonicity. A greater degree of relationship is expected, and acceptable, within the combined group of hypothesized taxon and complement members because more variability in scores should exist in such a mixed group.

Nuisance covariance values were calculated for selected composite indicators to confirm they were robust enough to detect taxonicity if it was present. Within group

estimates of nuisance covariance were close to those suggested by results of Monte Carlo studies for most composites (see Table 20). Moreover, for most composite indicators the relationship within the entire sample (Table 21) exceeded that within the proposed taxon and complement group, as is expected in the case of hypothesized taxonicity. Levels of nuisance covariance did exceed .30 within either the taxon or complement group for some combinations of variables and these combinations of indicators were thus not used together in any taxometric analysis procedures. The strong relationships between composites measuring similar constructs on different measures (e.g., stability on both the STAI and NEO-FFI) was expected and these composites were also not used as separate indicators within any taxometric analysis procedure. Importantly, within the proposed taxon and complement groups the relationship between the SDE and IM factors of the MCSDS was within acceptable limits for use as separate indicators within taxometric analysis procedures (Table 20).

Simulation of comparator data sets to facilitate interpretation of taxometric analysis output. Psychometric properties of data such as skew and kurtosis at times mask important construct variability and can give the appearance of taxonicity when it is not present (Ruscio, Ruscio, & Meron, in press). Despite this, most taxometric analysis investigators do not report basic descriptive statistics and it is therefore often impossible to know if findings of taxonicity are due to non-construct-related variability in the psychometric properties of indicators. Recently a solution has been devised for the difficulties in output interpretation that are often faced by researchers. This solution involves simulating data structures of known latent structure with parameters that are matched to those of the collected data set that is referred to as the *research data*.

Taxometric analysis procedures are conducted with the simulated data of known structure to determine if interpretable results will emerge and to provide comparator graphic output. To date, the majority of published taxometric analysis studies have not included simulated data to facilitate interpretation of output from research data (see Gangstead & Snyder, 1985 and Ruscio, Ruscio, & Keane, 2002 for exceptions) and have not provided data with which the robustness of indicators to detect latent structure could be evaluated. The current study, however, used data simulation procedures to examine robustness of indices and to provide a comparator for interpretations about latent structure of research data. The graphic output of taxometric analyses conducted with the simulated data was used as a comparator that facilitated interpretation of output from the research data. Four raters who were blind to experimental hypotheses provided judgments about the degree to which research data matched simulated data and these judgments were used as judgments about the latent structure reflected in each research data output panel.

Consistency tests. When findings converge across multiple taxometric analysis procedures, *consistency tests* are passed. It is essential that taxometric analysts obtain consistent results using multiple approaches to data analysis if they are to have confidence in findings because null hypothesis testing is not used. Sources of consistency include converging findings across procedures with different mathematical foundations, and across different approaches to measurement of indices (Campbell and Fiske, 1959; Meehl, 1992; Popper, 1959). In the current study, consistency tests included the use of two taxometric analysis procedures with different mathematical foundations and collection of data using both traditional indices of the repressor construct (i.e., the MCSDS and the STAI) and alternative indices of it (i.e., SDE, IM, NEO-FFI S and A

scales). If the results obtained using different mathematical procedures and separate indices converge on the same finding about a construct's structure, this is said to be a strong test of the consistency of the findings (Meehl).

Another source of consistency test involves the estimation of base rates of the hypothesized taxon using graphic output. Taxonicity is inferred if base rates across analysis procedures converge with one exception: When data are dimensional, base rates cohere around 50% due to the procedure used to estimate base rates. If base rates vary widely across different taxometric analysis procedures, this is also suggestive of dimensional rather than taxonic latent structure.

Mathematical Procedures

Taxometric mathematical procedures are based on the principals of *Coherent Cut Kinetics* (Waller & Meehl, 1998). The term *coherent* refers to the consistent findings across multiple domains of inquiry that are necessary to infer a construct's latent structure. The term *cut* refers to a commonality across all procedures of taxometric analysis that involves ordering scores on an indicator variable that is plotted on the abscissa and then systematically making cuts along the abscissa and examining scores on at least one other indicator that is plotted on the ordinate as a function of the ordered abscissa scores. The term *kinetics* refers to the systematic movement of a cut on the ordered abscissa. Within each window delineated by a cut, mathematical operations are performed on the output indicator(s) and plotted on the ordinate. The analytic procedures with diverse mathematical foundations described next go by the acronyms of MAMBAC and MAXCOV (Waller & Meehl, 1998).

MAMBAC analyses. The letters of the *MAMBAC* acronym are taken from the first letters of each word in the phrase *M*ean *A*bove *M*inus *B*elow *A C*ut. The MAMBAC procedure requires two indicators (Meehl & Yonce, 1994). The first indicator called the input is standardized, sorted, and placed along the abscissa. The second indicator, the output, is also standardized and is then used to generate points along the ordinate that are plotted beginning above the twenty-fifth case on the abscissa. The value plotted is the score that results when the mean score below the cut is subtracted from the mean score above the cut. This procedure continues along consecutive cuts on the abscissa until the point 25 cases from the last case at which point the final difference between the means is calculated and plotted above the final cut point. The choice regarding how many cases to begin and end from the first and the last case, respectively, is an arbitrary one as is the number of cuts to use. If data is taxonic then a characteristic peak occurs in the graphic output. This peak corresponds to the score on the input variable that is associated with a maximal difference score on the output variable between taxon and complement members. Said another way, the highest point of the peak reflects the point where the mean above the input indicator cut is the mean score of primarily taxon members and the mean below the cut is the mean score of primarily complement members. The decision as to which is the input and which the output indicator is also arbitrary. In fact, as a test of consistency each indicator is used as both an input and an output to generate two graphs that are interpreted as either providing some evidence for taxonicity or for dimensionality. Evidence for dimensionality is inferred if the graph appears either flat or dish-like with both ends sloping up. Graphic output is used to compute the base rate of the taxon. Assuming that taxon members score higher than complement members on the

input variable, a peak to the far right suggests a small base rate, whereas a peak in the middle of the input variable range suggests that the taxon and complement groups are of an equal size.

For the current study, MAMBAC was conducted with all combinations of final composite indicators that yielded nuisance covariance estimates below $r = .31$. Composite indicators were submitted as both input and output indicator. This resulted in 16 panels of research data that are presented in the following figures (composite indicators in parentheses served as both input and output): 2 (Def, Stv), 5 (SDE, IM), 8 (SDE, Av), 11 (IM, Stv), 14 (IM, Sv), 17 (IM, Av), 20 (Stv,Av), and 23 (Sv,Av). Following each research data panel is simulated dimensional (Figures 3, 6, 9, 12, 15, 18, 21, 24) and then taxonic data (Figures 4, 7, 10, 13, 16, 19, 22, 25) for each set of research data composites, respectively. Raters ($n = 4$) who were blind to experimental hypotheses were instructed to select the data simulation panel (i.e., dimensional or taxonic) that most resembled the research data. Raters were given the following instructions:

Each attached figure page is labeled with a particular figure number at the top left. Each figure page is followed by two pages, labeled A and B, in the top left. The number of the figure to which it corresponds precedes each of A and B. For each figure, please decide which graph in the same location on the corresponding page labeled with a letter (A or B) that it most resembles. Please only compare graphs in the same location across the figure and letter-labeled pages. For example, for Figure 1 begin with the graph on the left side of the page and determine which graph on the left side of page 1A or 1B it most-resembles. Record either A or B on the response sheet next to the appropriate figure number and make the same judgment for the graph on the right side of the figure page. Thus, the next decision is regarding the graph on the right side of the page labeled figure 1: Does it most resemble the graph on the right side of page 1A or 1B? If you are completely uncertain then just respond with DK for don't know. Thank you.

Judgments about latent structure of research data are presented in Table 22. Ten out of the 16 MAMBAC judgments were unanimous, whereas for three judgments only three of the four raters agreed, and for three judgments a split between judgment choices occurred. Thus, agreement was reached for 55 out of a possible 64 panels yielding a value of .86 for inter-rater agreement. When a criterion of the majority of judgments is used to determine latent structure then for seven sets of indicators the judgment was dimensional, for six it was taxonic, and for three no majority consensus was obtained. It never occurred that the same latent structure judgment was made for a set of indicators in both the input and output role. Interestingly, whenever SDE was in the role of input it resulted in a taxonic structure judgment whereas when IM served as input it resulted in mixed judgments about structure. Base rate estimates for both research and simulated data are presented in Table 23 and, despite the expected repressor base rate of around 20%, these cohere around .50 as would be expected in the case of dimensional latent structure. Moreover, research data base rates more closely resemble simulated base rates for dimensional data. Taken together, judgments about latent structure in combination with base rate estimates are mixed with regard to latent structure. Even when only the most valid combinations of indicators are considered along with base rate estimates, conclusive inferences about latent structure cannot be made because discrepancies exist between structural judgments associated with panels and those with base rate estimates.

MAXCOV analyses. The *MAXCOV* acronym is derived from the first letters of each word in the term *MAX*imum *COV*ariance. The MAXCOV procedure requires three relatively independent indicators (Meehl & Yonce, 1996). All indicators are standardized

and then the input indicator is sorted and placed along the abscissa on which intervals of an arbitrary width are demarcated. The other two indicators become the output indicators and the covariance between these two output variables is computed within each successive interval and plotted along the ordinate above the input indicator intervals. Again, the decision as to which is the input and which the output indicator is arbitrary. In fact, each indicator (e.g., a,b,c) is used as both input and output to generate a total of three graphs (a as a function of the covariance between b and c within the respective intervals of a, etc.) that are interpreted as either providing some evidence for taxonicity or dimensionality. Evidence for taxonicity is inferred if the graph contains a peak. In cases of low base rate the graph may build to a peak that is found to the right of the abscissa if higher numbers reflect greater odds of being a taxon member. Evidence for dimensionality is inferred if the graph appears flat. If the construct is taxonic, then the location of the peak corresponds to the score on the input indicator where equal numbers of taxon and complement members can be found within the sample. It is here that covariance between output indicators is maximal because the greatest level of variation is found in an equal mixture of groups. Thus, the peak of the curve is located near the optimal cut score on the indicator variable that can be used to separate taxon from complement members. Covariation is least at points along the input variable that correspond to scores of pure taxon and complement members because within each of these groups individuals vary little from each other. This lack of variability in scores within each group yields low covariance scores and results in a downward shift in the curve relative to the maximum of the curve found where groups are mixed. As in

MAMBAC, characteristics of the graph output are used to compute the base rate of the taxon.

Selection of composite indicators for use with the MAXCOV procedure was constrained by two things: (a) the recommendation that nuisance covariance be less than around $r = .31$ between indicators within the proposed taxon or complement group and (b) the validity of indicators. Review of Tables 19 and 20 resulted in the decision to conduct only one MAXCOV analysis using the SDE, IM, and Stv composites as both input and output in all possible combinations. Although nuisance covariance estimates suggested the potential suitability of C as a composite along with SDE and IM the validity of C was not acceptable and would have resulted in difficult-to-interpret output. The MAXCOV with SDE, IM, and Stv was judged by the majority of raters to reflect dimensional latent structure when Stv and IM were input indicators, but the panel with SDE as the input indicator resulted in mixed judgments with only two out of the four raters saying it appeared more like the simulated taxonic data. Decisions regarding latent structure, and base rates are presented in Tables 24 and 25, respectively. Base rate estimates were difficult to interpret because they were either exceptionally low or high for all research panels. Taken together, results of MAXCOV also did not provide support for confident inferences about the latent structure of the repressor construct.

Some reports suggest that phenomena associated with the repressor construct differ by sex (e.g., Brown et al.; Ritz & Dahme). Thus, it was decided to repeat all taxometric analyses described above using the same indicators within each sex separately. Validity estimates of the same composite indicators used with the combined sample were thus computed for the male and female sample (Table 26) and remained

acceptable. Nuisance covariance estimates of composite indicators for male repressors and non-repressors are found in Table 27, those for female repressors and non-repressors are found in Table 28, and those for the combined (repressors + non-repressors) male and combined female samples are found in Table 29. Nuisance covariance estimates within taxon and complement samples were less optimal and often had unacceptable levels of nuisance covariance ($r > .30$). Specifically, within the male repressor group r exceeded .30 for the following indicator sets: Def, Stv; Def, Sv; SDE, Stv; SDE, Sv; Stv, Av; Sv, Av and within the male non-repressor group for the following sets: SDE, IM; and SDE, Sv. Unacceptable levels of nuisance covariance were found within the female repressor group for the SDE and Sv indicator set and within the female non-repressor group for the following sets: SDE, IM; SDE, Sv; Sv, Def; Av, Stv; and Av,Sv. It was decided to proceed with taxometric analyses, despite these limitations, so that comparison graphs generated within each separate sex could be created. Decisions regarding latent structure for the male sample derived from MAMBAC analyses, and associated base rates, are found in Tables 30 and 31, respectively. Decisions regarding latent structure for the male sample derived from MAXCOV analyses, and associated base rates, are found in Tables 32 and 33, respectively. Decisions regarding latent structure for the female sample derived from MAMBAC analyses, and associated base rates, are found in Tables 34 and 35, respectively. Decisions regarding latent structure for the female sample derived from MAXCOV analyses, and associated base rates, are found in Tables 36 and 37, respectively. To conserve space, figures are not presented for taxometric analyses conducted with separate male and female samples, but are available upon request from the author. Interestingly, the majority of research data panels were rated as reflecting a

taxonic structure within the male sample whereas within the female sample the majority of panels were rated as reflecting a dimensional structure. Again, however, base rate estimates for each of males and females derived from MAMBAC analyses were more consistent with dimensional latent structure than taxonic. Base rate estimates derived from MAXCOV analyses were, again, exceptionally low for the most part and not consistent with the expected repressor base rate of around twenty percent. Thus, decisions about latent structure within separate male and female samples are difficult to make with confidence when judgments about latent structure are considered along with base rate estimates and do not entirely parallel judgments made for the entire sample.

Discussion

The primary aim of the present study was to empirically evaluate the latent structure of the repressor construct. In order to do two taxometric analysis procedures, MAMBAC and MAXCOV, were conducted with data collected from a large undergraduate sample. Traditional and theoretically relevant but novel indices of the repressor construct were used. Traditional indices included both the MCSDS and the STAI scale and novel indices included the stability and agreeableness subscales of the NEO-FFI as well as SDE and IM factors derived from the MCSDS. Estimates of base rates derived using MAMBAC procedures were consistently supportive of a dimensional latent structure. Judgments about latent structure of MAMBAC output made by blind raters, however, were not as clearly supportive of a dimensional structure. In fact, judgments were split between taxonic and dimensional, often for the same set of indicators. For example, when the NEO-FFI agreeableness composite served as input along with the NEO-FFI stability composite as the output, a unanimous judgment of taxonic latent structure emerged. On the contrary, when the NEO-FFI stability composite served as input along with the agreeableness composite as the output a unanimous judgment of dimensional latent structure emerged. In order to have confidence in findings about latent structure it is important that judgments about structure derived from base rate estimates and judgments of graphic output cohere. Moreover, it is also necessary that judgments of graphic output cohere when a given set of indicators serves in both the input and output role. Because of unacceptable levels of nuisance covariance between many potential sets of indicators, MAXCOV was not conducted with traditional indices of the repressor construct. It was only conducted with the novel SDE and IM indicators in

combination with the trait stability composite derived from the STAI. Latent structure judgments were again mixed. Moreover, base rate estimates derived from both research and simulated data were difficult to interpret and ranged from very low to very high and were not consistent with an expected 20% base rate for a repressor taxon. Taken together, these findings do not provide support for a confident inference about the latent structure of the repressor construct. It is possible, however, that latent structure findings from MAMBAC and MAXCOV analyses conducted with combinations of the most valid indicators (i.e., Def, SDE, IM, Stv) may be given more weight than the rest of the indicators. If this is done then the balance is tipped in favor of a dimensional latent structure, however such an inference is in need more support from independent replications.

Taxometric analyses were repeated for separate male and female samples, however, these were of limited utility because nuisance covariance estimates between sets of indicators was at an unacceptable level for many indicator sets. Interestingly, taxonic latent structure was more often found for MAMBAC analyses conducted with the male sample whereas a dimensional latent structure was found more often for the female sample. Base rate estimates for both samples, however, cohered around 50%, a finding consistent with a dimensional latent structure. Base rate estimates derived for simulated taxonic data also cohered around 50%, however, suggesting the possibility that indicators were not optimal for use with separate male and female samples.

A finding of a dimensional latent structure, if replicated, is contrary to the assumption of taxonicity reflected in the majority of research conducted about individuals who repress unwanted information. To date research has involved classification of people

as repressors only if they scored below the median on an index of trait anxiety and in the upper quartile on an index of defensiveness. Classification of individuals as repressors based upon a classification system that includes only those who report extreme levels of defensiveness implies that a type of person who reports information about the self in a positively biased fashion exists and that this person is different in nature than all others. The current study provides preliminary evidence to suggest that this assumption might be incorrect. Indeed, base rate estimates from the current study suggest the possibility that all individuals possess some degree of reporting bias whereby they deny negative attributes and claim to possess positive ones. Some may argue that the use of the term repressor is a short cut, used to describe those who repress, that is devoid of assumptions about latent structure. This short cut, however, seems to perpetuate the assumption of taxonicity and may preclude an accurate understanding of the nature of anxiety. Use of the repressor classification system results in neglect of a large portion of variance in defensiveness that is related to the anxiety and repressor constructs and consequently precludes an accurate understanding of both, as well as of emotional processing in general. Because research about anxiety and defensiveness is relevant to the development of effective psychotherapy for a range of disorders (Newman et al., in press; Safran & Greenberg, 1991) it is important to let knowledge of the repressor construct guide research design.

Several implications will follow if researchers continue to report evidence in support of a dimensional latent structure of the repressor construct. Specific implications are related to research design, analysis, and interpretation. First, investigators must sample the entire range of both trait anxiety and defensiveness in order to develop an

accurate understanding of the repressor construct and the many domains of research impacted by it. As well, investigators' strategies for studying the etiology of people who repress can be guided by the knowledge that multiple factors, rather than a discrete event, create such people. This is because findings of dimensionality suggest that the etiology of people who repress is not a discrete event, as a taxonic finding would suggest, but rather multi-determined as are all dimensional constructs (Meehl, 1992). Investigators must also choose analytic strategies that assume dimensional latent structure in order to understand people who repress. Third, researchers who wish to make inferences about people who repress must base these generalizations only on data that capture the entire range of scores on indices of the construct and that use analytic strategies that assume a dimensional latent structure. Thus, if dimensional latent structure findings are replicated with more certainty then inferences based on the majority of research conducted to date about repressors will be seen to have serious restrictions. This is because most researchers classify as repressors only those who report extreme levels of defensiveness. Thus, relationships between moderate levels of defensiveness and dependent variables in people who repress are missed.

A major strength of the current study was the inclusion of a recently developed data simulation procedure (Ruscio et al., 2002) to facilitate interpretation of graphic output. This procedure simulated data that matched the parameters of the research data and provided superior comparator graphs to those provided by Monte Carlo studies that are usually not well matched to research data. Moreover, use of simulated data made it possible to determine how powerful indices were for making inferences about latent structure. In many cases, research data panels were difficult to match up to simulated data

panels. Without the use of simulated data the risk of drawing inaccurate conclusions about latent structure would have been great. The mixed latent structure findings that emerged from the current study provide some data about the best indicators of the repressor construct for use with taxometric analyses. Specifically, the traditional indices as well as the SDE and IM indices derived from the traditional MCSDS index served as useful indices of the repressor construct. Although the NEO-FFI S and A indices were not as robust as the traditional indices for purposes of taxometric analyses, useful information about the repressor construct was provided through inclusion of the NEO-FFI in the current study.

Another strength of the current study was the use of blind raters with high inter-rater agreement. These raters ensured that experimenter bias played no role in the ultimate findings. Such is not the case with any study published to date using taxometric procedures.

Findings from the current study revealed that in comparison to NEO-FFI normative data, repressors reported below average N and above average A. The low and high levels of N and A, respectively, reported by those who characteristically repress have parallels to two hallmarks of the repressor construct: the denial of most negative emotions and the tendency to behave in ways that maintain relatedness with and acceptance by others. The finding that those who characteristically repress scored low on N was not surprising because trait anxiety is a facet of N and was used to assign individuals to the repressor group (Costa & McCrae, 1992). The finding that A captured what is central to the R construct even better than did E and C was somewhat surprising: Most previously reported evidence supports hypotheses that all are key elements of the

construct. Nevertheless, although extraversion captures the tendency to report an overly positive self-concept and experience, which is characteristic of those who typically repress (Costa & McCrae, 1992; Watson, 2000), it did not capture the repressor construct as powerfully as did scores on the N and A domains. Similarly, although C captures the tendency to engage in acts of self-restraint (Costa & McCrae) typical of those who repress, it also was not as central to the repressor construct as were the N and A domains. In fact, scores on E and C of those classified as repressors fell within the normal range of a normative comparison group of college students (Costa & McCrae) thus suggesting the that N and A capture what is most central to the repressor construct. Openness was not related to the repressor construct and this was expected because of its lack of relationship with trait emotionality (Watson, 2000). Estimates of the degree to which composite indicators of the NEO-FFI discriminated taxon from complement members were also consistent with the finding that N and A were superior to E and C in classifying repressors. As has already been mentioned, however, N and A were not as robust as were traditional indices for purposes of taxometric analyses.

One limitation of the current study involves the use of the shorter NEO-FFI rather than the longer NEO-PI-R to measure personality. Whereas the 240-item NEO-PI-R has eight items to measure each of the six facets of each personality domain, the NEO-FFI does not. In fact, not all facets of each personality domain are represented on the NEO-FFI. This is important to keep in mind when interpreting results from the current study. The most surprising finding of the current study was that A captured the repressor construct even better than C. Inspection of the items of each personality scale revealed that items that measure self-restraint are not comprehensively represented on the NEO-

FFI. Items that arguably measure self-restraint can be found on the following facet scales of the NEO-PI-R: impulsiveness (N), assertiveness (E), compliance (A), competence (C), dutifulness (C), achievement striving (C), self-discipline (C), and deliberation (C). As is seen in Tables 38 through 42, these facet scales are distributed across more than one personality domain and not all are equally represented even on the C scale of the NEO-FFI that was expected to index self-restraint. Thus, future researchers who use the NEO-PI-R may find that the A and C personality domains are both central to the repressor construct. Indeed, future research will further elucidate the nature of the repressor construct if it includes measurement of the NEO-PI-R impulsiveness and assertiveness items found on its N and E scales, respectively. Future research could also usefully look at the relationship between specific facets of each FFM personality domain, including openness, and the act of repression. It will be interesting to see if individuals who characteristically repress respond in the affirmative to questions asking if they are open to feelings, a facet of openness that review of Table 40 reveals was not adequately represented on the NEO-FFI. Although to some it may be socially desirable to be open to feelings, if repression is related to learning not to be open to the experience of negative feelings it is possible that individuals who are prone to repression will deny such openness. It will also be useful to determine what particular facets of the remaining personality domains are related to repression.

Positive emotions were represented adequately on the E scale, so the use of the NEO-FFI rather than the NEO-PI-R cannot explain easily why extraversion, with its positive emotion core, was not central to the repressor construct. One possible explanation for this is that the denial of negative emotions is more central to the repressor

construct than is the claiming of overly positive emotions. This possibility receives some support from the finding that the repressor group scored below average on the N scale that included items keyed primarily in a direction to measure the presence of negative emotions. Thus, a low N (or high stability score) is consistent with the denial of negative emotions. More support is found in the fact that all of the E items were worded to reflect a focus on the presence of positive emotions. This suggests that the denial of negative emotions is more central to the repressor construct than is the claiming of positive emotions. Findings that repressors denied not only anxiety, but also several other negative emotions (e.g., depression and anger) are also notable because those who repress are often investigated with respect to primarily their denial of anxiety rather than their denial of other negative emotions (e.g., Eysenck, 1997). Many researchers have, however noted that repressors deny more than anxiety (e.g., Weinberger, 1990) and findings from the current study provide further support of this hypothesis.

Some things can be inferred about the typical styles of thinking, feeling, and behaving of those who repress based upon findings about individuals who are high in agreeableness (Graziano & Eisenberg, 1997; Graziano & Tobin, 2002). Notably, high scores on the A domain are associated with difficulties in asserting needs in relationships (Pincus & Boekman, 1995). Thus, findings of high A from the current study suggest that repressors will have difficulties with assertive behaviors in relationships. Such difficulties are consistent with the suggestion that a central motivation of the repressor is to maintain relatedness with and acceptance by others (Crowne & Marlowe, 1964; Myers & Brewin, 1994; Weinberger, 1990; 1992). This is an important area to further explore and was also anticipated by others (Blatt, 1990; Bonanno & Singer, 1990) who have framed the

repressor construct within Bakan's (1966) theory that all individuals struggle to achieve a balance between the motivation to connect with and be accepted by others that is known as *communion* and the motivation to overlook other's needs in the interest of getting the self's needs met that is known as *agency*. These basic communion and agency motivations have also been called "getting ahead" and "getting along" (Hogan, 1983) and are reflected on the axes of the interpersonal circumplex onto which both A and E have been projected (Trapnell and Wiggins, 1990). It appears as if those who characteristically repress choose communion over agency. Thus, many potentially fruitful areas of inquiry remain to be integrated with the repressor and general personality literature in order to better-understand the repressor construct and its impact on relationships.

It will be important for independent researchers to replicate findings from the current study using a full range of indices of the repressor construct. The MCSDS most often used to classify individuals as repressors is actually a mixture of items that tap SDE and IM (Paulhus & John, 1998). Future research should use non-self-report indices of the repressor construct such as information processing, physiological, and behavioral measures including observable behaviors rated by others. A limitation of the present study was the use of self-report responses alone. Nevertheless, theoretically relevant, self-report indices of the repressor construct were used that allowed for application of findings about the FFM to the repressor construct thus creating a bridge over which investigators can pass to extend theory about both the repressor construct and personality in general.

Finally, little is known about the DHA group that shares a high level of defensiveness with repressors. To date no information about this group's latent structure

is known and such information will be important not only in understanding the DHA group itself, but also in refining our understanding of the repressor construct. Despite difficulties in recruitment of the DHA group, it will be essential that efforts be made to understand it because it shares a high level of defensiveness with the repressor group and is thus critical to an accurate understanding of the relative importance of both defensiveness and trait anxiety to repression. If future researchers report data consistent with a dimensional latent structure, it will be important for future researchers to determine the amount of variance in dependent variables accounted for by the full range of possible defensiveness scores. Due to research design limitations associated with the customary restricted sampling of this construct, as well as to the tendency of investigators to completely omit the DHA from analyses, insufficient knowledge exists to even develop indices of the DHA that can be submitted to taxometric analysis procedures at this point. Thus, a taxometric analysis of the DHA construct is not warranted at this time. Findings that the DHA group occasionally emerges as distinct from Weinberger's original comparator groups suggest the possibility of taxonicity, however, results are mixed. Many researchers report that the DHA group's responses fall between those of the repressor and HA group and rather suggest the possibility of dimensional latent structure. Until researchers consistently sample the entire range of scores on defensiveness, insufficient information will exist with which to develop both hypotheses about the latent structure of the DHA group and indices of it to submit to taxometric analysis.

The importance of making inferences about a construct based upon sampling strategies that do not presume latent structure are underscored by findings of the current study that suggest the hypothesis of taxonicity may be inaccurate: This hypothesis was

based heavily upon studies that presumed the repressor construct was taxonic and consequently sampled only extremes on measures of defensiveness and sometimes extremes of trait anxiety. Such a research strategy resulted in inferences biased in favor of taxonicity. Thus, researchers are strongly cautioned to empirically evaluate the latent structure of their constructs. Without such evaluation they will be continually presented with the challenges in inference that result from inaccurate assumptions about latent structure.

Table 1

Original classification system used to identify repressors

	Defensiveness	
	High	Low
Trait Anxiety		
High	Defensive high anxious (DHA)	Repressor (R)
Low	High anxious (HA)	Low anxious (LA)

Note. The original classification system is used to classify individuals according to scores on a measure of defensiveness and trait anxiety. These were the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1964) and the Spielberger Anxiety Inventory (Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983), respectively. High and low defensiveness refer to the upper and lower quartile, respectively. High and low trait anxiety refer to above and below the trait anxiety median, respectively (Weinberger, Schwartz, & Davidson, 1979).

Table 2

Weinberger Adjustment Inventory (WAI) classification system used to identify repressors

		Restraint	
	High	Moderate	Low
Distress			
High	Oversocialized	Sensitized	Reactive
Low	Repressive	Self-Assured	Undersocialized

Note. The WAI (Weinberger & Schwartz, 1990) classification system is used to classify individuals according to distress and restraint scores. High, moderate, and low restraint levels refer to the upper, middle, and lower tercile of restraint, respectively. High and low distress refer to the above and below the median split, respectively (Weinberger, Schwartz, & Davidson, 1979).

Table 3

Descriptive and psychometric data for the STAI, MCSDS, and the NEO-FFI personality domain subscale measures

Measure	Alpha	Skew	Kurtosis
STAI	0.92	0.38	-0.07
MCSDS	0.83	0.14	-0.04
N	0.87	0.14	-0.44
E	0.79	-0.23	-0.08
O	0.73	0.10	-0.38
A	0.77	-0.38	0.18
C	0.86	-0.22	-0.15

Note. Marlowe-Crowne Social Desirability (MCSDS: Crowne & Marlowe, 1964) measures defensiveness. Spielberger Trait Anxiety Inventory (STAI: Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983) measures trait anxiety. Neuroticism (N), extraversion (E), openness (O), agreeableness (A), and conscientiousness (C) are personality domain subscales from the NEO- Five Factor Inventory (NEO-FFI: Costa & McCrae, 1992). N = 1040.

Table 4

Corrected item-total correlation (CITC) and standardized validity (SV) values for STAI items

Item	CITC	SV	Item	CITC	SV
STAI13	0.68	0.82	STAI20	0.61	0.93
STAI3	0.68	0.92	STAI2	0.61	0.77
STAI4	0.66	1.00	STAI1	0.58	0.82
STAI16	0.66	0.97	STAI11	0.56	0.75
STAI12	0.65	0.81	STAI19	0.55	0.96
STAI10	0.65	0.88	STAI18	0.54	0.82
STAI15	0.65	0.83	STAI17	0.51	0.78
STAI5	0.64	0.82	STAI9	0.51	0.65
STAI7	0.63	0.82	STAI6	0.50	0.75
STAI8	0.62	0.92	STAI14	0.42	0.56

Note. Spielberger Trait Anxiety Inventory (STAI: Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983) was scored in a direction that reflected trait stability (st). N = 1040. CITC = corrected item-total correlation; SV = standardized validity computed using Meehl and Yonce (1996, p. 1146).

Table 5

Corrected item-total correlation (CITC) and standardized validity (SV) values for MCSDS items

Item	CITC	SV	Item	CITC	SV	Item	CITC	SV
MC15	0.54	1.10	MC10	0.36	0.84	MC3	0.29	0.74
MC6	0.51	1.14	MC22	0.37	0.64	MC20	0.28	0.52
MC19	0.51	1.12	MC17	0.35	0.70	MC11	0.28	0.44
MC28	0.45	1.02	MC33	0.35	0.70	MC2	0.28	0.48
MC30	0.45	0.83	MC13	0.33	0.66	MC8	0.27	0.56
MC12	0.44	0.92	MC26	0.32	0.67	MC24	0.26	0.56
MC21	0.43	0.82	MC5	0.32	0.80	MC1	0.21	0.49
MC23	0.42	1.11	MC4	0.33	0.60	MC27	0.21	0.41
MC31	0.38	0.78	MC14	0.33	0.82	MC32	0.20	0.47
MC29	0.37	0.76	MC9	0.31	0.63	MC18	0.12	0.32
MC16	0.36	0.67	MC25	0.30	0.71	MC7	0.07	0.30

Note. The Marlowe-Crowne Social Desirability (MCSDS: Crowne & Marlowe, 1964) was used to measure measures defensiveness. N = 1040. CITC = corrected item-total correlation; SV = standardized validity computed using Meehl and Yonce (1996, p. 1146).

Table 6

Corrected item-total correlation (CITC) and standardized validity (SV) values for NEO-FFI neuroticism (N) / stability (S) items

Item	CITC	SV
NEO26	0.64	0.81
NEO46	0.61	0.61
NEO21	0.61	0.70
NEO11	0.58	0.69
NEO41	0.58	0.93
NEO16	0.57	0.72
NEO51	0.56	0.72
NEO56	0.53	0.86
NEO6	0.53	0.68
NEO31	0.53	0.60
NEO36	0.48	0.72
NEO1	0.50	0.43

Note. The neuroticism scale of the NEO-Five Factor Inventory (Costa & McCrae, 1992) was scored in a direction that reflected trait stability (S). N = 1040. CITC = corrected item-total correlation; SV = standardized validity computed using Meehl and Yonce (1996, p. 1146).

Table 7

Corrected item-total correlation (CITC) and standardized validity (SV) values for NEO-FFI extraversion items

Item	CITC	SV
NEO37	0.67	0.69
NEO17	0.51	0.42
NEO42	0.51	0.70
NEO52	0.49	0.49
NEO2	0.47	0.18
NEO32	0.47	0.29
NEO22	0.46	0.10
NEO7	0.40	0.40
NEO57	0.37	0.48
NEO47	0.34	0.16
NEO27	0.32	0.30
NEO12	0.25	0.39

Note. The extraversion (E) scale of the NEO-Five Factor Inventory (Costa & McCrae, 1992) was used to measure E. N = 1040. CITC = corrected item-total correlation; SV = standardized validity computed using Meehl and Yonce (1996, p. 1146).

Table 8

Corrected item-total correlation (CITC) and standardized validity (SV) values for NEO-FFI openness items

Item	CITC	SV
NEO43	0.59	0.21
NEO13	0.57	0.05
NEO58	0.56	0.16
NEO48	0.53	0.14
NEO23	0.52	0.22
NEO53	0.42	0.22
NEO33	0.32	0.06
NEO18	0.30	0.17
NEO28	0.24	0.06
NEO38	0.13	-0.21
NEO3	0.15	-0.36
NEO8	0.05	-0.16

Note. The openness (O) scale of the NEO-Five Factor Inventory (Costa & McCrae, 1992) was used to measure O. N = 1040. CITC = corrected item-total correlation; SV = standardized validity computed using Meehl and Yonce (1996, p. 1146).

Table 9

Corrected item-total correlation (CITC) and standardized validity (SV) values for NEO-FFI agreeableness items

Item	CITC	SV
NEO14	0.51	0.61
NEO39	0.50	0.65
NEO49	0.48	0.59
NEO24	0.47	0.70
NEO59	0.46	0.75
NEO4	0.39	0.50
NEO54	0.38	0.41
NEO44	0.38	0.25
NEO9	0.37	0.67
NEO29	0.36	0.54
NEO19	0.30	0.15
NEO34	0.30	0.59

Note. The agreeableness (A) scale of the NEO-Five Factor Inventory (Costa & McCrae, 1992) was used to measure A. N = 1040. CITC = corrected item-total correlation; SV = standardized validity computed using Meehl and Yonce (1996, p. 1146).

Table 10

Corrected item-total correlation (CITC) and standardized validity (SV) values for NEO-FFI conscientiousness items

Item	CITC	SV
NEO50	0.66	0.61
NEO35	0.65	0.53
NEO55	0.63	0.58
NEO25	0.62	0.47
NEO10	0.62	0.58
NEO60	0.59	0.53
NEO20	0.55	0.44
NEO30	0.52	0.64
NEO5	0.49	0.45
NEO45	0.48	0.69
NEO40	0.48	0.60
NEO15	0.28	0.10

Note. The conscientiousness (C) scale of the NEO-Five Factor Inventory (Costa & McCrae, 1992) was used to measure C. N = 1040. CITC = corrected item-total correlation; SV = standardized validity computed using Meehl and Yonce (1996, p. 1146).

Table 11

Mean (SD) Spielberger Trait Anxiety Inventory (STAI) Scores

Sex	Repressors	Non-repressors	Entire sample
Males	36.00	52.14	49.48
	(7.07)	(11.37)	(12.33)
Females	40.05	54.51	51.23
	(6.42)	(11.73)	(12.34)
Combined	39.01	53.71	50.66
	(6.81)	(11.65)	(12.34)

Note. The STAI (Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983) was scored such that higher numbers indicate higher levels of trait anxiety. Repressors and non-repressors were classified according to the Weinberger, Schwartz, and Davidson (1979) system. Combined sample $N = 1040$. Means for males and females were based on an $n = 273$ and n = 572, respectively, due to missing data.

Table 12

Mean (SD) Marlowe Crowne Social Desirability Scale (MCSDS) scores

Sex	Repressors	Non-repressors	Entire sample
Males	121.64	95.37	99.70
	(7.74)	(10.92)	(14.30)
Females	119.88	97.20	102.36
	(7.94)	(11.64)	(14.47)
Combined	120.34	96.58	101.50
	(7.90)	(11.43)	(14.46)

Note. The MCSDS (Crowne & Marlowe, 1964) was used to measure defensiveness. Higher numbers reflect higher levels of defensiveness. Repressors and non-repressors were classified according to the Weinberger, Schwartz, and Davidson (1979) system. Combined sample $N = 1040$. Means for males and females were based on an $n = 273$ and n = 572, respectively, due to missing data about sex.

Table 13

Frequency (percentage) of each sex by group

Sex	Repressors	Non-repressors	Entire sample
Males	45	228	273
	(26)	(34)	
Females	130	442	572
	(74)	(66)	
Combined	175	670	845
	(21)	(79)	

Note. Repressors and non-repressors were classified according to the Weinberger, Schwartz, and Davidson (1979) system.

Table 14

Mean (SD) NEO-Five Factor Inventory (NEO-FFI) neuroticism scores

Sex	Repressors	Non-repressors	Entire sample
Males	12.67	21.22	19.80
	(5.13)	(7.85)	(8.11)
Females	15.50	24.90	22.75
	(5.84)	(7.92)	(8.47)
Combined	14.77	23.65	21.80
	(5.79)	(8.08)	(8.46)

Note. The neuroticism (N) scale of the NEO-FFI (Costa & McCrae, 1992) was used to measure trait N. Higher numbers reflect higher levels of trait N. Repressors and non-repressors were classified according to the Weinberger, Schwartz, and Davidson (1979) system. Combined sample $N = 1040$. Means for males and females were based on an $n = 273$ and n = 572, respectively, due to missing data about sex.

Table 15

Mean (SD) NEO-Five Factor Inventory (NEO-FFI) extraversion scores

Sex	Repressors	Non-repressors	Entire sample
Males	33.36	29.06	29.76
	(5.51)	(6.04)	(6.16)
Females	34.65	30.16	31.20
	(5.68)	(6.44)	(6.55)
Combined	34.31	29.78	30.74
	(5.65)	(6.33)	(6.46)

Note. The extraversion scale of the NEO-FFI (Costa & McCrae, 1992) was used to measure E. Higher numbers reflect higher levels of E. Repressors and non-repressors were classified according to the Weinberger, Schwartz, and Davidson (1979) system. Combined sample $N = 1040$. Means for males and females were based on an $n = 273$ and n = 572, respectively, due to missing data about sex.

Table 16

Mean (SD) NEO-Five Factor Inventory (NEO-FFI) openness scores

Sex	Repressors	Non-repressors	Entire sample
Males	28.74	28.24	28.32
	(6.87)	(6.86)	(6.85)
Females	28.83	28.24	28.37
	(5.62)	(6.40)	(6.23)
Combined	28.81	29.24	28.36
	(5.94)	(6.56)	(6.43)

Note. The openness scale of the NEO-FFI (Costa & McCrae, 1992) was used to measure openness. Higher numbers reflect higher levels of O. Repressors and non-repressors were classified according to the Weinberger, Schwartz, and Davidson (1979) system. Combined sample $N = 1040$. Means for males and females were based on an $n = 273$ and n = 572, respectively, due to missing data about sex.

Table 17

Mean (SD) NEO-Five Factor Inventory (NEO-FFI) agreeableness scores

Sex	Repressors	Non-repressors	Entire sample
Males	35.35	29.49	30.50
	(4.87)	(5.90)	(6.17)
Females	37.38	31.20	32.62
	(4.36)	(6.38)	(6.52)
Combined	36.95	30.62	31.94
	(4.54)	(6.27)	(6.48)

Note. The agreeableness (A) scale of the NEO-FFI (Costa & McCrae, 1992) was used to measure A. Higher numbers reflect higher levels of A. Repressors and non-repressors were classified according to the Weinberger, Schwartz, and Davidson (1979) system. Combined sample $N = 1040$. Means for males and females were based on an $n = 273$ and n = 572, respectively, due to missing data about sex.

Table 18

Mean (SD) NEO-Five Factor Inventory (NEO-FFI) conscientiousness scores

Sex	Repressors	Non-repressors	Entire sample
Males	35.14	28.67	29.72
	(5.72)	(6.93)	(7.15)
Females	36.46	30.28	31.70
	(6.23)	(7.20)	(7.46)
Combined	36.13	29.73	31.06
	(6.12)	(7.14)	(4.41)

Note. The conscientiousness (C) scale of the NEO-FFI (Costa & McCrae, 1992) was used to measure C. Higher numbers reflect higher levels of C. Repressors and non-repressors were classified according to the Weinberger, Schwartz, and Davidson (1979) system. Combined sample $N = 1040$. Means for males and females were based on an $n = 273$ and n = 572, respectively, due to missing data about sex.

Table 19

Standardized validity estimates of composite indicators

Scale	All items	Highest CITC items	Highest SV items
MCSDS	2.20	1.95	1.98
SDE	2.00		
IM	1.65		
STAI	1.38	1.30	1.39
S	1.15	1.07	1.20
E	0.71	0.70	0.84
A	1.03	1.02	1.11
C	0.84	0.74	0.91

Note. Marlowe-Crowne Social Desirability (MCSDS: Crowne & Marlowe, 1964) measures defensiveness. Spielberger Trait Anxiety Inventory (STAI: Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983) measures trait anxiety. Stability (S), extraversion (E), openness (O), agreeableness (A), and conscientiousness (C) are personality domain subscales from the NEO- Five Factor Inventory (NEO-FFI: Costa & McCrae, 1992). N = 1040. CITC = corrected item total correlations. SV = standardized validity items computed according to Meehl & Yonce (1996, p. 1146).

Table 20

Nuisance covariance estimates between composite indicators in the repressor (above diagonal) and non-repressor (below diagonal) group

	Def	SDE	IM	Stv	Sv	Ev	Av	Cv
Def	-	0.80	0.68	0.29	0.34	0.31	0.37	0.23
SDE	0.87	-	0.15	0.32	0.41	0.17	0.20	0.10
IM	0.80	0.42	-	0.08	0.05	0.29	0.30	0.28
Stv	0.23	0.33	0.05	-	0.54	0.35	0.28	0.10
Sv	0.31	0.44	0.06	0.71	-	0.40	0.23	0.12
Ev	0.16	0.15	0.13	0.43	0.39	-	0.42	0.16
Av	0.50	0.40	0.42	0.31	0.29	0.30	-	0.13
C v	0.34	0.29	0.30	0.31	0.34	0.24	0.24	-

Note. Defensiveness (Def) composite was formed via combination of all Marlowe-Crowne Social Desirability Scale (MCSDS: Crowne & Marlowe, 1964) items. Self-deceptive enhancement (SDE) and impression management (IM) composites were formed via combination of the items that composed the MCSDS SDE and IM factors, respectively (Paulhus & Reid, 1989). The trait stability (Stv) composite was formed via combination of the most valid items (Meehl & Yonce, 1996, P. 1146) of the Spielberger Trait Anxiety Inventory (STAI: Spielberger et al., 1983). Separate stability (Sv), extraversion (Ev), agreeableness (Av) and conscientiousness (Cv) composites were formed via combination of the most valid items on each of these NEO-Five Factor Inventory (NEO-FFI: Costa & McCrae, 1992) subscales. N = 1040.

Table 21

Nuisance covariance estimates between composite indicators in the combined (repressor + non-repressor) group

	Def	SDE	IM	Stv	Sv	Ev	Av	Cv
Def	-							
SDE	0.91	-						
IM	0.85	0.58	-					
Stv	0.46	0.51	0.28	-				
Sv	0.48	0.56	0.26	0.75	-			
Ev	0.32	0.30	0.28	0.50	0.46	-		
Av	0.60	0.51	0.53	0.43	0.40	0.39	-	
C v	0.45	0.39	0.41	0.39	0.40	0.30	0.32	-

Note. Defensiveness (Def) composite was formed via combination of all Marlowe-Crowne Social Desirability Scale (MCSDS: Crowne & Marlowe, 1964) items. Self-deceptive enhancement (SDE) and impression management (IM) composites were formed via combination of the items that composed the SDE and IM factors, respectively, of the MCSDS (Paulhus & Reid, 1989). The trait stability (Stv) composite was formed via combination of the most valid (Meehl & Yonce, 1996, P. 1146) items of the Spielberger Trait Anxiety Inventory (STAI: Spielberger et al., 1983). Separate stability (Sv), extraversion (Ev), agreeableness (Av) and conscientiousness (Cv) composites were formed via combination of the most valid items on each of these NEO-Five Factor Inventory (NEO-FFI: Costa & McCrae, 1992) subscales. N = 1040.

Table 22

Judgments of latent structure for mean-above-minus-below-a-cut (MAMBAC) analyses

Input	Output	Latent Structure (frequency of judgment)
Def	Stv	D (4/4)
Stv	Def	D (3/4); T (1/4)
SDE	IM	T (4/4)
IM	SDE	D (2/4); T (2/4)
SDE	Av	T (4/4)
Av	SDE	D (4/4)
IM	Stv	D (2/4); DK (2/4)
Stv	IM	T (4/4)
IM	Sv	D (3/4); DK (1/4)
Sv	IM	T (4/4)
IM	Av	D (3/4); T (1/4)
Av	IM	T (4/4)
Stv	Av	T (2/4); DK (2/4)
Av	Stv	D (4/4)
Sv	Av	D (4/4)
Av	Sv	T (4/4)

Note. Defensiveness (Def) composite was formed via combination of all Marlowe-Crowne Social Desirability Scale (MCSDS: Crowne & Marlowe, 1964) items. Self-deceptive enhancement (SDE) and impression management (IM) composites were formed via combination of the items that composed the SDE and IM factors, respectively, of the MCSDS (Paulhus & Reid, 1989). The trait stability (Stv) composite was formed via combination of the most valid (Meehl & Yonce, 1996, P. 1146) items of the Spielberger Trait Anxiety Inventory (STAI: Spielberger et al., 1983). Separate stability (Sv), extraversion (Ev), agreeableness (Av) and conscientiousness (Cv) composites were formed via combination of the most valid items on each of these NEO-Five Factor Inventory (NEO-FFI: Costa & McCrae, 1992) subscales. *N* = 1040. Latent structure judgments by four blind raters: D = dimensional; T = taxonic; DK = don't know.

Table 23

Base rate estimates derived from MAMBAC analyses with research data, simulated dimensional, and simulated taxonic data

Input	Output	Research Data	Simulated	
			Dimensional	Taxonic
Def	Stv	0.45	0.50	0.31
Stv	Def	0.44	0.48	0.35
SDE	IM	0.43	0.54	0.40
IM	SDE	0.45	0.52	0.43
SDE	Av	0.50	0.49	0.48
Av	SDE	0.49	0.46	0.49
IM	Stv	0.48	0.58	0.28
Stv	IM	0.34	0.46	0.26
IM	Sv	0.48	0.58	0.28
Sv	IM	0.38	0.66	0.32
IM	Av	0.53	0.54	0.48
Av	IM	0.48	0.54	0.46
Stv	Av	0.54	0.50	0.44
Av	Stv	0.52	0.49	0.46
Sv	Av	0.58	0.51	0.44
Av	Sv	0.49	0.47	0.49

Note. Defensiveness (Def) composite was formed via combination of all Marlowe-Crowne Social Desirability Scale (MCSDS: Crowne & Marlowe, 1964) items. Self-deceptive enhancement (SDE) and impression management (IM) composites were formed via combination of the items that composed the SDE and IM factors, respectively, of the MCSDS (Paulhus & Reid, 1989). The trait stability (Stv) composite was formed via combination of the most valid (Meehl & Yonce, 1996, P. 1146) items of the Spielberger Trait Anxiety Inventory (STAI: Spielberger et al., 1983). Separate stability (Sv), extraversion (Ev), agreeableness (Av) and conscientiousness (Cv) composites were formed via combination of the most valid items on each of these NEO-Five Factor Inventory (NEO-FFI: Costa & McCrae, 1992) subscales. N = 1040.

Table 24

Decisions regarding latent structure for MAXCOV analyses

Input	Output	Latent structure
Stv	IM, SDE	D (4/4)
IM	Stv, SDE	D (4/4)
SDE	Stv, IM	T (2/4); D (1/4); DK (1/4)

Note. The trait stability (Stv) composite was formed via combination of the most valid (Meehl & Yonce, 1996, P. 1146) items of the Spielberger Trait Anxiety Inventory (STAI: Spielberger et al., 1983). Self-deceptive enhancement (SDE) and impression management (IM) composites were formed via combination of the items that composed the SDE and IM factors (Paulhus & Reid, 1989), respectively, of the Marlowe-Crowne Social Desirability Scale (MCSDS: Crowne & Marlowe, 1964). $N = 1040$. Latent structure judgments: D = dimensional; T = taxonic; DK = don't know.

Table 25

Base rate estimates derived from MAXCOV analyses with research data, simulated dimensional, and simulated taxonic data

Input	Output	Research Data	Simulated	
			Dimensional	Taxonic
Stv	IM, SDE	0.08	0.92	0.08
IM	Stv, SDE	0.08	0.08	0.08
SDE	Stv, IM	0.92	0.08	0.08

Note. The trait stability (Stv) composite was formed via combination of the most valid (Meehl & Yonce, 1996, P. 1146) items of the Spielberger Trait Anxiety Inventory (STAI: Spielberger et al., 1983). Self-deceptive enhancement (SDE) and impression management (IM) composites were formed via combination of the items that composed the SDE and IM factors (Paulhus & Reid, 1989), respectively, of the Marlowe-Crowne Social Desirability Scale (MCSDS: Crowne & Marlowe, 1964). $N = 1040$.

Table 26

Standardized validity estimates of composite indicators in separate male and female samples

	Males	Females
Def	2.50	2.05
SDE	2.41	1.84
IM	1.71	1.62
Stv	1.55	1.35
Sv	1.15	1.27
Ev	0.80	0.83
Av	1.18	1.06
Cv	1.02	0.92

Note. Defensiveness (Def) composite was formed via combination of all Marlowe-Crowne Social Desirability Scale (MCSDS: Crowne & Marlowe, 1964) items. Self-deceptive enhancement (SDE) and impression management (IM) composites were formed via combination of the items that composed the SDE and IM factors, respectively, of the MCSDS (Paulhus & Reid, 1989). The trait stability (Stv) composite was formed via combination of the most valid (Meehl & Yonce, 1996, P. 1146) items of the Spielberger Trait Anxiety Inventory (STAI: Spielberger et al., 1983). Separate stability (Sv), extraversion (Ev), agreeableness (Av) and conscientiousness (Cv) composites were formed via combination of the most valid items on each of these NEO-Five Factor Inventory (NEO-FFI: Costa & McCrae, 1992) subscales. N = 1040.

Table 27

Nuisance covariance estimates between composite indicators in the male repressor (above diagonal) and non-repressor (below diagonal) group

	Def	SDE	IM	Stv	Sv	Ev	Av	Cv
Def	-	0.82	0.64	0.33	0.48	0.40	0.41	0.26
SDE	0.86	-	0.13	0.44	0.41	0.37	0.38	0.12
IM	0.80	0.42	-	0.06	0.22	0.22	0.10	0.29
Stv	0.21	0.26	0.08	-	0.44	0.40	0.36	0.14
Sv	0.24	0.36	0.04	0.69	-	0.59	0.40	0.26
Ev	0.08	0.05	0.09	0.47	0.40	-	0.36	0.34
Av	0.43	0.33	0.39	0.30	0.28	0.29	-	0.23
Cv	0.34	0.31	0.24	0.34	0.28	0.24	0.19	-

Note. Defensiveness (Def) composite was formed via combination of all Marlowe-Crowne Social Desirability Scale (MCSDS: Crowne & Marlowe, 1964) items. Self-deceptive enhancement (SDE) and impression management (IM) composites were formed via combination of the items that composed the SDE and IM factors, respectively, of the MCSDS (Paulhus & Reid, 1989). The trait stability (Stv) composite was formed via combination of the most valid (Meehl & Yonce, 1996, P. 1146) items of the Spielberger Trait Anxiety Inventory (STAI: Spielberger et al., 1983). Separate stability (Sv), extraversion (Ev), agreeableness (Av) and conscientiousness (Cv) composites were formed via combination of the most valid items on each of these NEO-Five Factor Inventory (NEO-FFI: Costa & McCrae, 1992) subscales. N = 319 (44 repressors).

Table 28
Nuisance covariance estimates between composite indicators in the female repressor (above diagonal) and non-repressor (below diagonal) group

	Def	SDE	IM	Stv	Sv	Ev	Av	Cv
Def	-	0.80	0.72	0.19	0.29	0.32	0.34	0.23
SDE	0.88	-	0.21	0.20	0.41	0.17	0.17	0.14
IM	0.81	0.46	-	0.10	0.00	0.30	0.31	0.24
Stv	0.23	0.32	0.06	-	0.56	0.36	0.26	0.10
Sv	0.35	0.46	0.12	0.70	-	0.38	0.21	0.07
Ev	0.17	0.18	0.13	0.41	0.41	-	0.46	0.12
Av	0.55	0.45	0.45	0.33	0.35	0.29	-	0.07
Cv	0.34	0.28	0.33	0.32	0.39	0.24	0.26	-

Note. Defensiveness (Def) composite was formed via combination of all Marlowe-Crowne Social Desirability Scale (MCSDS: Crowne & Marlowe, 1964) items. Self-deceptive enhancement (SDE) and impression management (IM) composites were formed via combination of the items that composed the SDE and IM factors, respectively, of the MCSDS (Paulhus & Reid, 1989). The trait stability (Stv) composite was formed via combination of the most valid (Meehl & Yonce, 1996, P. 1146) items of the Spielberger Trait Anxiety Inventory (STAI: Spielberger et al., 1983). Separate stability (Sv), extraversion (Ev), agreeableness (Av) and conscientiousness (Cv) composites were formed via combination of the most valid items on each of these NEO-Five Factor Inventory (NEO-FFI: Costa & McCrae, 1992) subscales. $N = 636$ (118 repressors).

Table 29

Nuisance covariance estimates between composite indicators in the entire (repressors + nonrepressors) male (above diagonal) and entire female (below diagonal) group

	Def	SDE	IM	Stv	Sv	Ev	Av	Cv
Def	-	0.92	0.84	0.45	0.42	0.25	0.55	0.46
SDE	0.92	-	0.59	0.49	0.50	0.23	0.48	0.43
IM	0.86	0.61	-	0.30	0.24	0.22	0.48	0.37
Stv	0.44	0.50	0.30	-	0.72	0.52	0.43	0.43
Sv	0.52	0.59	0.32	0.75	-	0.47	0.38	0.37
Ev	0.33	0.32	0.29	0.48	0.48	-	0.36	0.32
Av	0.62	0.54	0.54	0.44	0.45	0.39	-	0.29
Cv	0.45	0.39	0.44	0.40	0.45	0.30	0.34	-

Note. Defensiveness (Def) composite was formed via combination of all Marlowe-Crowne Social Desirability Scale (MCSDS: Crowne & Marlowe, 1964) items. Self-deceptive enhancement (SDE) and impression management (IM) composites were formed via combination of the items that composed the SDE and IM factors, respectively, of the MCSDS (Paulhus & Reid, 1989). The trait stability (Stv) composite was formed via combination of the most valid (Meehl & Yonce, 1996, P. 1146) items of the Spielberger Trait Anxiety Inventory (STAI: Spielberger et al., 1983). Separate stability (Sv), extraversion (Ev), agreeableness (Av) and conscientiousness (Cv) composites were formed via combination of the most valid items on each of these NEO-Five Factor Inventory (NEO-FFI: Costa & McCrae, 1992) subscales. N = 955 (162 repressors).

Table 30

Judgments of latent structure for mean above minus below-a-cut (MAMBAC) analyses with the male sample

Input	Output	Latent Structure
Def	Stv	T
Stv	Def	D
SDE	IM	T
IM	SDE	D
SDE	Av	T
Av	SDE	T
IM	Stv	T
Stv	IM	T
IM	Sv	T
Sv	IM	T
IM	Av	D
Av	IM	T
Stv	Av	D
Av	Stv	T
Sv	Av	D
Av	Sv	DK

Note. Defensiveness (Def) composite was formed via combination of all Marlowe-Crowne Social Desirability Scale (MCSDS: Crowne & Marlowe, 1964) items. Self-deceptive enhancement (SDE) and impression management (IM) composites were formed via combination of the items that composed the SDE and IM factors, respectively, of the MCSDS (Paulhus & Reid, 1989). The trait stability (Stv) composite was formed via combination of the most valid (Meehl & Yonce, 1996, P. 1146) items of the Spielberger Trait Anxiety Inventory (STAI: Spielberger et al., 1983). Separate stability (Sv), extraversion (Ev), agreeableness (Av) and conscientiousness (Cv) composites were formed via combination of the most valid items on each of these NEO-Five Factor Inventory (NEO-FFI: Costa & McCrae, 1992) subscales. *N* = 319. Latent structure judgments: D = dimensional; T = taxonic; DK = don't know.

Table 31

Base rate estimates derived from MAMBAC analyses with research data, simulated dimensional, and simulated taxonic data: male sample

Input	Output	Research Data	Simulated	
			Dimensional	Taxonic
Def	Stv	0.31	0.48	0.21
Stv	Def	0.36	0.29	0.37
SDE	IM	0.45	0.51	0.41
IM	SDE	0.42	0.44	0.35
SDE	Av	0.46	0.54	0.37
Av	SDE	0.39	0.58	0.41
IM	Stv	0.35	0.59	0.24
Stv	IM	0.33	0.51	0.24
IM	Sv	0.25	0.75	0.24
Sv	IM	0.29	0.65	0.36
IM	Av	0.51	0.49	0.38
Av	IM	0.41	0.53	0.42
Stv	Av	0.38	0.38	0.44
Av	Stv	0.45	0.50	0.45
Sv	Av	0.46	0.42	0.43
Av	Sv	0.43	0.58	0.54

Note. Defensiveness (Def) composite was formed via combination of all Marlowe-Crowne Social Desirability Scale (MCSDS: Crowne & Marlowe, 1964) items. Self-deceptive enhancement (SDE) and impression management (IM) composites were formed via combination of the items that composed the SDE and IM factors, respectively, of the MCSDS (Paulhus & Reid, 1989). The trait stability (Stv) composite was formed via combination of the most valid (Meehl & Yonce, 1996, P. 1146) items of the Spielberger Trait Anxiety Inventory (STAI: Spielberger et al., 1983). Separate stability (Sv), extraversion (Ev), agreeableness (Av) and conscientiousness (Cv) composites were formed via combination of the most valid items on each of these NEO-Five Factor Inventory (NEO-FFI: Costa & McCrae, 1992) subscales. N = 319.

Table 32

Decisions regarding latent structure for MAXCOV analyses within the male sample

Input	Output	Latent structure
Stv	IM, SDE	DK
IM	Stv, SDE	T
SDE	Stv, IM	DK

Note. The trait stability (Stv) composite was formed via combination of the most valid (Meehl & Yonce, 1996, P. 1146) items of the Spielberger Trait Anxiety Inventory (STAI: Spielberger et al., 1983). Self-deceptive enhancement (SDE) and impression management (IM) composites were formed via combination of the items that composed the SDE and IM factors (Paulhus & Reid, 1989), respectively, of the Marlowe-Crowne Social Desirability Scale (MCSDS: Crowne & Marlowe, 1964). $N = 319$. Latent structure judgments: D = dimensional; T = taxonic; DK = don't know.

Table 33

Base rate estimates derived from MAXCOV analyses with research data, simulated dimensional, and simulated taxonic data: male sample

Input	Output	Research Data	Simulated	
			Dimensional	Taxonic
Stv	IM, SDE	0.08	0.41	0.08
IM	Stv, SDE	0.08	0.08	0.08
SDE	Stv, IM	0.08	0.92	0.08

Note. The trait stability (Stv) composite was formed via combination of the most valid (Meehl & Yonce, 1996, P. 1146) items of the Spielberger Trait Anxiety Inventory (STAI: Spielberger et al., 1983). Self-deceptive enhancement (SDE) and impression management (IM) composites were formed via combination of the items that composed the SDE and IM factors (Paulhus & Reid, 1989), respectively, of the Marlowe-Crowne Social Desirability Scale (MCSDS: Crowne & Marlowe, 1964). $N = 319$.

Table 34

Judgments of latent structure for mean above minus below-a-cut (MAMBAC) analyses with the female sample

Input	Output	Latent Structure
Def	Stv	D
Stv	Def	D
SDE	IM	T
IM	SDE	D
SDE	Av	D
Av	SDE	DK
IM	Stv	D
Stv	IM	T
IM	Sv	DK
Sv	IM	T
IM	Av	D
Av	IM	D
Stv	Av	D
Av	Stv	D
Sv	Av	DK
Av	Sv	DK

Note. Defensiveness (Def) composite was formed via combination of all Marlowe-Crowne Social Desirability Scale (MCSDS: Crowne & Marlowe, 1964) items. Self-deceptive enhancement (SDE) and impression management (IM) composites were formed via combination of the items that composed the SDE and IM factors, respectively, of the MCSDS (Paulhus & Reid, 1989). The trait stability (Stv) composite was formed via combination of the most valid (Meehl & Yonce, 1996, P. 1146) items of the Spielberger Trait Anxiety Inventory (STAI: Spielberger et al., 1983). Separate stability (Sv), extraversion (Ev), agreeableness (Av) and conscientiousness (Cv) composites were formed via combination of the most valid items on each of these NEO-Five Factor Inventory (NEO-FFI: Costa & McCrae, 1992) subscales. *N* = 636. Latent structure judgments: D = dimensional; T = taxonic; DK = don't know.

Table 35

Base rate estimates derived from MAMBAC analyses with research data, simulated dimensional, and simulated taxonic data: female sample

Input	Output	Research Data	Simulated	
			Dimensional	Taxonic
Def	Stv	0.54	0.52	0.38
Stv	Def	0.50	0.52	0.33
SDE	IM	0.44	0.52	0.44
IM	SDE	0.49	0.52	0.45
SDE	Av	0.54	0.54	0.56
Av	SDE	0.56	0.52	0.50
IM	Stv	0.54	0.46	0.33
Stv	IM	0.43	0.47	0.29
IM	Sv	0.56	0.60	0.31
Sv	IM	0.48	0.52	0.39
IM	Av	0.55	0.55	0.47
Av	IM	0.53	0.48	0.46
Stv	Av	0.60	0.51	0.46
Av	Stv	0.54	0.51	0.49
Sv	Av	0.60	0.47	0.44
Av	Sv	0.50	0.47	0.44

Note. Defensiveness (Def) composite was formed via combination of all Marlowe-Crowne Social Desirability Scale (MCSDS: Crowne & Marlowe, 1964) items. Self-deceptive enhancement (SDE) and impression management (IM) composites were formed via combination of the items that composed the SDE and IM factors, respectively, of the MCSDS (Paulhus & Reid, 1989). The trait stability (Stv) composite was formed via combination of the most valid (Meehl & Yonce, 1996, P. 1146) items of the Spielberger Trait Anxiety Inventory (STAI: Spielberger et al., 1983). Separate stability (Sv), extraversion (Ev), agreeableness (Av) and conscientiousness (Cv) composites were formed via combination of the most valid items on each of these NEO-Five Factor Inventory (NEO-FFI: Costa & McCrae, 1992) subscales. N = 636.

Table 36

Decisions regarding latent structure for MAXCOV analyses within the female sample

Input	Output	Latent structure
Stv	IM, SDE	D
IM	Stv, SDE	T
SDE	Stv, IM	D

Note. The trait stability (Stv) composite was formed via combination of the most valid (Meehl & Yonce, 1996, P. 1146) items of the Spielberger Trait Anxiety Inventory (STAI: Spielberger et al., 1983). Self-deceptive enhancement (SDE) and impression management (IM) composites were formed via combination of the items that composed the SDE and IM factors (Paulhus & Reid, 1989), respectively, of the Marlowe-Crowne Social Desirability Scale (MCSDS: Crowne & Marlowe, 1964). $N = 636$. Latent structure judgments: D = dimensional; T = taxonic; DK = don't know.

Table 37

Base rate estimates derived from MAXCOV analyses with research data, simulated dimensional, and simulated taxonic data: female sample

Input	Output	Research Data	Simulated	
			Dimensional	Taxonic
Stv	IM, SDE	0.08	0.08	0.27
IM	Stv, SDE	0.08	0.92	0.15
SDE	Stv, IM	0.08	0.08	0.08

Note. The trait stability (Stv) composite was formed via combination of the most valid (Meehl & Yonce, 1996, P. 1146) items of the Spielberger Trait Anxiety Inventory (STAI: Spielberger et al., 1983). Self-deceptive enhancement (SDE) and impression management (IM) composites were formed via combination of the items that composed the SDE and IM factors (Paulhus & Reid, 1989), respectively, of the Marlowe-Crowne Social Desirability Scale (MCSDS: Crowne & Marlowe, 1964). $N = 636$.

Table 38

Number of NEO-FFI items that measure each possible facet of the NEO-PI-R neuroticism scale

Anxiety	3
Angry hostility	1
Depression	4
Self-consciousness	2
Impulsiveness	0
Vulnerability	2

Note. The neuroticism (N) scale of the NEO-Five Factor Inventory (NEO-FFI: Costa & McCrae, 1992) was used to measure N and is a shortened version of the Revised NEO Personality Inventory (NEO-PI-R: Costa & McCrae, 1992) N scale.

Table 39

Number of NEO-FFI items that measure each possible facet of the NEO-PI-R extraversion scale

Warmth	1
Gregariousness	2
Assertiveness	1
Activity	3
Excitement seeking	1
Positive emotions	4

Note. The extraversion (E) scale of the NEO-Five Factor Inventory (NEO-FFI: Costa & McCrae, 1992) was used to measure E and is a shortened version of the Revised NEO Personality Inventory (NEO-PI-R: Costa & McCrae, 1992) E scale.

Table 40

Number of NEO-FFI items that measure each possible facet of the NEO-PI-R openness scale

Fantasy	1
Aesthetics	3
Feelings	1
Actions	2
Ideas	3
Values	2

Note. The openness (O) scale of the NEO-Five Factor Inventory (NEO-FFI: Costa & McCrae, 1992) was used to measure O and is a shortened version of the Revised NEO Personality Inventory (NEO-PI-R: Costa & McCrae, 1992) O scale.

Table 41

Number of NEO-FFI items that measure each possible facet of the NEO-PI-R agreeableness scale

Trust	2
Straightforwardness	1
Altruism	5
Compliance	3
Modesty	0
Tender-mindedness	1

Note. The agreeableness (A) scale of the NEO-Five Factor Inventory (NEO-FFI: Costa & McCrae, 1992) was used to measure A and is a shortened version of the Revised NEO Personality Inventory (NEO-PI-R: Costa & McCrae, 1992) A scale.

Table 42

Number of NEO-FFI items that measure each possible facet of the NEO-PI-R conscientiousness scale

Competence	0
Order	3
Dutifulness	3
Achievement striving	3
Self-discipline	3
Deliberation	0

Note. The conscientiousness (C) scale of the NEO-Five Factor Inventory (NEO-FFI: Costa & McCrae, 1992) was used to measure C and is a shortened version of the Revised NEO Personality Inventory (NEO-PI-R: Costa & McCrae, 1992) C scale.

Figure 1. NEO-FFI personality scores. Repressors and non-repressors were classified according to the Weinberger, Schwartz, and Davidson (1979) system. Neuroticism (N), extraversion (E), openness (O), agreeableness (A), and conscientiousness (C) are personality domain subscales from the NEO- Five Factor Inventory (NEO-FFI: Costa & McCrae, 1992). Means for males and females were based on an $n = 273$ and n = 572, respectively, due to missing data about sex.

Figure 1

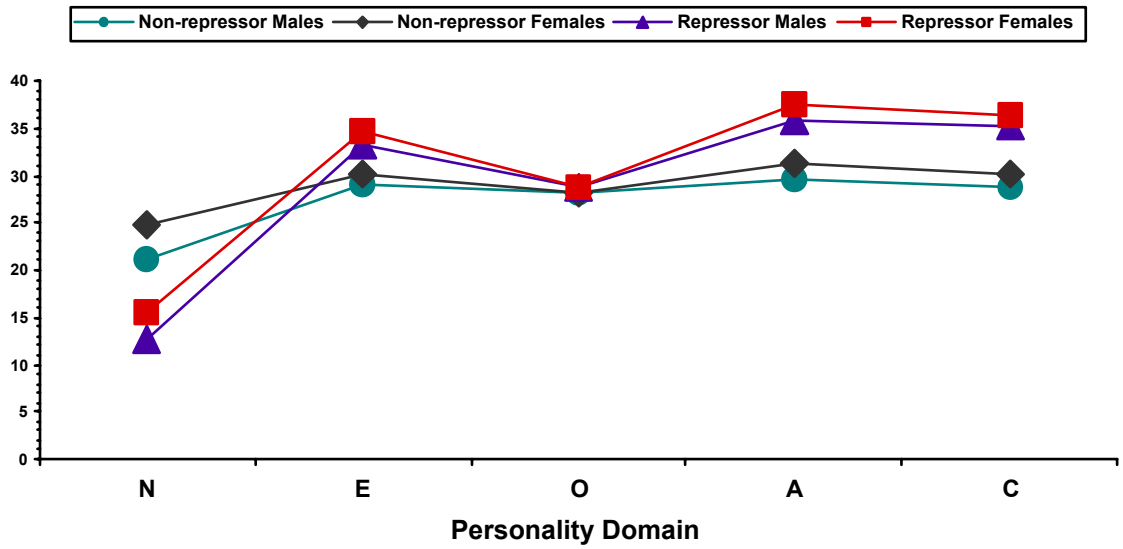

Non-repressor Males
Non-repressor Females
Repressor Males
Repressor Females
40
35
30
25
20
15
10
5
0
N
E
O
A
C
Personality Domain

Figure 2. Research data output derived from mean above minus below a cut (MAMBAC) analyses conducted with defensiveness (Def) and trait stability (Stv) composite indicators of the repressor construct. Each composite indicator (Ind) served as both the input (plotted on abscissa) and output (plotted on ordinate) Ind. On the abscissa cases were ordered according to standardized scores ranging from lowest to highest and 50 cuts were made beginning and ending 25 cases from the extremes. On the ordinate the difference between mean scores of individuals falling above and below each cut was plotted. The Def composite (Ind 1) was formed via combination of all Marlowe-Crowne Social Desirability Scale (MCSDS: Crowne & Marlowe, 1964) items. The Stv (Ind 2) composite was formed via combination of the most valid items (Meehl &Yonce, 1996, p. 1146) of the Spielberger Trait Anxiety Inventory (STAI: Spielberger et al., 1983). $N = 1040$.

Figure 2

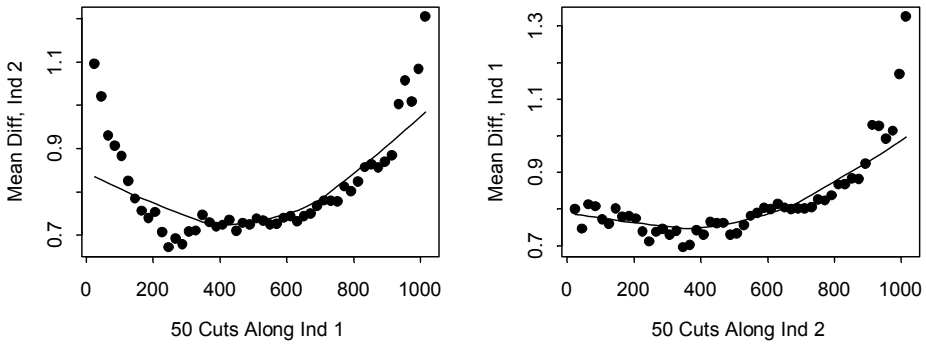

Mean Diff, Ind 2
0.7
0.9
1.1
0
200
400
600
800
1000
50 Cuts Along Ind 1
Mean Diff, Ind 1
0.7
0.9
1.1
1.3
0
200
400
600
800
1000
50 Cuts Along Ind 2

Figure 3. Simulated dimensional data output derived from mean above minus below a cut (MAMBAC) analyses conducted with defensiveness (Def) and trait stability (Stv) composite indicators of the repressor construct. Each composite indicator (Ind) served as both the input (plotted on abscissa) and output (plotted on ordinate) Ind. On the abscissa cases were ordered according to standardized scores ranging from lowest to highest and 50 cuts were made beginning and ending 25 cases from the extremes. On the ordinate the difference between mean scores of individuals falling above and below each cut was plotted. The Def composite (Ind 1) was formed via combination of all Marlowe-Crowne Social Desirability Scale (MCSDS: Crowne & Marlowe, 1964) items. The Stv (Ind 2) composite was formed via combination of the most valid items (Meehl &Yonce, 1996, p. 1146) of the Spielberger Trait Anxiety Inventory (STAI: Spielberger et al., 1983). N = 1040.

Figure 3

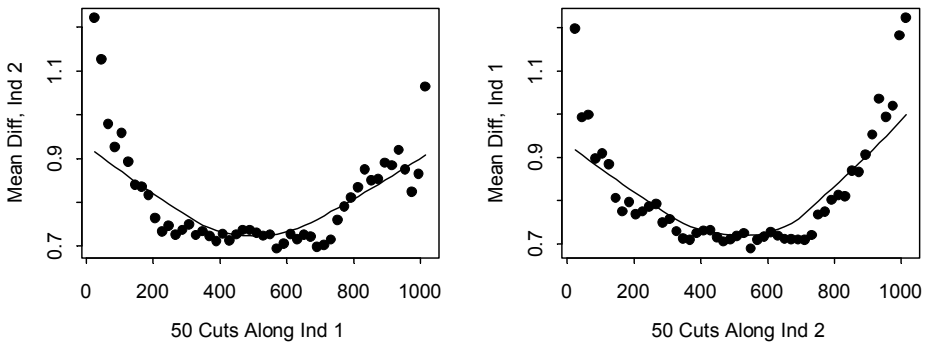

Mean Diff, Ind 2
0.7
0.9
1.1
0
200
400
600
800
1000
50 Cuts Along Ind 1
Mean Diff, Ind 1
0.7
0.9
1.1
0
200
400
600
800
1000
50 Cuts Along Ind 2

Figure 4. Simulated taxonic data output derived from mean above minus below a cut (MAMBAC) analyses conducted with defensiveness (Def) and trait stability (Stv) composite indicators of the repressor construct. Each composite indicator (Ind) served as both the input (plotted on abscissa) and output (plotted on ordinate) Ind. On the abscissa cases were ordered according to standardized scores ranging from lowest to highest and 50 cuts were made beginning and ending 25 cases from the extremes. On the ordinate the difference between mean scores of individuals falling above and below each cut was plotted. The Def composite (Ind 1) was formed via combination of all Marlowe-Crowne Social Desirability Scale (MCSDS: Crowne & Marlowe, 1964) items. The Stv (Ind 2) composite was formed via combination of the most valid items (Meehl &Yonce, 1996, p. 1146) of the Spielberger Trait Anxiety Inventory (STAI: Spielberger et al., 1983). N = 1040.

Figure 4

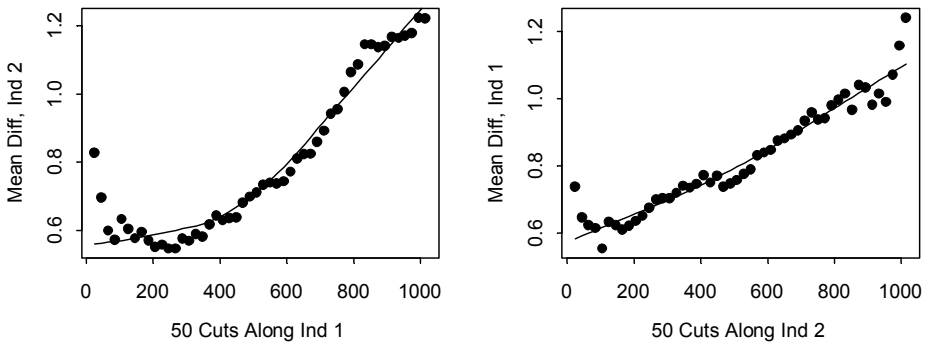

Mean Diff, Ind 2
0.6
0.8
1.0
1.2
0
200
400
600
800
1000
50 Cuts Along Ind 1
Mean Diff, Ind 1
0.6
0.8
1.0
1.2
0
200
400
600
800
1000
50 Cuts Along Ind 2

Figure 5. Research data output derived from mean above minus below a cut (MAMBAC) analyses conducted with impression management (IM) and self-deceptive enhancement (SDE) composite indicators of the repressor construct. Each composite indicator (Ind) served as both the input (plotted on abscissa) and output (plotted on ordinate) Ind. On the abscissa cases were ordered according to standardized scores ranging from lowest to highest and 50 cuts were made beginning and ending 25 cases from the extremes. On the ordinate the difference between mean scores of individuals falling above and below each cut were plotted. The IM (Ind 1) and SDE (Ind 2) composites were formed via combination of the items that compose the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1964) IM and SDE factors, respectively (Paulhus & Reid, 1989). *N* = 1040.

Figure 5

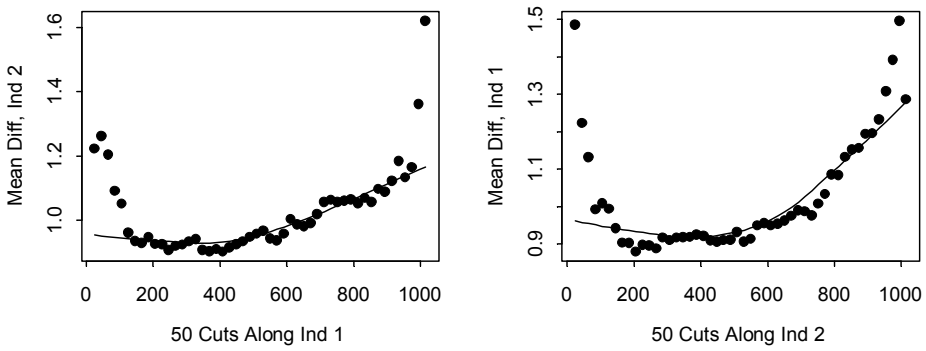

Mean Diff, Ind 2
1.0
1.2
1.4
1.6
0
200
400
600
800
1000
50 Cuts Along Ind 1
Mean Diff, Ind 1
0.9
1.1
1.3
1.5
0
200
400
600
800
1000
50 Cuts Along Ind 2

Figure 6. Simulated dimensional data output derived from mean above minus below a cut (MAMBAC) analyses conducted with impression management (IM) and self-deceptive enhancement (SDE) composite indicators of the repressor construct. Each composite indicator (Ind) served as both the input (plotted on abscissa) and output (plotted on ordinate) Ind. On the abscissa cases were ordered according to standardized scores ranging from lowest to highest and 50 cuts were made beginning and ending 25 cases from the extremes. On the ordinate the difference between mean scores of individuals falling above and below each cut were plotted. The IM (Ind 1) and SDE (Ind 2) composites were formed via combination of the items that compose the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1964) IM and SDE factors, respectively (Paulhus & Reid, 1989). $N = 1040$.

Figure 6

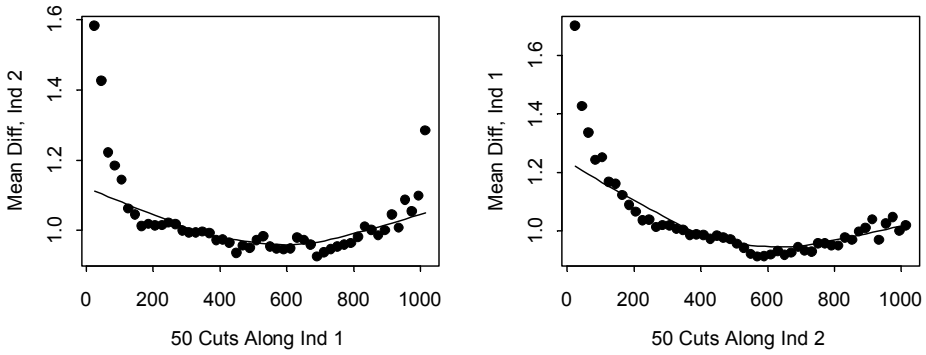

Mean Diff, Ind 2
1.0
1.2
1.4
1.6
0
200
400
600
800
1000
50 Cuts Along Ind 1
Mean Diff, Ind 1
1.0
1.2
1.4
1.6
0
200
400
600
800
1000
50 Cuts Along Ind 2

Figure 7. Simulated taxonic data output derived from mean above minus below a cut (MAMBAC) analyses conducted with impression management (IM) and self-deceptive enhancement (SDE) composite indicators of the repressor construct. Each composite indicator (Ind) served as both the input (plotted on abscissa) and output (plotted on ordinate) Ind. On the abscissa cases were ordered according to standardized scores ranging from lowest to highest and 50 cuts were made beginning and ending 25 cases from the extremes. On the ordinate the difference between mean scores of individuals falling above and below each cut was plotted. The IM (Ind 1) and SDE (Ind 2) composites were formed via combination of the items that compose the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1964) IM and SDE factors, respectively (Paulhus & Reid, 1989). $N = 1040$.

Figure 7

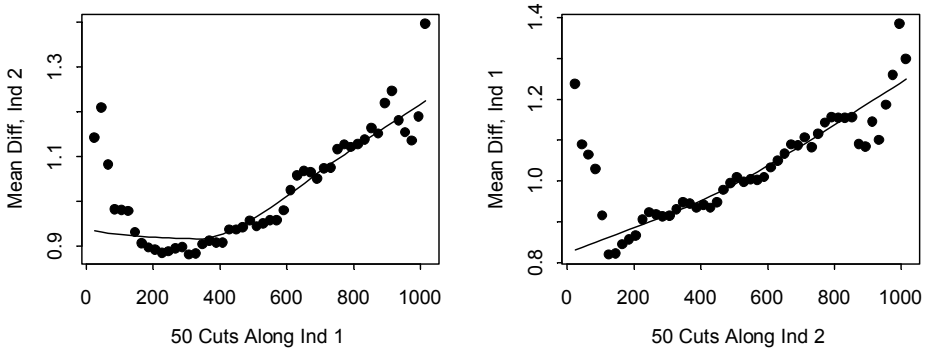

Mean Diff, Ind 2
0.9
1.1
1.3
0
200
400
600
800
1000
50 Cuts Along Ind 1
Mean Diff, Ind 1
0.8
1.0
1.2
1.4
0
200
400
600
800
1000
50 Cuts Along Ind 2

Figure 8. Research data output derived from mean above minus below a cut (MAMBAC) analyses conducted with agreeableness (Av) and self-deceptive enhancement (SDE) composite indicators of the repressor construct. Each composite indicator (Ind) served as both the input (plotted on abscissa) and output (plotted on ordinate) Ind. On the abscissa cases were ordered according to standardized scores ranging from lowest to highest and 50 cuts were made beginning and ending 25 cases from the extremes. On the ordinate the difference between mean scores of individuals falling above and below each cut was plotted. The Av (Ind 1) composite was formed via combination of the most valid items (Meehl & Yonce, 1996, p. 1146) on the agreeableness subscale of the NEO-Five Factor Inventory (NEO-FFI: Costa & McCrae, 1992). The SDE (Ind 2) composite was formed via combination of the items that compose the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1964) SDE factor (Paulhus & Reid, 1989). $N = 1040$.

Figure 8

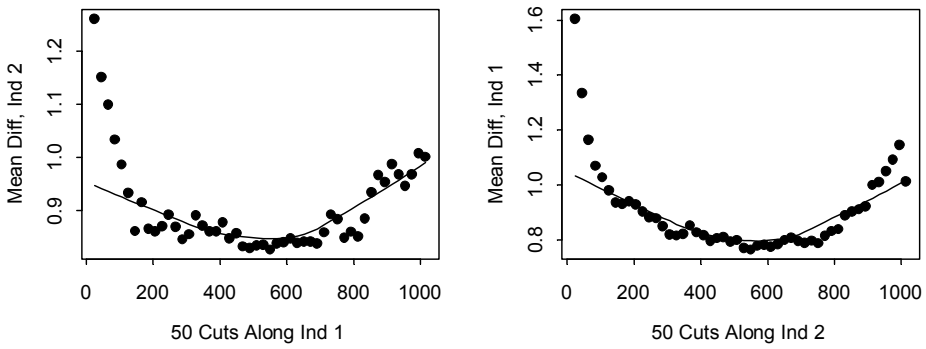

Mean Diff, Ind 2
0.9
1.0
1.1
1.2
0
200
400
600
800
1000
50 Cuts Along Ind 1
Mean Diff, Ind 1
0.8
1.0
1.2
1.4
1.6
0
200
400
600
800
1000
50 Cuts Along Ind 2

Figure 9. Simulated dimensional data output derived from mean above minus below a cut (MAMBAC) analyses conducted with agreeableness (Av) and self-deceptive enhancement (SDE) composite indicators of the repressor construct. Each composite indicator (Ind) served as both the input (plotted on abscissa) and output (plotted on ordinate) Ind. On the abscissa cases were ordered according to standardized scores ranging from lowest to highest and 50 cuts were made beginning and ending 25 cases from the extremes. On the ordinate the difference between mean scores of individuals falling above and below each cut was plotted. The Av (Ind 1) composite was formed via combination of the most valid items (Meehl & Yonce, 1996, p. 1146) on the agreeableness subscale of the NEO-Five Factor Inventory (NEO-FFI: Costa & McCrae, 1992). The SDE (Ind 2) composite was formed via combination of the items that compose the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1964) SDE factor (Paulhus & Reid, 1989). $N = 1040$.

Figure 9

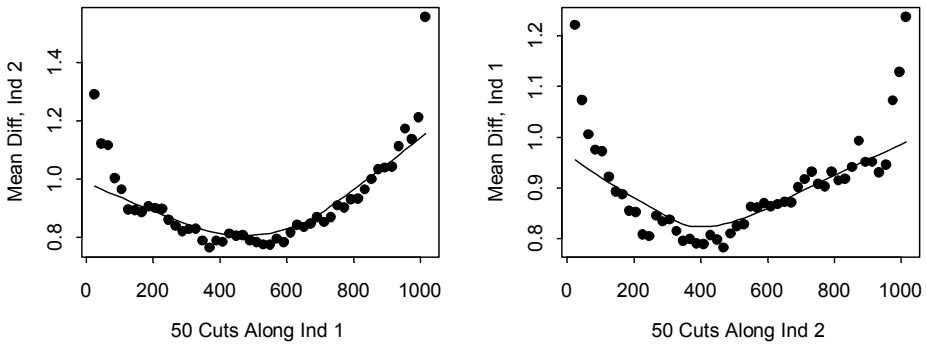

Mean Diff, Ind 2
0.8
1.0
1.2
1.4
0
200
400
600
800
1000
50 Cuts Along Ind 1
Mean Diff, Ind 1
0.8
0.9
1.0
1.1
1.2
0
200
400
600
800
1000
50 Cuts Along Ind 2

Figure 10. Simulated taxonic data output derived from mean above minus below a cut (MAMBAC) analyses conducted with agreeableness (Av) and self-deceptive enhancement (SDE) composite indicators of the repressor construct. Each composite indicator (Ind) served as both the input (plotted on abscissa) and output (plotted on ordinate) Ind. On the abscissa cases were ordered according to standardized scores ranging from lowest to highest and 50 cuts were made beginning and ending 25 cases from the extremes. On the ordinate the difference between mean scores of individuals falling above and below each cut was plotted. The Av (Ind 1) composite was formed via combination of the most valid items (Meehl & Yonce, 1996, p. 1146) on the agreeableness subscale of the NEO-Five Factor Inventory (NEO-FFI: Costa & McCrae, 1992). The SDE (Ind 2) composite was formed via combination of the items that compose the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1964) SDE factor (Paulhus & Reid, 1989). $N = 1040$.

Figure 10

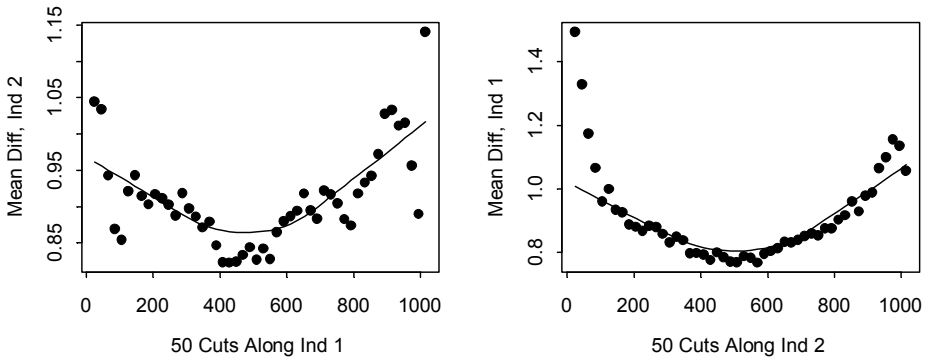

Mean Diff, Ind 2
0.85
0.95
1.05
1.15
0
200
400
600
800
1000
50 Cuts Along Ind 1
Mean Diff, Ind 1
0.8
1.0
1.2
1.4
0
200
400
600
800
1000
50 Cuts Along Ind 2

Figure 11. Research data output derived from mean above minus below a cut (MAMBAC) analyses conducted with trait stability (Stv) and impression management (IM) composite indicators of the repressor construct. Each composite indicator (Ind) served as both the input (plotted on abscissa) and output (plotted on ordinate) Ind. On the abscissa cases were ordered according to standardized scores ranging from lowest to highest and 50 cuts were made beginning and ending 25 cases from the extremes. On the ordinate the difference between mean scores of individuals falling above and below each cut was plotted. The stv (Ind 2) composite was formed via combination of the most valid items (Meehl &Yonce, 1996, p. 1146) of the Spielberger Trait Anxiety Inventory (STAI: Spielberger et al., 1983). The IM (Ind 2) composite was formed via combination of the items that compose the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1964) IM factor (Paulhus & Reid, 1989). $N = 1040$.

Figure 11

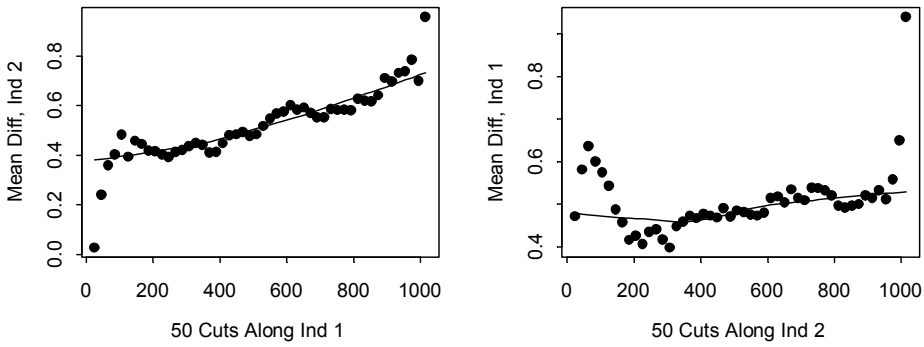

Mean Diff, Ind 2
0.0
0.2
0.4
0.6
0.8
0
200
400
600
800
1000
50 Cuts Along Ind 1
Mean Diff, Ind 1
0.4
0.6
0.8
0
200
400
600
800
1000
50 Cuts Along Ind 2

Figure 12. Simulated dimensional data output derived from mean above minus below a cut (MAMBAC) analyses conducted with trait stability (Stv) and impression management (IM) composite indicators of the repressor construct. Each composite indicator (Ind) served as both the input (plotted on abscissa) and output (plotted on ordinate) Ind. On the abscissa cases were ordered according to standardized scores ranging from lowest to highest and 50 cuts were made beginning and ending 25 cases from the extremes. On the ordinate the difference between mean scores of individuals falling above and below each cut was plotted. The stv (Ind 2) composite was formed via combination of the most valid items (Meehl &Yonce, 1996, p. 1146) of the Spielberger Trait Anxiety Inventory (STAI: Spielberger et al., 1983). The IM (Ind 2) composite was formed via combination of the items that compose the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1964) IM factor (Paulhus & Reid, 1989). $N = 1040$.

Figure 12

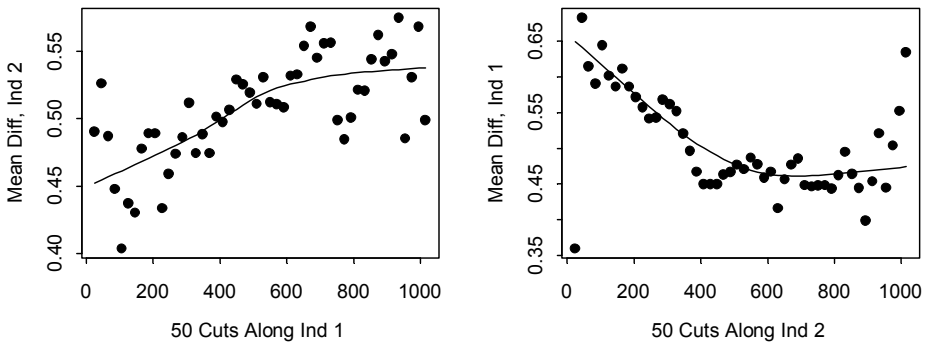

Mean Diff, Ind 2
0.40
0.45
0.50
0.55
0
200
400
600
800
1000
50 Cuts Along Ind 1
Mean Diff, Ind 1
0.35
0.45
0.55
0.65
0
200
400
600
800
1000
50 Cuts Along Ind 2

Figure 13. Simulated taxonic data output derived from mean above minus below a cut (MAMBAC) analyses conducted with trait stability (Stv) and impression management (IM) composite indicators of the repressor construct. Each composite indicator (Ind) served as both the input (plotted on abscissa) and output (plotted on ordinate) Ind. On the abscissa cases were ordered according to standardized scores ranging from lowest to highest and 50 cuts were made beginning and ending 25 cases from the extremes. On the ordinate the difference between mean scores of individuals falling above and below each cut was plotted. The stv (Ind 2) composite was formed via combination of the most valid items (Meehl &Yonce, 1996, p. 1146) of the Spielberger Trait Anxiety Inventory (STAI: Spielberger et al., 1983). The IM (Ind 2) composite was formed via combination of the items that compose the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1964) IM factor (Paulhus & Reid, 1989). $N = 1040$.

Figure 13

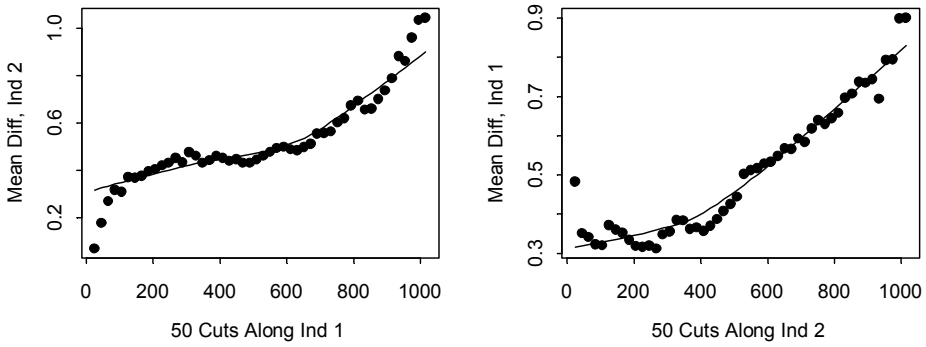

Mean Diff, Ind 2
0.2
0.6
1.0
0
200
400
600
800
1000
50 Cuts Along Ind 1
Mean Diff, Ind 1
0.3
0.5
0.7
0.9
0
200
400
600
800
1000
50 Cuts Along Ind 2

Figure 14. Research data output derived from mean above minus below a cut (MAMBAC) analyses conducted with trait stability (Sv) and impression management (IM) composite indicators of the repressor construct. Each composite indicator (Ind) served as both the input (plotted on abscissa) and output (plotted on ordinate) Ind. On the abscissa cases were ordered according to standardized scores ranging from lowest to highest and 50 cuts were made beginning and ending 25 cases from the extremes. On the ordinate the difference between mean scores of individuals falling above and below each cut was plotted. The Sv (Ind 1) composite was formed via combination of the most valid items (Meehl &Yonce, 1996, p. 1146) of the NEO-Five Factor Inventory (Costa & McCrae, 1992) trait stability subscale. The IM (Ind 2) composite was formed via combination of the items that compose the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1964) IM factor (Paulhus & Reid, 1989). $N = 1040$.

Figure 14

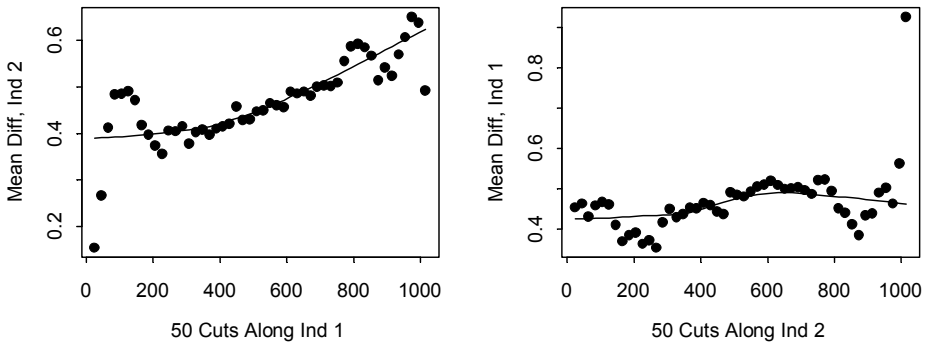

Mean Diff, Ind 2
0.2
0.4
0.6
0
200
400
600
800
1000
50 Cuts Along Ind 1
Mean Diff, Ind 1
0.4
0.6
0.8
0
200
400
600
800
1000
50 Cuts Along Ind 2

Figure 15. Simulated dimensional data output derived from mean above minus below a cut (MAMBAC) analyses conducted with trait stability (Sv) and impression management (IM) composite indicators of the repressor construct. Each composite indicator (Ind) served as both the input (plotted on abscissa) and output (plotted on ordinate) Ind. On the abscissa cases were ordered according to standardized scores ranging from lowest to highest and 50 cuts were made beginning and ending 25 cases from the extremes. On the ordinate the difference between mean scores of individuals falling above and below each cut was plotted. The Sv (Ind 1) composite was formed via combination of the most valid items (Meehl &Yonce, 1996, p. 1146) of the NEO-Five Factor Inventory (Costa & McCrae, 1992) trait stability subscale. The IM (Ind 2) composite was formed via combination of the items that compose the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1964) IM factor (Paulhus & Reid, 1989). $N = 1040$.

Figure 15

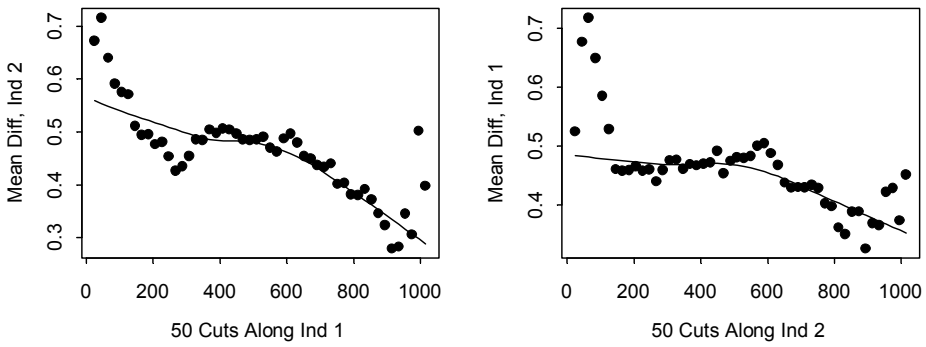

Mean Diff, Ind 2
0.3
0.4
0.5
0.6
0.7
0
200
400
600
800
1000
50 Cuts Along Ind 1
Mean Diff, Ind 1
0.4
0.5
0.6
0.7
0
200
400
600
800
1000
50 Cuts Along Ind 2

Figure 16. Simulated taxonic data output derived from mean above minus below a cut (MAMBAC) analyses conducted with trait stability (Sv) and impression management (IM) composite indicators of the repressor construct. Each composite indicator (Ind) served as both the input (plotted on abscissa) and output (plotted on ordinate) Ind. On the abscissa cases were ordered according to standardized scores ranging from lowest to highest and 50 cuts were made beginning and ending 25 cases from the extremes. On the ordinate the difference between mean scores of individuals falling above and below each cut was plotted. The Sv (Ind 1) composite was formed via combination of the most valid items (Meehl &Yonce, 1996, p. 1146) of the NEO-Five Factor Inventory (Costa & McCrae, 1992) trait stability subscale. The IM (Ind 2) composite was formed via combination of the items that compose the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1964) IM factor (Paulhus & Reid, 1989). $N = 1040$.

Figure 16

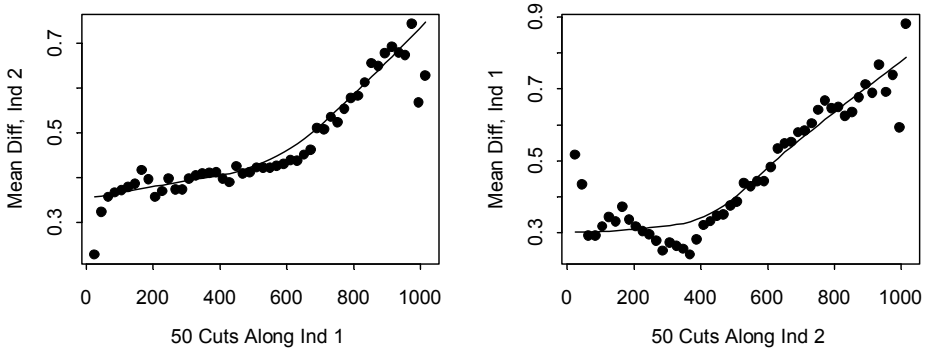

Mean Diff, Ind 2
0.3
0.5
0.7
0
200
400
600
800
1000
50 Cuts Along Ind 1
Mean Diff, Ind 1
0.3
0.5
0.7
0.9
0
200
400
600
800
1000
50 Cuts Along Ind 2

Figure 17. Research data output derived from mean above minus below a cut (MAMBAC) analyses conducted with agreeableness (Av) and impression management (IM) composite indicators of the repressor construct. Each composite indicator (Ind) served as both the input (plotted on abscissa) and output (plotted on ordinate) Ind. On the abscissa cases were ordered according to standardized scores ranging from lowest to highest and 50 cuts were made beginning and ending 25 cases from the extremes. On the ordinate the difference between mean scores of individuals falling above and below each cut was plotted. The Sv (Ind 1) composite was formed via combination of the most valid items (Meehl &Yonce, 1996, p. 1146) of the NEO-Five Factor Inventory (Costa & McCrae, 1992) agreeableness subscale. The IM (Ind 2) composite was formed via combination of the items that compose the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1964) IM factor (Paulhus & Reid, 1989). $N = 1040$.

Figure 17

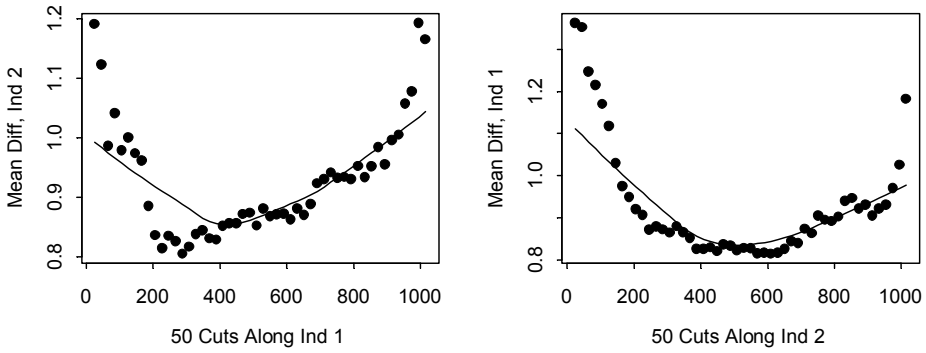

Mean Diff, Ind 2
0.8
0.9
1.0
1.1
1.2
0
200
400
600
800
1000
50 Cuts Along Ind 1
Mean Diff, Ind 1
0.8
1.0
1.2
0
200
400
600
800
1000
50 Cuts Along Ind 2

Figure 18. Simulated dimensional data output derived from mean above minus below a cut (MAMBAC) analyses conducted with agreeableness (Av) and impression management (IM) composite indicators of the repressor construct. Each composite indicator (Ind) served as both the input (plotted on abscissa) and output (plotted on ordinate) Ind. On the abscissa cases were ordered according to standardized scores ranging from lowest to highest and 50 cuts were made beginning and ending 25 cases from the extremes. On the ordinate the difference between mean scores of individuals falling above and below each cut was plotted. The Sv (Ind 1) composite was formed via combination of the most valid items (Meehl &Yonce, 1996, p. 1146) of the NEO-Five Factor Inventory (Costa & McCrae, 1992) agreeableness subscale. The IM (Ind 2) composite was formed via combination of the items that compose the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1964) IM factor (Paulhus & Reid, 1989). $N = 1040$.

Figure 18

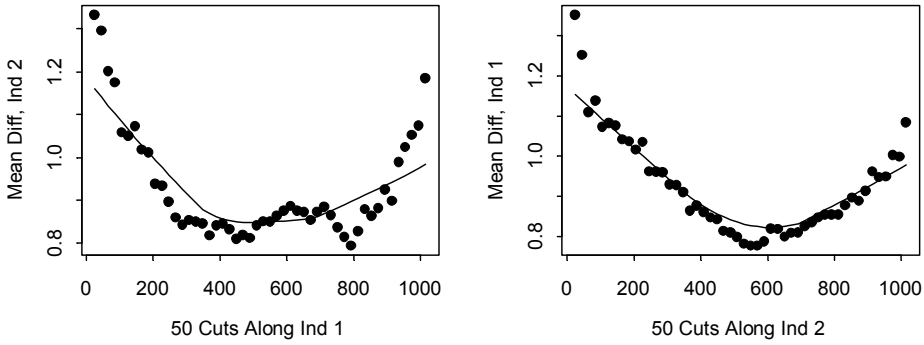

Mean Diff, Ind 2
0.8
1.0
1.2
0
200
400
600
800
1000
50 Cuts Along Ind 1
Mean Diff, Ind 1
0.8
1.0
1.2
0
200
400
600
800
1000
50 Cuts Along Ind 2

Figure 19. Simulated taxonic data output derived from mean above minus below a cut (MAMBAC) analyses conducted with agreeableness (Av) and impression management (IM) composite indicators of the repressor construct. Each composite indicator (Ind) served as both the input (plotted on abscissa) and output (plotted on ordinate) Ind. On the abscissa cases were ordered according to standardized scores ranging from lowest to highest and 50 cuts were made beginning and ending 25 cases from the extremes. On the ordinate the difference between mean scores of individuals falling above and below each cut was plotted. The Sv (Ind 1) composite was formed via combination of the most valid items (Meehl &Yonce, 1996, p. 1146) of the NEO-Five Factor Inventory (Costa & McCrae, 1992) agreeableness subscale. The IM (Ind 2) composite was formed via combination of the items that compose the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1964) IM factor (Paulhus & Reid, 1989). $N = 1040$.

Figure 19

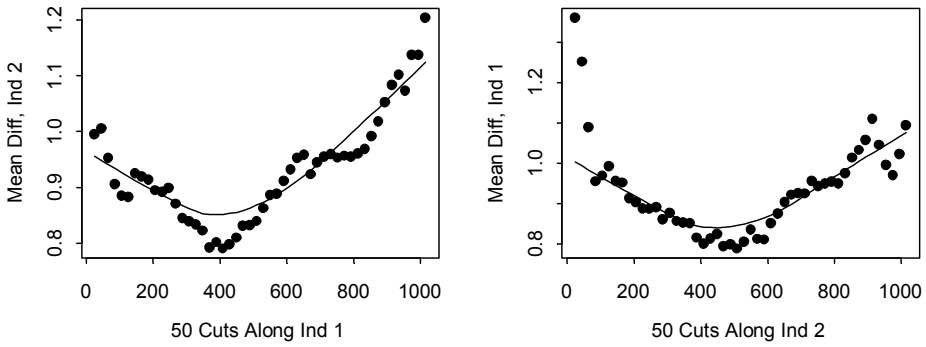

Mean Diff, Ind 2
0.8
0.9
1.0
1.1
1.2
0
200
400
600
800
1000
50 Cuts Along Ind 1
Mean Diff, Ind 1
0.8
1.0
1.2
0
200
400
600
800
1000
50 Cuts Along Ind 2

Figure 20. Research data output derived from mean above minus below a cut (MAMBAC) analyses conducted with trait stability (St) and agreeableness (Av) composite indicators of the repressor construct. Each composite indicator (Ind) served as both the input (plotted on abscissa) and output (plotted on ordinate) Ind. On the abscissa cases were ordered according to standardized scores ranging from lowest to highest and 50 cuts were made beginning and ending 25 cases from the extremes. On the ordinate the difference between mean scores of individuals falling above and below each cut was plotted. The St (Ind 1) composite was formed via combination of the most valid items (Meehl &Yonce, 1996, p. 1146) of the Spielberger Trait Anxiety Inventory (STAI: Spielberger et al., 1983). The Av (Ind 2) composite was formed via combination of the most valid items of the NEO-Five Factor Inventory (Costa & McCrae, 1992) agreeableness subscale. $N = 1040$.

Figure 20

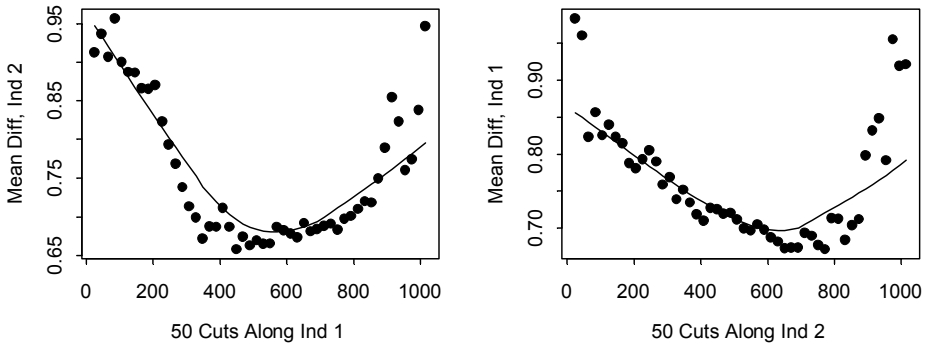

Mean Diff, Ind 2
0.65
0.75
0.85
0.95
0
200
400
600
800
1000
50 Cuts Along Ind 1
Mean Diff, Ind 1
0.70
0.80
0.90
0
200
400
600
800
1000
50 Cuts Along Ind 2

Figure 21. Simulated dimensional data output derived from mean above minus below a cut (MAMBAC) analyses conducted with trait stability (St) and agreeableness (Av) composite indicators of the repressor construct. Each composite indicator (Ind) served as both the input (plotted on abscissa) and output (plotted on ordinate) Ind. On the abscissa cases were ordered according to standardized scores ranging from lowest to highest and 50 cuts were made beginning and ending 25 cases from the extremes. On the ordinate the difference between mean scores of individuals falling above and below each cut was plotted. The St (Ind 1) composite was formed via combination of the most valid items (Meehl &Yonce, 1996, p. 1146) of the Spielberger Trait Anxiety Inventory (STAI: Spielberger et al., 1983). The Av (Ind 2) composite was formed via combination of the most valid items of the NEO-Five Factor Inventory (Costa & McCrae, 1992) agreeableness subscale. $N = 1040$.

Figure 21

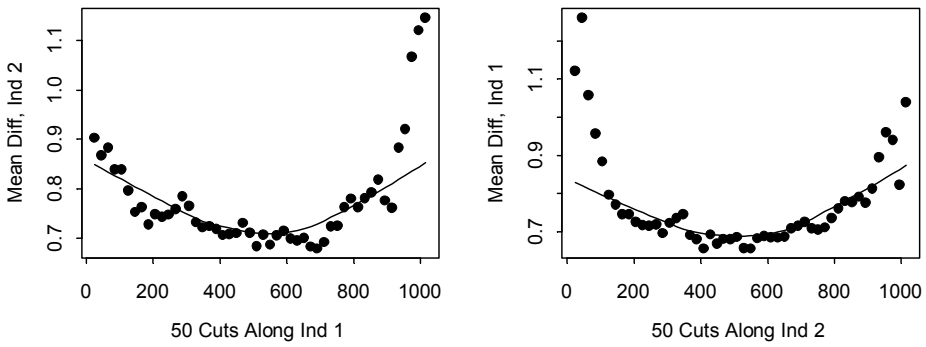

Mean Diff, Ind 2
0.7
0.8
0.9
1.0
1.1
0
200
400
600
800
1000
50 Cuts Along Ind 1
Mean Diff, Ind 1
0.7
0.9
1.1
0
200
400
600
800
1000
50 Cuts Along Ind 2

Figure 22. Simulated taxonic data output derived from mean above minus below a cut (MAMBAC) analyses conducted with trait stability (St) and agreeableness (Av) composite indicators of the repressor construct. Each composite indicator (Ind) served as both the input (plotted on abscissa) and output (plotted on ordinate) Ind. On the abscissa cases were ordered according to standardized scores ranging from lowest to highest and 50 cuts were made beginning and ending 25 cases from the extremes. On the ordinate the difference between mean scores of individuals falling above and below each cut was plotted. The St (Ind 1) composite was formed via combination of the most valid items (Meehl &Yonce, 1996, p. 1146) of the Spielberger Trait Anxiety Inventory (STAI: Spielberger et al., 1983). The Av (Ind 2) composite was formed via combination of the most valid items of the NEO-Five Factor Inventory (Costa & McCrae, 1992) agreeableness subscale. $N = 1040$.

Figure 22

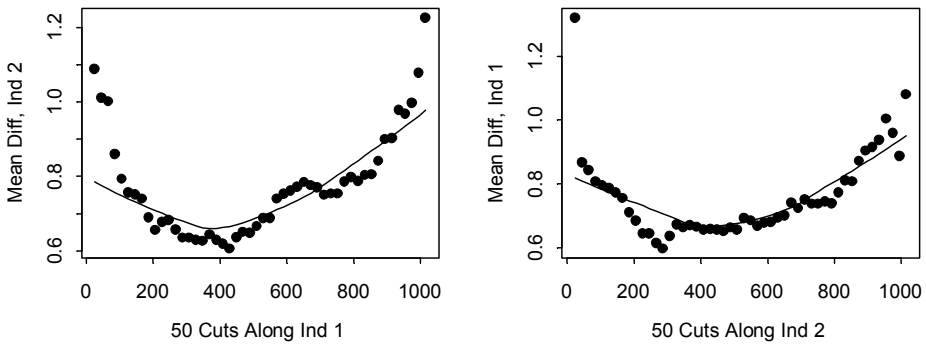

Mean Diff, Ind 2
0.6
0.8
1.0
1.2
0
200
400
600
800
1000
50 Cuts Along Ind 1
Mean Diff, Ind 1
0.6
0.8
1.0
1.2
0
200
400
600
800
1000
50 Cuts Along Ind 2

Figure 23. Research data output derived from mean above minus below a cut (MAMBAC) analyses conducted with trait stability (Sv) and agreeableness (Av) composite indicators of the repressor construct. Each composite indicator (Ind) served as both the input (plotted on abscissa) and output (plotted on ordinate) Ind. On the abscissa cases were ordered according to standardized scores ranging from lowest to highest and 50 cuts were made beginning and ending 25 cases from the extremes. On the ordinate the difference between mean scores of individuals falling above and below each cut was plotted. The Sv (Ind 1) and Av (Ind 2) composites were formed via combination of the most valid items (Meehl &Yonce, 1996, p. 1146) of the NEO-Five Factor Inventory (Costa & McCrae, 1992) stability and agreeableness subscales, respectively. $N = 1040$.

Figure 23

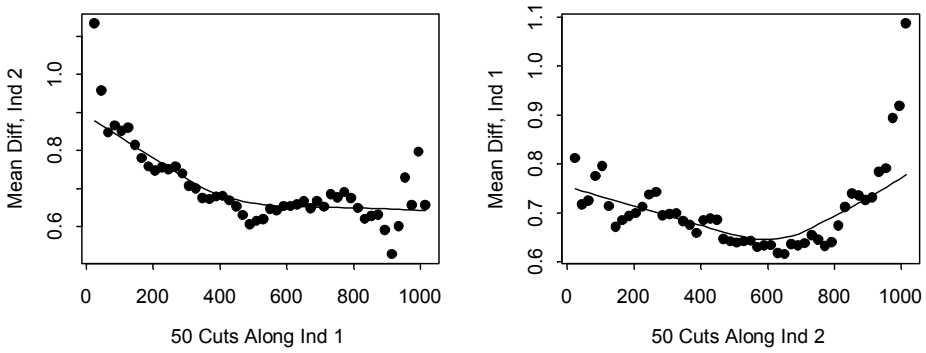

Mean Diff, Ind 2
0.6
0.8
1.0
0
200
400
600
800
1000
50 Cuts Along Ind 1
Mean Diff, Ind 1
0.6
0.7
0.8
0.9
1.0
1.1
0
200
400
600
800
1000
50 Cuts Along Ind 2

Figure 24. Simulated dimensional data output derived from mean above minus below a cut (MAMBAC) analyses conducted with trait stability (Sv) and agreeableness (Av) composite indicators of the repressor construct. Each composite indicator (Ind) served as both the input (plotted on abscissa) and output (plotted on ordinate) Ind. On the abscissa cases were ordered according to standardized scores ranging from lowest to highest and 50 cuts were made beginning and ending 25 cases from the extremes. On the ordinate the difference between mean scores of individuals falling above and below each cut was plotted. The Sv (Ind 1) and Av (Ind 2) composites were formed via combination of the most valid items (Meehl &Yonce, 1996, p. 1146) of the NEO-Five Factor Inventory (Costa & McCrae, 1992) stability and agreeableness subscales, respectively. $N = 1040$.

Figure 24

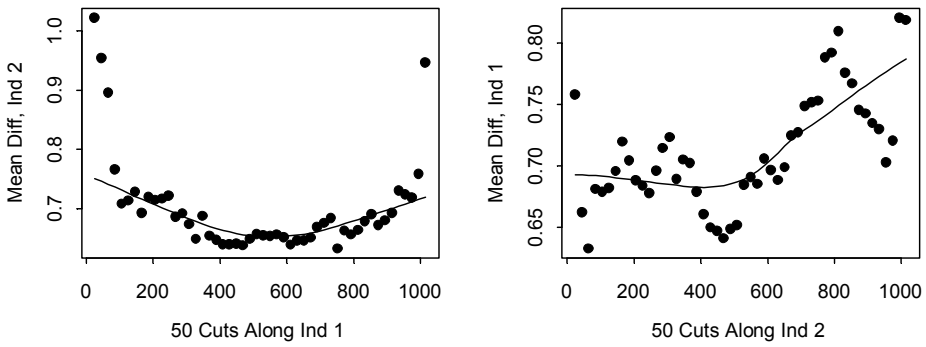

Mean Diff, Ind 2
0.7
0.8
0.9
1.0
0
200
400
600
800
1000
50 Cuts Along Ind 1
Mean Diff, Ind 1
0.65
0.70
0.75
0.80
0
200
400
600
800
1000
50 Cuts Along Ind 2

Figure 25. Simulated taxonic data output derived from mean above minus below a cut (MAMBAC) analyses conducted with trait stability (Sv) and agreeableness (Av) composite indicators of the repressor construct. Each composite indicator (Ind) served as both the input (plotted on abscissa) and output (plotted on ordinate) Ind. On the abscissa cases were ordered according to standardized scores ranging from lowest to highest and 50 cuts were made beginning and ending 25 cases from the extremes. On the ordinate the difference between mean scores of individuals falling above and below each cut was plotted. The Sv (Ind 1) and Av (Ind 2) composites were formed via combination of the most valid items (Meehl &Yonce, 1996, p. 1146) of the NEO-Five Factor Inventory (Costa & McCrae, 1992) stability and agreeableness subscales, respectively. $N = 1040$.

Figure 25

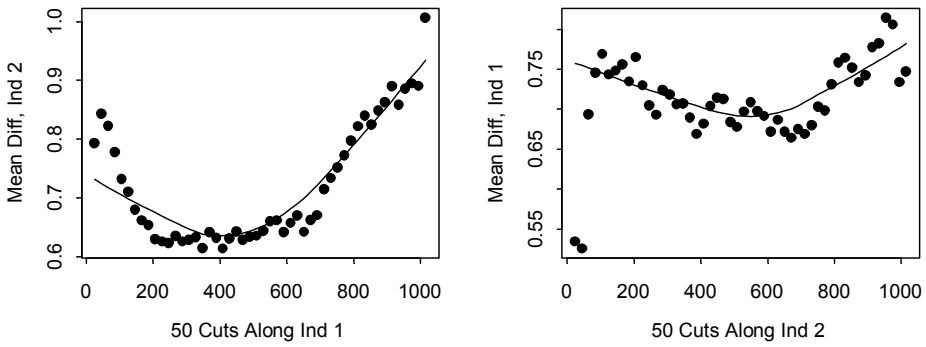

Mean Diff, Ind 2
0.6
0.7
0.8
0.9
1.0
0
200
400
600
800
1000
50 Cuts Along Ind 1
Mean Diff, Ind 1
0.55
0.65
0.75
0
200
400
600
800
1000
50 Cuts Along Ind 2

Figure 26. Research data output derived from maximum covariance (MAXCOV) analyses conducted with trait stability (Stv), impression management (IM), and self-deceptive enhancement (SDE) composite indicators of the repressor construct. Each composite indicator (Ind) served as both the input (plotted on abscissa) and output (plotted on ordinate) Ind. On the abscissa cases were ordered according to standardized scores ranging from lowest to highest and 50 cuts were made beginning and ending 25 cases from the extremes. On the ordinate the eigen value, or degree of interindicator association, within each cut was plotted. The stv (Ind 1) composite was formed via combination of the most valid items (Meehl &Yonce, 1996, p. 1146) of the Spielberger Trait Anxiety Inventory (STAI: Spielberger et al., 1983). The IM (Ind 2) and SDE (Ind 3) composites were formed via combination of the items that compose the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1964) IM and SDE factors, respectively (Paulhus & Reid, 1989). N = 1040.

Figure 26

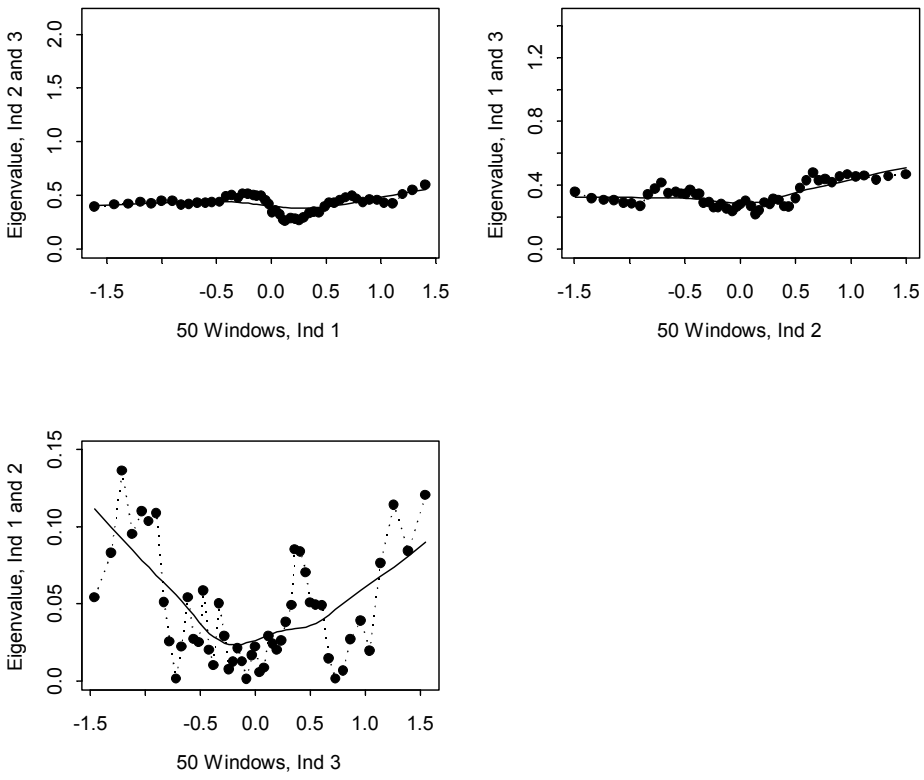

Eigenvalue, Ind 2 and 3
0.0
0.5
1.0
1.5
2.0
-1.5
-0.5
0.0
0.5
1.0
1.5
50 Windows, Ind 1
Eigenvalue, Ind 1 and 3
0.0
0.4
0.8
1.2
-1.5
-0.5
0.0
0.5
1.0
1.5
50 Windows, Ind 2
Eigenvalue, Ind 1 and 2
0.0
0.05
0.10
0.15
-1.5
-0.5
0.0
0.5
1.0
1.5
50 Windows, Ind 3

Figure 27. Simulated dimensional data Research data output derived from maximum covariance (MAXCOV) analyses conducted with trait stability (Stv), impression management (IM), and self-deceptive enhancement (SDE) composite indicators of the repressor construct. Each composite indicator (Ind) served as both the input (plotted on abscissa) and output (plotted on ordinate) Ind. On the abscissa cases were ordered according to standardized scores ranging from lowest to highest and 50 cuts were made beginning and ending 25 cases from the extremes. On the ordinate the eigen value, or degree of interindicator association, within each cut was plotted. The stv (Ind 1) composite was formed via combination of the most valid items (Meehl &Yonce, 1996, p. 1146) of the Spielberger Trait Anxiety Inventory (STAI: Spielberger et al., 1983). The IM (Ind 2) and SDE (Ind 3) composites were formed via combination of the items that compose the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1964) IM and SDE factors, respectively (Paulhus & Reid, 1989). N = 1040.

Figure 27

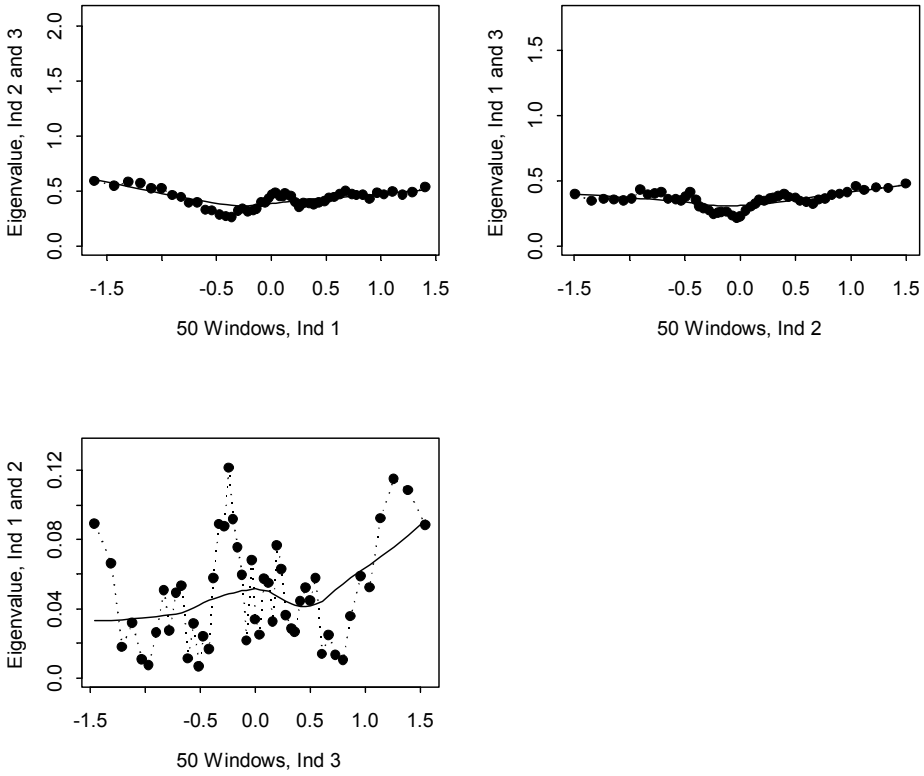
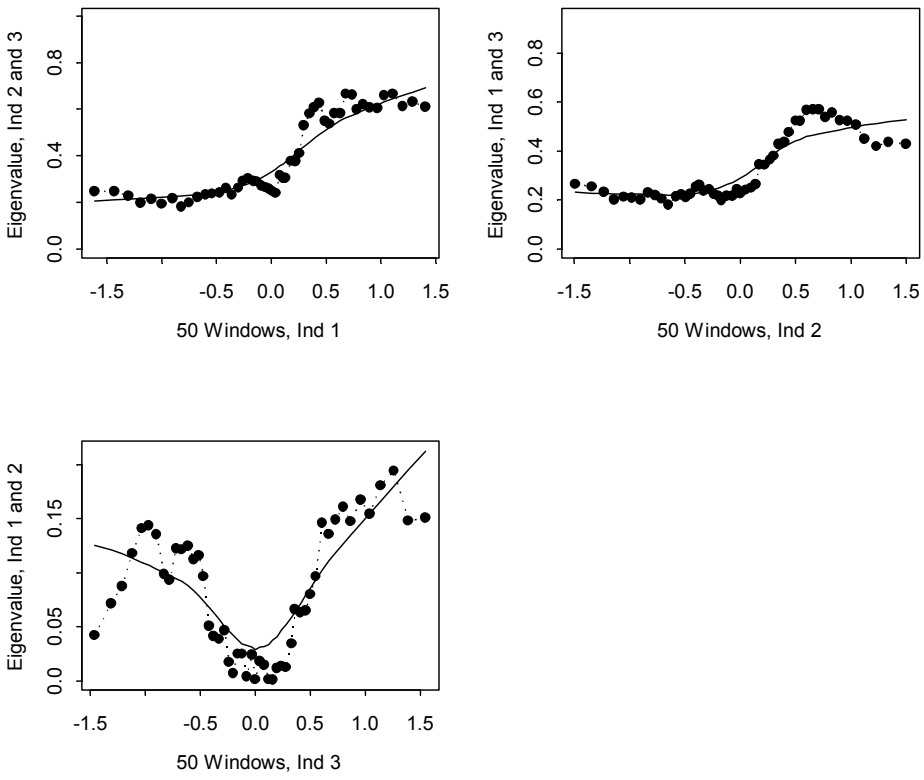

Eigenvalue, Ind 2 and 3
0.0
0.5
1.0
1.5
2.0
-1.5
-0.5
0.0
0.5
1.0
1.5
50 Windows, Ind 1
Eigenvalue, Ind 1 and 3
0.0
0.5
1.0
1.5
-1.5
-0.5
0.0
0.5
1.0
1.5
50 Windows, Ind 2
Eigenvalue, Ind 1 and 2
0.0
0.04
0.08
0.12
-1.5
-0.5
0.0
0.5
1.0
1.5
50 Windows, Ind 3

Figure 28. Simulated taxonic data output derived from maximum covariance (MAXCOV) analyses conducted with trait stability (Stv), impression management (IM), and self-deceptive enhancement (SDE) composite indicators of the repressor construct. Each composite indicator (Ind) served as both the input (plotted on abscissa) and output (plotted on ordinate) Ind. On the abscissa cases were ordered according to standardized scores ranging from lowest to highest and 50 cuts were made beginning and ending 25 cases from the extremes. On the ordinate the eigen value, or degree of interindicator association, within each cut was plotted. The stv (Ind 2) composite was formed via combination of the most valid items (Meehl &Yonce, 1996, p. 1146) of the Spielberger Trait Anxiety Inventory (STAI: Spielberger et al., 1983). The IM (Ind 2) and SDE (Ind 3) composites were formed via combination of the items that compose the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1964) IM and SDE factors, respectively (Paulhus & Reid, 1989). $N = 1040$.

Figure 28


Eigenvalue, Ind 2 and 3
0.0
0.4
0.8
-1.5
-0.5
0.0
0.5
1.0
1.5
50 Windows, Ind 1
Eigenvalue, Ind 1 and 3
0.0
0.2
0.4
0.6
0.8
-1.5
-0.5
0.0
0.5
1.0
1.5
50 Windows, Ind 2
Eigenvalue, Ind 1 and 2
0.0
0.05
0.15
-1.5
-0.5
0.0
0.5
1.0
1.5
50 Windows, Ind 3

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1/89 – 5/92	Arcadia University, Beaver College, Glenside, P.A. B.A. Magna Cum Laude in Psychology
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II. Publications

Peer Review Journal Articles

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