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Differentiating Hostility and Indifference: Motive Autonomy as a Circumplex Moderator

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DIFFERENTIATING HOSTILITY AND INDIFFERENCE: MOTIVE

AUTONOMY AS A CIRCUMPLEX MODERATOR

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Dedication

To my parents, who understood and nurtured my insatiable desire to learn.

DIFFERENTIATING HOSTILITY AND INDIFFERENCE: MOTIVE

AUTONOMY AS A CIRCUMPLEX MODERATOR

by

SHELBY RAE CURTIS, B.S.

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Abstract

Basic personality models, such as the Interpersonal Circumplex and the Five Factor Model often conflict when defining the traits that form the negative pole of communion. Some argue that both hostility and indifference compose the opposite of warmth, whereas others collapse the two traits into one (e.g. hostility/indifference, cold/quarrelsomeness). Still others argue that it is indifference (or hostility) alone that should be considered the negative pole to communion. Whereas consolidation of traits may result in misinterpretations of interpersonal interactions and behaviors, choosing only hostility or indifference may miss critical information. Thus, the present research explores the inclusion of motive autonomy as a moderator through the lens of Self-Determination Theory, which states that autonomous motives are sought after for personal fulfillment. The driving effects in the present study were due to main effects of motive frustration, rather than a consistent effect due to manipulations of motive autonomy. However, the present study did find some evidence to suggest that individuals pursuing autonomous motives are more hostile when the achievement of such a motive is frustrated by another person, supporting the proposed theoretical synthesis. Ultimately, these findings address the need to continue to measure motive autonomy when predicting behavioral strategies and complementarity in interpersonal interactions in order to differentiate hostility and indifference both at a dispositional and interpersonal level.

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Chapter 1: Introduction

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1.1 THE INTERPERSONAL CIRCUMPLEX AND COMPLEMENTARITY

The IPC is an organizational structure of how individuals differ with respect to interpersonal motivation, behavior, and dispositional traits (Wiggins, 1979). It is most commonly used to study interpersonal personality traits (Markey & Markey, 2009) and to interpret dyadic

relationships (Kiesler, 1983; Orford, 1986). The circumplex assesses the traits relevant to two orthogonal but overarching human goals: to get ahead and to get along (Leary, 1957). Across the literature, these interpersonal goals have interchangeably been referred to as agency and communion, dominance and affiliation, and love and status (see Wiggins, 1982). Within the IPC, analyses and assessment can be conducted at differing levels of specificity. Although sometimes split into as many as 16 distinct sections for nuanced analysis, when only the two poles of agency and communion are of interest, the IPC is often measured in quadrants. These four quadrants are often referred to as Friendly Dominant (Quadrant 1), Unfriendly Dominant (Quadrant 2), Unfriendly Submissive (Quadrant 3), and Friendly Submissive (Quadrant 4) (see Figure 1). These quadrants are generally used when researching how placement on the interpersonal circumplex influences the trajectory and outcomes of interpersonal interactions (Orford, 1986).
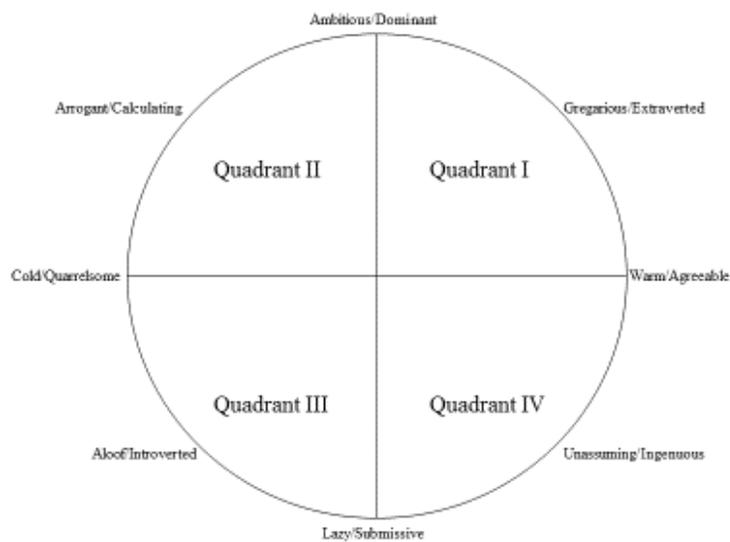
Figure 1: Depiction of the Interpersonal Circumplex.

The interpersonal behaviors studied in the IPC are assumed to be complementary, such that in dyadic interactions there is reciprocity with respect to agency and correspondence with respect to communion (Kiesler, 1983). This theory of complementarity assumes that when a person behaves interpersonally, that individual invites a partner to respond in a complementary manner in order to fulfill goals (Carson, 1969). When non-complementarity occurs, it is theorized to lead to interactions that frustrate goals (Sullivan, 1953). For example, a hostile-submissive person should invite hostile-dominant behavior, and a friendly-dominant person should invite friendly-submissive behavior (Benjamin, 1974). However, as theories of complementarity expanded beyond the quadrant model of the IPC and into octant and sixteenth models, conflicting results emerged (e.g. Kiesler, 1983; Strong et al, 1988).

According to theories of complementarity, agentic behaviors are reciprocated (dominance inviting submissiveness) and communal behaviors are mirrored (friendliness inviting friendliness). Although these theories generally agree on the positive communal pole of the circumplex, they fail to agree on the proper invited behaviors on the negative pole (see Carson, 1969; Kiesler, 1983; Wiggins, 1982). Specifically, Orford (1986) found that hostile dominance was generally responded to with hostile dominance, whereas hostile submissiveness was generally responded to with friendly dominance, contradicting the primary principles of complementarity. Thus, "interpersonal behavior may be motivated less by a desire to fit the definition of the relationship being offered...than by a wish to maintain or restore what is seen as an appropriate status balance." (Orford, 1986, p. 376).

To reconcile these inconsistencies in complementarity, Horowitz and colleagues (2006) proposed a series of postulates about the IPC and advocated that the negative pole of communion is indifference, not hostility. Although this theory is one of few to differentiate hostility from

indifference in the circumplex literature, it also argues that hostility has no place within the IPC: its only place is as a reaction to a frustrated motive. Specifically in regards to complementarity, postulate 12 states that "the complement of a behavior is the reaction that would satisfy the motive behind it" (Horowitz et al., 2006, p. 73). Thus, according to this postulate, indifference is the true negative pole of communion because disconnected behaviors are satisfied by disconnected reactions. In contrast, hostile behavior is not satisfied by a hostile reaction, and is therefore assumed to only occur when an important motive has been frustrated. However, although these postulates resolve the majority of issues within theories of complementarity, they do not address dispositional hostility. Instead, the theory argues that hostility is a universal response to all frustrated motives. This theory also corresponds with the Frustration Aggression hypothesis proposed in 1939 by Dollard and colleagues, which states that "aggression is always a consequence of frustration" (p. 1). Although never cited by Horowitz and colleagues (2006), the Frustration Aggression hypothesis primarily suggests that hostile aggressive acts result from frustration and interpersonal goal blocking (Berkowitz, 1989). However, a reaction of hostile behavior is assumed to only result dependent on the negative affect aroused by the frustration.

In sum, research on the IPC collapses the traits of hostility and indifference into a single "negative pole" of communion. This lack of distinction has led to issues within circumplex research, including issues regarding a unified theory of complementary behavior. Further, it can extend to misinterpretations regarding the underlying motivations for behaviors, such as physical aggression. Thus, the ideal level of analysis in circumplex research should take into account necessary differences in motivations (Cattell, 1973). In order to examine these differences among the traits, it is first useful to study how they are categorized and operationalized within other major personality theories.

1.2 HOSTILITY AND INDIFFERENCE: A TRAIT LEVEL ANALYSIS

The traits of hostility and indifference can be found in most major theories of personality. The predominant model in personality research is the Five Factor Model (also known as the Big Five), which accounts for interpersonal warmth and kindness (and, by default, their opposites) within the trait of Agreeableness (McCrae & Costa, 1989). Further research also supports the idea that the negative pole of communion is captured within the domain of Agreeableness (Trapnell & Wiggins, 1990). A person low in Agreeableness is seen as callous, deceptive, and exploitative (Miller & Lynam, 2001). Further, the construct of Agreeableness loads on two distinct factors: compliance and compassion, where compliance is seen in submissive and non-manipulative individuals and compassion is observed in warm and empathetic individuals (DeYoung, Quilty, & Peterson, 2007; Kern et al., 2013). However, with regards to hostility, the NEO-PI-3 facet of Angry-Hostility is under the higher order factor of Neuroticism, not Agreeableness (McCrae, Costa, & Martin, 2005). Research by Gallo and Smith (1997) also supported this placement by using the Buss and Perry (1992) Aggression Questionnaire to map anger and hostility onto both the Five Factor Model (FFM) and the IPC. Both trait anger and hostility primarily reflected high neuroticism scores, and, to a lesser extent, low affiliation.

The Personality Inventory for DSM-5 (PID-5) also differentiates hostile and indifferent traits by placing them under different factors. Hostility is placed under the trait domain of Negative Affectivity, whereas Callousness, Manipulative, and Deceitfulness are all located under the domain of Antagonism (Krueger et al., 2012). Hostility and indifference are also under different domains in the HEXACO 6-factor model (Ashton et al., 2012). However, in this personality model, hostility facets load under Agreeableness and indifferent traits load under the added factor of Honesty/Humility (H/H). This addition allows for a more distinct separation

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between hostile and indifferent traits on the negative pole of communion without having to place antagonistic and quarrelsome facets under an Emotionality or Neuroticism factor. Ashton and Lee (2007) differentiate the domains of H/H and Agreeableness by suggesting that Agreeableness is negatively associated with retaliation, whereas H/H is negatively associated with exploitation. Therefore, the costs of having high levels of Agreeableness are "losses because of being exploited by others" and the costs of having high levels of H/H are the "losses of potential gains that would result from exploitation of others" (Ashton & Lee, 2007, p. 156).

Some behavioral models and studies have also differentiated hostility and indifference. For example, confluence models for sexual aggression generally include proneness to hostility as a direct predictor, whereas low empathy and callous/unemotionality are only indirect moderators (Malamuth, 2003). Life History Strategy (LHS) also differentiates between the two traits: a fast LHS is associated with callousness and manipulation and a slow LHS predicts moral intuitions laden with anger, contempt, and disgust (Gladden, Figueredo, & Jacobs, 2008).

More recently, research has shown a positive relationship between compassion and hostility, especially among individuals who are prevention focused, or focused on avoiding losses (Keller & Pfattheicher, 2013). Both constructs reflect a special kind of sensitivity to negative social information. After being primed with high compassion, participants reported higher levels of hostility. These results are especially interesting due to the structure of the IPC, where hostility and compassion are located on opposite sides of the same pole. This relationship further supports a distinction between hostility and indifference at both a dispositional and behavioral level and suggests that the intensity and types of goal pursuit may be important to consider in predicting behavioral reactions from dispositional personality traits.

1.3 INTERPERSONAL MOTIVES AND FRUSTRATION

In their discussions on complementarity, Horowitz and colleagues (2006) state that "the complement of a behavior is the reaction that would satisfy the motive behind it." (p. 73). This statement creates more malleability in theories of complementarity in the IPC than had originally existed by suggesting that complementarity is motive dependent. However, motive research is not constrained to communal and agentic models (see Bakan, 1966), but has also conceptualized motives and goals as implicit and self-attributed (McClelland, Koestner, & Weinberger, 1989) and intrinsic vs. extrinsic (Deci & Ryan, 1985). In interpersonal research, motives and goals are assumed to have a social or interpersonal component: they are primarily achieved through interpersonal situations (Schechtman & Horowitz, 2006).

Several scales currently use the structure of the IPC to examine goals and motives, namely the Interpersonal Goal Inventory (IGI; Dryer, 1993), the Agentic and Communal Values scale (ACV; Trapnell & Paulhus, 2012), and the Circumplex of Interpersonal Values (CSIV; Locke, 2000). Often, these measures are assessed in conjunction with corresponding dispositional traits. Research indicates that these measures are highly correlated, but distinct (Locke & Sadler, 2007). For example, individuals sometimes rank specific types of interpersonal goals as important to them, such as warmth, although they are not themselves dispositionally warm (Dryer, 1993). Further, these measures of interpersonal goals all are primarily concerned with motive content (agentic or communal). Little research within the interpersonal sphere has examined the strength or autonomy of the motives being assessed.

Within the motive hierarchy, there are generally two distinct categories: intrinsic and extrinsic. Intrinsic motivation refers to the desire to achieve a goal or perform a task specifically for the inherent satisfaction in completing the activity or pursuing the motive (Ryan & Deci,

2000). These motives, although not strictly interpersonal, are often satisfied or frustrated through interpersonal situations. One such example would be a motive for intimacy and affiliation with others in order to gain self-fulfillment and satisfaction. Extrinsic motives, on the other hand, refer to motives that have a primarily external component to the importance of fulfillment. According to Self-Determination Theory (Deci & Ryan, 1985), these extrinsic motives vary according to their autonomy. A self-determined motive is one that has been internalized to such a point that it is intrinsically fulfilling, while also achieving an external reward. Motive autonomy is theorized to operate on a continuum, and completely non-autonomous motivations are those in which external punishments or rewards are solely responsible for pursuing the motive (Ryan & Connell, 1989). Non-autonomous motivations are also referred to as instrumental motives (Bogler & Somech, 2002) or controlled motives (Deci & Ryan, 1985).

Due to the intrinsic nature of satisfaction, motive autonomy is often highly related to the experience of satisfaction (Westbrook & Black, 1985). This implies that higher satisfaction will be experienced when individuals succeed in fulfilling an intrinsic motive compared to a primarily instrumental motive. Thus, it is also likely that individuals with more autonomous motives experience more negative affect if a motive is blocked or frustrated, whereas those with more instrumental motives may react with indifference. Therefore, it is important to not only assess motive *type* but also motive *autonomy* to predict reactions to frustrated motives in interpersonal situations. Further, dispositional traits may relate to trends of motive autonomy as well: whereas some individuals are likely to strive more often for extrinsic rewards, others may seek to fulfill intrinsic goals. The personality constructs of the Dark Triad and the Vulnerable Dark Triad may be a particularly useful lens through which to examine these postulations.

1.4 DIFFERENTIATING QUADRANT TWO: THE VULNERABLE DARK TRIAD AND THE DARK TRIAD

The Dark Triad of personality is composed of Machiavellianism, grandiose narcissism, and psychopathy (Paulhus & Williams, 2002). These constructs all share a common core of low Honesty/Humility, low Agreeableness, and high callous manipulation (Book, Visser, & Volk, 2015), but each has unique characteristics and is able to uniquely predict a variety of outcomes (e.g. Baughman, Giammarco, & Vernon, 2012; Jones & Paulhus, 2011; Paulhus & Williams, 2002; Rauthman, 2012). For example, in regards to aggression, psychopathy predicts aggression indiscriminately (Patrick & Zempolich, 1998; Reidy, Zeichner & Martinez, 2008), Machiavellianism shows no behavioral association with violence, aggression, or revenge (Williams & Paulhus, 2004), but shows trait relations to resentment and suspicion (Jones & Neria, 2015), and narcissism predicts aggression after social rejections or provocation (Bettencourt, Talley, Benjamin, & Valentine, 2006; Twenge & Campbell, 2003).

Research on the Dark Triad indicates that individuals high in these traits tend to have an agentic social style: competitive and individualistic, but not always unaltruistic (Jonason, Li, & Teicher, 2010), are driven by instrumental or egoistic goals (Jones & Paulhus, 2011), and are associated with agentic and distant interpersonal values and motives (Dowgwillo & Pincus, 2016). Within the quadrant model of the IPC, the Dark Triad tends to fall within Quadrant 2: high agency, low communion (Jones & Paulhus, 2011). However, each construct does so to a differing degree. Of the three, narcissism is the highest on agency and most neutral on communion, and Machiavellianism is the most neutral on agency and lowest on communion (Rauthmann & Kolar, 2013). Thus, not only do the Dark Triad constructs predict callous and exploitative behavior as opposed to hostile and antagonistic behaviors, but they also strive for

goals that are instrumental or self-serving in nature. This is summed up as a common behavioral style that is "exploitative, that is, agentic striving at the expense of communal welfare" (Jones & Paulhus, 2011, p. 6).

Theorists have introduced the "Vulnerable Dark Triad"(VDT), which is composed of borderline personality, vulnerable narcissism, and secondary psychopathy (Miller et al., 2010). The creation of the VDT was done in part to explain heterogeneity often seen in the constructs of psychopathy and narcissism. Although the VDT traits remain manipulative and disagreeable, they also predict negative emotionality and neuroticism. This combination of low agreeableness and high neuroticism (particularly the facet "angry hostility") results in a personality core that is easily threatened and reactively hostile in social interactions. As such, it is an ideal interpersonal complement to the callous and cold Dark Triad. Currently, there is little research directly comparing all of the Dark Triad to the VDT. However, research into each construct and its complement shows that members of the VDT are associated with higher negative affect and neuroticism, lower self-esteem, anxious or fearful attachment styles, and reactive aggressive behaviors (e.g., Zeigler-Hill & Abraham, 2006; Pincus et al., 2009). In their seminal paper introducing the VDT, Miller and colleagues (2010) posit that there may be different forms of disagreeableness, such that "individuals who are high on grandiose narcissism may be disagreeable (e.g., immodest, aggressive) for both instrumental reasons (e.g., personal gain) and for reasons related to status and dominance, whereas the VDT…may be related to disagreeable interpersonal behavior due to affective dysregulation and distrust of others" (p. 1555).

Primary Psychopathy and Secondary Psychopathy. Psychopathy was formally operationalized in 1941 by Hervey Cleckley in his seminal book, *The Mask of Sanity* (2016). In his book, Cleckley describes a psychopathic person as one who is impulsive, manipulative, and

duplicitous. These core features persist in more recent definitions of the construct, the most popular of which remains the Psychopathy Checklist - Revised (PCL-R; Hare, 1991), also considered the "gold standard" for clinical psychopathy assessment (Acheson, 2005). The assessment of psychopathy, its theory, measurement, and factor structure factor structure has been the subject of much debate. As a consequence, multiple theories and measurements have been proposed to fully understand the construct (see Hare, 2003; Levenson, Kiehl, & Fitzpatrick, 1995; Patrick, Fowles, & Krueger, 2009; Skeem, Poythress, Edens, Lilienfeld, & Cale, 2003). It is generally agreed that psychopathy should not be conceptualized as a discrete category, but as a continuous trait (Williams, Hare, & Paulhus, 2007).

In the PCL-R, as well as its subclinical counterpart, the self-report psychopathy (SRP; Paulhus, Neumann, & Hare, 2016) scale, psychopathy is composed of two higher order factors: Factor 1 – the interpersonal/affective factor (e.g. lack of remorse; lying; manipulation; grandiosity) and Factor 2 – the impulsive antisocial factor (Hare, 2003).[1] Jones and Figueredo (2013) argue that Factor 1 can be found in all three Dark Triad traits (e.g., low agreeableness; low honesty humility), whereas Factor 2 is specific to psychopathy. Further, Factor 2 is related to low conscientiousness and high neuroticism (Lynam & Derefinko, 2006). Widiger (2006) found that Factor 2 of psychopathy is more strongly related to borderline and antisocial personality disorders than is Factor 1, and others have found that Factor 2 psychopathy shows high correlations with psychopathology scores of anxiety, hostility, and interpersonal sensitivity (Miller et al., 2010). Factor 1 and Factor 2 have also been conceptualized as "primary" and "secondary" psychopathy, respectively (Skeem, Johansson, Andershed, Kerr, & Louden, 2007).

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[1] The SRP and PCL-R are formally composed of four facets: callous affect (CA), interpersonal manipulation (IM), erractic lifestyle (EL), and antisocial behavior (ASB), but these are most often referred to in terms of the two higher order factors of Factor 1 (CA/IM) and Factor 2 (EL/ASB).

Fundamentally, primary psychopathy is considered an affective deficit, whereas secondary psychopathy reflects an affective disturbance (Karpman, 1948). Secondary psychopathy is characterized by high levels of positive and negative emotionality, which is considered to be at normal levels for individuals high in primary psychopathy (Lykken, 1995). In a sample of violent offenders, Skeem and colleagues (2007) found that secondary psychopaths had higher trait anxiety. Research has also shown that those higher in primary psychopathy have weak behavioral inhibition systems (BIS: sensitivity to punishment cues), and those higher in secondary psychopathy have strong behavioral activation systems (BAS: sensitivity to reward cues) (Newman, MacCoon, Vaughn, & Sadeh, 2005). Thus, although those higher in primary psychopathy may not notice potential punishments, those higher in secondary psychopathy are hyperreactive to potential rewards.

When considering the implications for primary and secondary psychopathy in differentiations of hostility and indifference through motive autonomy, there are several studies that assessed both in terms of anger and frustration. For example, those high in secondary psychopathy report having higher levels of anger and hostility towards others (Morrison & Gilbert, 2001) and rate their reactions to frustrating situations as more intense and angry than others do (Blackburn & Evans, 1985). Further, primary psychopathy is associated with instrumental aggression whereas secondary psychopathy is associated with reactive aggression (Reidy, Zeichner, Miller, & Martinez, 2007). These findings suggest that those higher in primary psychopathy tend to aggress against others indiscriminately and indifferently, whereas those higher in secondary psychopathy are prone to reactive hostility.

Grandiose Narcissism and Vulnerable Narcissism. Of the Dark Triad personality constructs, narcissism is considered the most heterogenous. Generally, narcissism has been

theorized to have two distinct types identified by multiple names, such as oblivious and hypervigilant (Gabbard, 1989), overt and covert (Wink, 1991), agentic and communal (Gebauer, Sedikides, Verplanken, & Maio, 2012), and grandiose and vulnerable (Dickinson & Pincus, 2003). Whereas grandiose narcissists are exhibitionistic, dominant, use overt self-enhancement, and devalue those who may threaten their self esteem (Wink, 1991), vulnerable narcissists often maintain their self-esteem by relying on feedback from others and experience emotional distress and conflict in interpersonal situations due to denial of entitled expectations (Dickinson & Pincus, 2003).

Dispositional studies of aggression have found that grandiose narcissism negatively predicts hostile tendencies (Jones & Neria, 2015) and clinical patients with narcissistic styles reciprocate clinician-client relationships with more warm and friendly interactions, as opposed to hostile or dominant (Wagner, Riley, Schmidt, McCormick, & Butler, 1999). However, narcissism predicts aggression in response to ego-threat (Bushman & Baumeister, 1998) and social exclusion (Twenge & Campbell, 2003). In fact, narcissism is the only trait among the Dark Triad to react negatively to ego-threats (Jones & Paulhus, 2010) or exclusion (Mcdonald & Donnellan, 2012). Although a reaction to ego-threats or exclusion may suggest reactive hostility when confronted with frustrated motives, Twenge and Campbell (2003) also reported that those higher in narcissism, although they acted aggressively after social rejection, did not report feelings of internalized negative affect. Thus, such aggressive reactions may be an assertion of agentic dominance and communal indifference as opposed to hostile reactivity.

In contrast, vulnerable narcissists are prone to angry and hostile outbursts when their motives, which revolve around external validation from another person, are frustrated. Specifically, Miller and colleagues (2011) have proposed that the motive behind the antagonistic

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interaction with others, among those higher in vulnerable narcissism, may be due to a hostile attribution bias. In contrast, the motive among individuals high in grandiose narcissism is self-enhancement. Thus, grandiose narcissists are more concerned with self-construction and validation than with social approval from interpersonal others. This reduced concern leaves grandiose narcissists as less reactively hostile to motive frustrations when compared with vulnerable narcissists (Morf & Rhodewalt, 2001; Seah & Ang, 2008; Washburn, McMahon, King, Reinecke, & Silver, 2004). Further, Besser and Priel (2010) found that grandiose narcissism predicted higher negative affect and anger in situations of achievement threat, whereas vulnerable narcissism predicted higher negative affect and anger in situations of interpersonal threat and rejection.

Machiavellianism and Borderline Personality. Unlike psychopathy and narcissism, Machiavellianism is largely researched as a homogenous construct characterized by cautious and flexible strategy (Berezckei, 2015) with no direct links to erratic or antisocial behavior (Jones & Figueredo, 2013). McHoskey (1999) has found that such personalities tend to have extrinsic goals, especially financial success, do not prioritize intrinsic goals, and are negatively associated with social interest. They also report having a "control" motive orientation, which indicates that individuals high in Machiavellianism rely on external triggers for motivation (such as deadlines) and do things because they think they "should" (Deci & Ryan, 1985). There is also evidence to support that those who score higher on Machiavellianism scales tend to be task rather than person oriented (Geis, 1978), pursue materialistic, long-term goals (Rauthmann & Will, 2011), and show no association to violence, aggression, or revenge (Williams & Paulhus, 2004).

Although Borderline Personality Disorder (BPD) is not theoretically considered a counterpart to Machiavellianism, it is included as the final member of the VDT due to similar

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elements of low agreeableness and high neuroticism, as well as elements of impulsivity and interpersonal antagonism (Samuel & Widiger, 2008). Those with BPD are prone to anger and hostility (Gardner, Leibenluft, O'Leary, & Cowdry, 1991), expect hostility from others (Critchfield, Levy, Clarkin, & Kernberg, 2008), and experience mood instability and variability that is reactive to environmental factors (Gunderson & Phillips, 1991). In addition, those with BPD are often involved in unstable relationships that involve idealization and hatred of partners, experience chronic feelings of emptiness, and have a fear of abandonment (Sanislow et al., 2002), all of which point to motive pursuit of a more social and intrinsic nature.

Differentiating Quadrant 2. Overall, the constructs of the VDT are much more emotionally reactive and hostile than their counterparts in the original Dark Triad. However, when mapped onto the interpersonal circumplex, all six constructs fall into Quadrant 2, or high agency/low communion. As such, looking at the Dark Triad and VDT within the IPC can demonstrate why a distinction between hostility and indifference is necessary through a third interpersonal moderator, such as autonomy of motive.

The anxious and fearful attachment styles present in the VDT suggest that individuals high in these dark traits seek interpersonal relationships with others and have motives and goals that involve intimacy and closeness with social others (Miller et al., 2010). This finding is in direct contrast to members of the Dark Triad. Research has shown that individuals high in the Dark Triad are most likely to have dismissive or avoidant attachment styles, suggesting that social relations with others are less important than more material and extrinsic motives (Frodi, Dernevik, Sepa, Philipson, & Bragesjo, 2001; Inancsi, Lang, & Bereczkei, 2015; Smolewska & Dion, 2005). Although individuals in both groups may engage in aggressive behavior and take up similar space in the interpersonal circumplex, research indicates that they may have very

different goals and motivational pursuits. Without incorporating a dimension of motive pursuit into the interpersonal circumplex, it may be difficult to differentiate between both dispositional and reactive hostile and indifferent tendencies.

1.5 MOTIVE AUTONOMY: A CIRCUMPLEX MODERATOR

Most interpersonal theorists who research motives broadly classify them as either agentic or communal, reflecting the two dimensions of the interpersonal circumplex (Bakan, 1966; Trapnell & Paulhus, 2012). Although this is an effective and useful way to classify motive type, it is also necessary to classify the autonomy (or intrinsicity) of the motive (Deci & Ryan, 1985). The level of personal value and importance given to a particular motive is often overlooked in circumplex theory. Nevertheless, assessments of goal value are likely important when researching behavioral strategies. Only one study has thus far examined motive autonomy in relation to the interpersonal circumplex, finding that autonomy, as defined by Deci and Ryan (1985), projects onto Quadrant 1 (high communion, high agency) (Hmel & Pincus, 2002). This suggests that the intrinsicity and self-determination of a motive is not limited to only communal motives. Hmel and Pincus (2002) also found that, in relation to the Five Factor Model, motive autonomy was positively related to Agreeableness and negatively related to Neuroticism. This provides preliminary support for motive autonomy as a distinction between indifference and hostility at a dispositional level.

Often overlooked in the IPC is the dimension of intensity, which is visualized as the distance from the center of the circle, with the highest intensity behaviors at the outer edge of the circumplex (Orford, 1994). For example, someone who is intensely submissive may act with docile conformity, whereas someone who is less intensely submissive may simply show respect (Leary, 1957). In this manner, it is possible to envision motive autonomy as a form of intensity,

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particularly in regards to expected behavioral reactions to frustrated motives. In this example, an individual pursuing a motive that is highly self-determined could theoretically be differentiated from an individual pursuing a motive for more extrinsic reasons. Thus, the assessment of motive strength and autonomic intensity would not only contribute to the assessment of the presence or absence of agentic or communal motives, but would also help evaluate the relative autonomy of the motive being assessed. This type of evaluation would allow for predictions and differentiations of behavior when faced with a frustrated motive.

As a motive becomes more intrinsic and autonomous, individuals internalize that motive or value as being integral to one's sense of self (Ryan & Deci, 2000). Therefore, the use of interpersonal strategies to pursue and achieve intrinsic motives will differ in reaction to frustrated motives that are extrinsic. Specifically, I predict the following: if an interpersonal other is unable to satisfy an instrumental motive for interaction, the motive seeker will react indifferently. However, if the other is unable to satisfy an intrinsic motive and frustrates the seeker's attempts, he/she will react with hostility.

A study by Shechtman and Horowitz (2006) provides preliminary support for the relevance that intrinsic values have on interpersonal motive frustration. After evoking motives related to influence over others, participants were told they were interacting with either a computer program or an interpersonal other. Participants were screened for high and low assertiveness, and the chat program either responded in a dominant or non-dominant manner. Hostile reactions emerged from assertive individuals who thought they were interacting with an assertive interpersonal other. This reaction likely emerged because the dominance of the partner would frustrate the motive of influence and assertion. However, hostility was not seen among non-assertive participants. Although all sets of participants were given the same motive in

approaching the paradigm, the motive for influence was only important and intrinsic for those individuals who were assertive. Even though this motive may have been frustrated in conditions with the non-assertive participant, hostility was not an observed reaction.

The distinction between hostility and indifference in the face of frustrated motives can also extend to a differentiation between agreeableness and warmth on the opposite pole of the IPC. Those individuals seeking more intrinsic motives may be more likely to act in an agreeable nature with another, accommodating them and being cooperative in order to reach a self-satisfying goal. Conversely, those seeking fulfillment of extrinsic motives may act warmly towards interpersonal others, by being kind and making others feel comfortable to use the interpersonal other to achieve an external goal. In this way, motive autonomy can distinguish both approach and reactionary behaviors in interpersonal interactions.

At a dispositional level, I have argued that those who are dispositionally callous have more extrinsic interpersonal motives, whereas those with higher dispositional hostility may hold motives that are more intrinsic to their sense of value and worth. However, it is the interaction between specific motive autonomy and trait dispositions that is most likely to evoke differential reactions to a frustrated motive. Although current interpersonal theory suggests that frustrated motives always elicit negative affect (Horowitz et al., 2006), I propose that a frustrated motive will only elicit a hostile reaction when the motive is self-determined. If the motive is non-autonomous and instrumental, its frustration will result in a cold and callous indifference to the interpersonal other.

By acknowledging and studying key trait differences between hostility and indifference on the negative pole of communion, the utility of the IPC in motivational and behavioral research may be expanded. Specifically, the examination and inclusion of motive autonomy when

studying behavioral reactions for frustrated motives can differentiate hostility and indifference while still allowing for the measurement and existence of dispositional hostility within the IPC. This synthesis of literature in the domains of motive autonomy, dispositional personality, and interpersonal behavior allows new perspective in the differentiation of hostility and indifference within the interpersonal circumplex.

1.6 PRELIMINARY INVESTIGATIONS

To test for preliminary support of the proposed hypotheses and model, I collected cross sectional data to examine and establish baseline relationships between dispositional traits and general motive autonomy. Specifically, this study tested the hypotheses that hostility and indifference can be differentiated at a trait level: individuals higher in trait hostility should value goals as more intrinsic whereas individuals higher in trait indifference should be motivated to pursue goals for more extrinsic and controlled reasons. Further, it also tested the assumption that the Dark Triad and Vulnerable Dark Triad are suitable representations of indifference and hostility, respectively, through a partially mediated model. Trait hostility, as measured by high FFM neuroticism and low HEXACO agreeableness, was hypothesized to partially mediate the relationship between the Vulnerable Dark Triad and higher motive autonomy. Conversely, trait indifference was hypothesized to partially mediate the relationship between the Dark Triad and extrinsic motive control.

It is important to note that trait hostility and indifference have not yet been directly tested in relation to dispositional motive autonomy. Instead, the proposed relationship between indifference with extrinsic motives and hostility with intrinsic motives has been empirically assumed through the use of the Dark Triad as a proxy for callous indifference. Thus, the partially mediated models tested in these preliminary investigations assess whether the mechanism for the

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established relationship between the Dark Triad and extrinsic motive control is due specifically to trait indifference or other factors unique to the Dark Triad constructs. These tests only seek to further understand and delineate the dispositional associations that may predict more or less general motive autonomy and are unrelated to the larger question addressed in the present study: namely whether motive autonomy may differentially predict behavioral reactions to motive frustration.

Participants. Using guidelines from Frick and Mackinnon (2007) regarding power for a partially mediated model of medium effect size, a sample size of at least 220 was recommended. A total of 315 participants were collected from Amazon's Mechanical Turk, but 91 participants failed at least one of three attention checks and were excluded from analysis, resulting in a total of 224 participants (52% women, mean age 36.16, 71.7% White/Caucasian).

Measures.

Trait Hostility. To assess trait hostility, the 24-item Neuroticism subscale from the 120-item IPIP representation of the Five Factor Model (Maples, Guan, Carter, & Miller, 2014) was included. Reliability was very high ($\alpha = .93$). Further, the 16-item Agreeableness subscale from the HEXACO-PI-R (Lee & Ashton, 2004; Ashton & Lee, 2009) was also included. Reliability for this scale was high ($\alpha = .87$). Higher neuroticism scores and lower HEXACO agreeableness scores indicate higher trait hostility. The correlation between these two subscales was $r = -.40$, $p < .001$.

Trait Indifference. Trait Indifference was also assessed using two subscales: the 24-item Agreeableness subscale from the 120-item IPIP representation of the Five Factor Model (Maples et al., 2014) and the 16-item Honesty/Humility (H/H) subscale from the HEXACO-PI-R (Lee & Ashton, 2004; Ashton & Lee, 2009). Reliability for both scales was found to be acceptable ($\alpha =$

.88; α = .87). Lower agreeableness scores and lower H/H scores indicate higher trait indifference. The correlation between these two subscales was $r = .65, p < .001$.

Short Dark Triad. The Short Dark Triad (SD3; Jones & Paulhus, 2014) is a 27 item measure assessing each Dark Triad trait using nine items. The reliability for each subscale was acceptable: Psychopathy (α = .79), narcissism (α = .82), and Machiavellianism(α = .85). Each subscale correlated with the other at rates typically found in other studies (psychopathy/narcissism $r = .49, p < .001$; psychopathy/Machiavellianism $r = .65, p < .001$; narcissism/Machiavellianism $r = .47, p < .001$).

Vulnerable Dark Triad. The Vulnerable Dark Triad was assessed using three separate measures: the 10-item Secondary Psychopathy factor of Levenson's Psychopathy Scale (α = .79, LSP; Levenson, Kiehl, & Fitzpatrick, 1995), the 10-item Hypersensitivity Narcissism Scale (α = .82 , HSNS; Hendin & Cheek, 1997), and the 10-item McLean Screening Instrument for Borderline Personality Disorder (α = .83, MSI-BPD; Zanarini et al., 2003). Correlations between the measures were as follows: LSP/HSNS $r = .54, p < .001$; LSP/MSI-BPD $r = .56, p < .001$; HSNS/MSI-BPD $r = .50, p < .001$. Although there are no previous studies with which to compare these correlations, these correlations are similar in magnitude to intercorrelations among the three Dark Triad constructs.

Motive Autonomy. Two different scales measured motive autonomy. The first scale was the General Causality Orientations Scale (GCOS; Deci & Ryan, 1985). The GCOS is comprised of 12 vignettes and includes three subscales of Autonomy, Control, and Impersonal to assess motive type. Reliability for all three subscales was found to be acceptable (α = .68-.83). The second scale was the Goal Contents and Motives Scale (GCMS; Sheldon, Ryan, Deci, & Kasser, 2004). The Goal Contents and Motives Scale gives participants a list of six goals, three of which

are agentic (fame/popularity, attractive image, financial success) and three of which are communal (emotional intimacy, personal growth/meaning, community contribution). For each goal, participants are asked to rate the extent to which this goal is driven by four different reasons ranging in autonomy. The two autonomous reasons are "because you really identify with the goal" (identified motivation) and "because of the enjoyment or stimulation that this goal would provide you" (intrinsic motivation). The two controlled, or non-autonomous reasons are "because somebody else wants you to or because the situation seems to compel it" (extrinsic motivation) and "because you would feel ashamed, guilty, or anxious if you did not have this goal" (introjected motivation). The internal reliability was found to be acceptable ($\alpha = .86$).

Results. Table 1 presents the correlations between the trait measures of hostility and indifference with the measures of the Dark Triad and Vulnerable Dark Triad. Because I was not interested in the separate Dark Triad or VDT constructs, I extracted a single common factor from each using Principal Analysis Factoring. As expected, the VDT, overall, showed higher magnitude correlations with Neuroticism and HEXACO Agreeableness, whereas the Dark Triad showed stronger relationships to Honesty/Humility and Agreeableness. However, some of these correlations were not significantly different in magnitude.

Table 1. Correlations between the Dark Triad, VDT, and trait hostility and indifference.

	Neuroticism	Agreeableness	Honesty/ Humility	HEXACO Agreeableness
Machiavellianism	.20**	-.66***	-.64***	-.51***
Narcissism	-.24***	-.44***	-.53***	-.19**
Psychopathy	.21**	-.68***	-.66***	-.39***
Borderline Personality Disorder	.56***	-.33***	-.21**	-.33***

	Factor 1	Factor 2	Factor 3
Hypersensitive Narcissism	.65***	-.55***	-.41***	-.53***
Secondary Psychopathy	.58***	-.50***	-.36***	-.41***
Common Dark Triad Factor	.15$_a$*	-.74$_a$***	-.74$_a$***	-.47$_a$***
Common VDT Factor	.71$_b$***	-.55$_b$***	-.39$_b$***	-.50$_a$***

*p < .05 ** p < .01 *** p < .001*
Note: Correlation Differences should be read vertically.

The GCMS includes three agentic goals and three communal goals and asks participants to rate how much each goal is driven by four different degrees of self-determined motivation. Thus, a total of eight subscales could be created, one for each version of the type of motivation crossed with the goal type, agentic or communal. A factor analysis using Principal Axis Factoring with a Promax rotation was conducted on these subscales, resulting in a three-factor solution (see Table 2).

Table 2. Principal Axis Factoring Analysis for Goal Contents and Motives subscales.

	Factor 1	Factor 2	Factor 3
External Motivation for Communal Goal	**.67**	.24	-.06
External Motivation for Agentic Goal	**.73**	-.06	.08
Introjected Motivation for Communal Goal	**.81**	-.03	.01
Introjected Motivation for Agentic Goal	**.80**	-.10	-.03
Identified Motivation for Communal Goal	-.04	**.91**	.01

Intrinsic Motivation for Communal Goal	.04	**.90**	.02
Identified Motivation for Agentic Goal	-.02	.07	**.81**
Intrinsic Motivation for Agentic Goal	.02	-.05	**.95**
Eigenvalue (% of Total Variance)	3.15 (39.40%)	1.94 (24.20%)	1.29 (16.14?%)
Total Variance			79.748%

All controlled motivations loaded on the same factor, regardless of goal type, and autonomous motivations loaded on two separate factors dependent on if the specific goal being rated was agentic or communal. Table 3 shows the correlations between these three factors, as well as their correlations with the autonomous and control subscales of the GCOS.

Table 3. Correlations between indices of Motive Autonomy.

	1.	2.	3.	4.	5.
1. Intrinsic Motivations for Communal Goals	-				
2. Intrinsic Motivations for Agentic Goals	.12	-			
3. Extrinsic Motivations	.03	.36***	-		
4. Autonomous Motivations	.42***	-.01	-.27***	-	
5. Controlled Motivations	.11	.45***	.22**	.21**	-

*$p < .05$ ** $p < .01$ *** $p < .001$

Table 4 shows these same variables correlated with the common factors of the Dark Triad and the VDT as well as the FFM factors of Neuroticism and Agreeableness and the HEXACO factors of H/H and Agreeableness. Trait indifference, measured through low H/H and low FFM Agreeableness was most related to less intrinsic motives for communal goals, as well as more

intrinsic motives for agentic goals, and more extrinsic and controlled goals overall. Trait

hostility did not seem to uniquely correspond with any particular level of motive autonomy.

Table 4. Correlations between Personality Constructs and Motive Autonomy.

	Intrinsic: Communal Goals	Intrinsic: Agentic Goals	Extrinsic	Autonomous	Controlled
Dark Triad Factor	$-.24_{ab}$***	$.44_a$***	$.25_{ab}$***	$-.29_a$***	$.33_a$***
VDT Factor	$-.29_a$***	$.23_b$**	$.22_{ab}$**	$-.31_{ab}$***	$.10_b$
Neuroticism	$-.18_b$**	$.05_c$	$.14_{ac}$*	$-.24_{ac}$***	$-.01_b$
FFM Agreeableness	$.47_c$***	$-.30_b$***	$-.16_a$*	$.39_b$***	$-.14_b$*
Honesty/Humility	$.28_{ab}$***	$-.48_a$***	$-.32_b$***	$.28_a$***	$-.31_a$***
HEXACO Agreeableness	$.26_{ab}$***	$-.20_b$**	$-.01_c$	$.12_c$	$-.13_b$

*p < .05 ** p < .01 *** p < .001*
Note: Correlation Differences should be read vertically.

Next, the hypothesized partially mediated models were tested. These mediation models

were tested using the PROCESS macro (Hayes, 2013). First, these were tested using the GCOS

variables of autonomy and control as the dependent variables. To test the hypothesis that trait

hostility mediated the relationship between the VDT and motive autonomy, two separate models

were tested: one using HEXACO Agreeableness as the mediation variable, and one using the

Angry Hostility facet of Neuroticism as the mediation variable of interest. The extracted

common factor of VDT was used as the predictor variable. Results can be found in Figure 2.
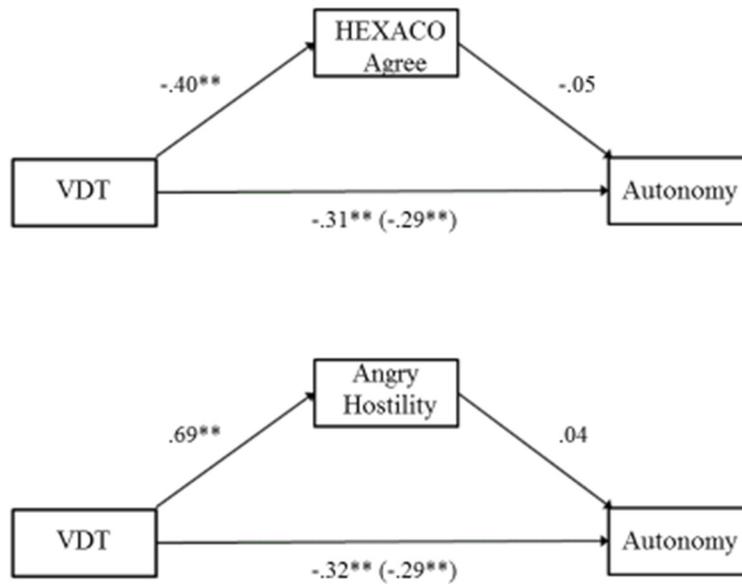
Figure 2: Mediation models for Trait Hostility mediating the relationship between the Vulnerable Dark Triad and Motive Autonomy.

For the first model, using HEXACO Agreeableness, the indirect effect was non-significant, $ab = .02$, BCa CI [-.05, .09]. For the second model, using Angry Hostility, the indirect effect was also non-significant, $ab = .03$, BCa CI [-.06, .12]. The second set of mediation models was to test whether trait indifference mediated the relationship between the Dark Triad and external motive control. Once again, two separate models were tested: one using HEXACO H/H as the mediation variable, and one using FFM Agreeableness as the mediation variable of interest. The extracted common factor of the Dark Triad was used as the predictor variable. These models are summarized in Figure 3. The indirect effect for the first model, using H/H, was non-significant, $ab = .10$, BCa CI [-.03, .22], but the effect size, P_M, was equal to .34, indicating that the mediator could account for about a third of the total effect. The second model,

using FFM Agreeableness, had a significant indirect effect, $ab = -.14$, BCa CI [-.27, -.03], and the mediator accounted for about half of the total effect, $P_M = -.51$.
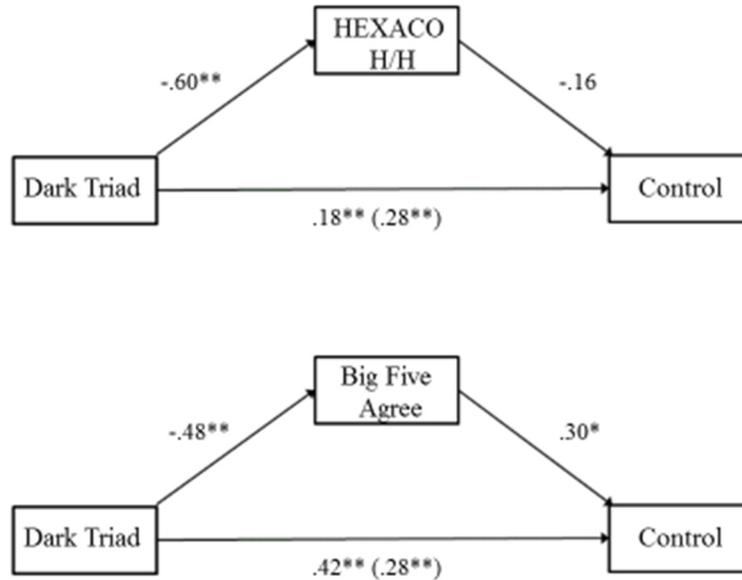
Figure 3: Mediation models for Trait Indifference mediating the relationship between the Dark Triad and External Motive Control.

Based on the results from the correlations and the aforementioned mediation model, an additional two mediation models were computed using factors from the GCMS. These two models were both tested using H/H as a mediator and the common core of the Dark Triad as the predictor variable. Further models using the VDT as a predictor variable were not tested due to negative correlations between it and levels of motive autonomy across all motive scales. Figure 4 shows these two mediation models: one with extrinsic motivation as the dependent variable and one with the "intrinsic motives for agentic goals" factor of the GCMS as the dependent variable. In the first model, H/H almost completely mediated the relationship between the Dark Triad and

extrinsic motivations, accounting for approximately 90% of the total effect: $ab = .20$, BCa CI [.09, .33], $P_M = .90$. In the second model, partial mediation was found, and H/H accounted for approximately half of the total effect: $ab = .26$, BCa CI [.12, .40], $P_M = .56$.
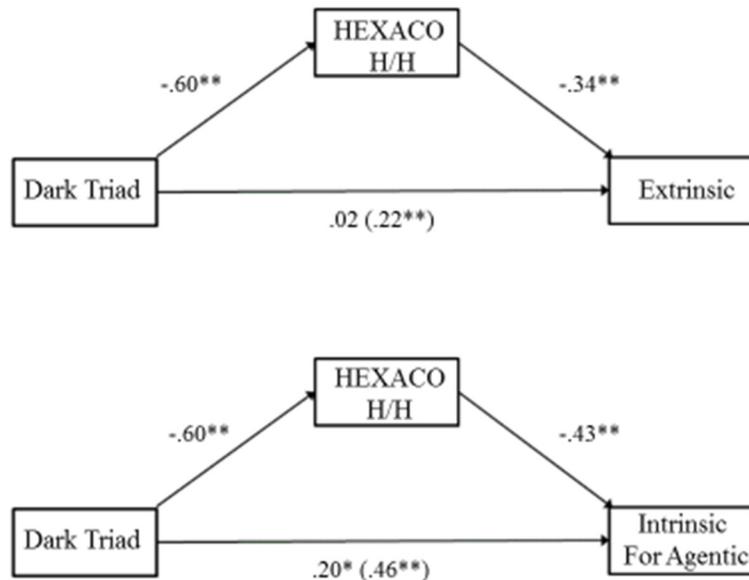
Figure 4: Mediation models for Honesty/Humility mediating the relationship between the Dark Triad and subscales of the GCMS.

1.7 SUMMARY AND PRESENT STUDY

The preliminary study was conducted to investigate two primary questions: whether hostility and indifference could be differentiated at a trait level via motive autonomy, and whether the Dark Triad and VDT are suitable representations of indifference and hostility. To address the first question, correlations and mediated models suggest that trait indifference is related to having less self-determined motives, particularly when measured through H/H. However, it should be noted that there was a strong relationship between trait indifference and having intrinsic motivation to achieve agentic goals. There did not seem to be a consistent

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relationship between trait hostility and self-determination. These results partially support the hypotheses tested: trait indifference appears to be related to less motive autonomy and more extrinsic and controlled motivation, but trait hostility is not related to any form of motive autonomy. Although this was not the hypothesized relationship, it suggests a form of differentiation between hostility and indifference at the trait level through the relationship of indifference with low motive autonomy.

The preliminary study also assessed the relationship between the Dark Triad and indifference and the VDT and hostility. Based on the results, the Dark Triad may be an appropriate personality construct lens through which to measure and examine trait indifference. In almost all tested mediation models, the relationship between the Dark Triad and extrinsic motives was partially mediated by either low agreeableness or H/H. However, the same results were not found for the VDT. First, according to the correlations, the VDT had similar relationships to motive autonomy and general personality models as the Dark Triad. The primary difference seen between the Dark Triad and the VDT was that the VDT was highly related to Neuroticism. As a personality cluster, the VDT is still very new, but these findings provide preliminary indications that the VDT may not be functionally different from the Dark Triad except for an excess of Neuroticism.

The preliminary study provides initial support for the hypothesis that individuals who are dispositionally indifferent are more likely to pursue interpersonal goals for less self-determined motivations. This finding may also inform behaviors in interpersonal interactions. For instance, individuals higher in trait indifference may also react with indifference when an interpersonal goal has been frustrated. However, in a case where the motive is self-determined, I argue that, regardless of disposition, an individual will react with hostility. Therefore, a behavioral study

was conducted to test indifferent and hostile reactions to frustrated motives dependent on the autonomy of the motive. This study manipulated motive autonomy and motive frustration and examined reactions in multiple ways to differentiate a hostile from an indifferent behavior. Five hypotheses were examined for this study:

H1: A frustrated motive will elicit a hostile reaction when the motive is primed to be intrinsic.

H2: A frustrated motive will elicit an indifferent reaction when the motive is primed to be extrinsic.

H3: Dispositional indifference will interact with motive autonomy such that those individuals higher in dispositional indifference will not react with hostility across both extrinsic or intrinsic motive primes.

H4: When an intrinsic motive is satisfied, individuals will react with warmth and agreeableness towards an interpersonal other.

H5: When an extrinsic motive is satisfied, individuals will react with indifference towards an interpersonal other.

Chapter 2: Method

2.1 PARTICIPANTS

Participants were all undergraduate students from the University of Texas at El Paso, recruited from the SONA system. A power analysis was conducted using the statistical software G*Power (Faul, Erdfelder, Buchner & Lang, 2009). Shechtman & Horowitz (2006) conducted a similar study assessing hostile reactions to frustrated motives and found a small to medium effect size for their main hypothesis of interest: a three way interaction in an ANOVA framework such that assertive participants who believed they were engaging in an interpersonal interaction expressed hostile reactions when they had a motive of dominance frustrated. Using this effect size ($f^2 = .05$) for a linear multiple regression with nine predictors, four main predictors and five interactions, a total sample size of 309 participants was recommended. A total sample of 360 participants were originally recruited for the study. However, 16 of these participants were excluded from the study for not following instructions, and an additional 29 failed one of two attention checks included in the survey portion of the study. The final sample size was 315 participants.

Of the 315 participants included in study analysis, 67.6% of them were female, and 74.6% of them identified as Latino/a. The remaining participants identified either as White (15.2%), Black (4.1%), Asian (1.0%), or Other (5.1%). The mean age of participants was 21.23 ($sd = 4.97$). Participants were randomly assigned to both an essay topic and feedback condition (see Procedure below). Of the 158 individuals prompted to write about the goal they ranked as most important, 72 received positive feedback, and 86 received negative feedback. Of the 157

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individuals prompted to write about the goal they ranked as least important, 69 received positive feedback, and 88 received negative feedback.

2.2 MEASURES

Trait Hostility. To assess trait hostility, only the 16-item Agreeableness subscale from the HEXACO-PI-R (see Appendix A; Lee & Ashton, 2004; Ashton & Lee, 2009) was used. A factor analysis of the subscales of FFM Neuroticism and HEXACO agreeableness from the preliminary study indicated a two factor solution, where the "angry hostility" facet of Neuroticism loaded negatively onto a factor consisting of all four HEXACO Agreeableness facets. Thus, the HEXACO Agreeableness subscale is, overall, a more cohesive indicator of trait hostility than an assessment of Neuroticism. This scale asks participants to rate their agreement with items on a 5-point Likert-type scale. The reliability for this scale was acceptable: $\alpha = .79$.

Trait Indifference. To assess trait indifference, the 16-item Honesty/Humility subscale from the HEXACO-PI-R (see Appendix B; Lee & Ashton, 2004; Ashton & Lee, 2009) was used. Although results from the preliminary study indicated that high FFM Agreeableness was generally more highly related to motive autonomy than H/H, H/H was always more strongly related to extrinsic motive control. Further, a factor analysis of the subscales of the two measures indicated a two factor solution, where three of the six Agreeableness facets loaded onto a factor with all of the H/H facets. As discussed previously, FFM Agreeableness has been theorized to include two separate components, compliance and compassion (DeYoung, Quilty, & Peterson, 2007), whereas H/H is unidimensional, and thus, a clearer indicator of trait indifference. This scale asks participants to rate their agreement with items on a 5-point Likert-type scale. The reliability for this scale was acceptable: $\alpha = .84$.

Dark Triad. In order to replicate the viability of using the personality constructs of the

Dark Triad as a measure of trait indifference, the 27-item Short Dark Triad was also included

(see Appendix C; Jones & Paulhus, 2014). This scale assesses each construct of the Dark Triad:

psychopathy, Machiavellianism, and narcissism, using nine items each. Participants rate their

agreement with items on a 5-point Likert-type scale. The reliability for each subscale was

acceptable: Psychopathy ($\alpha = .70$), narcissism ($\alpha = .72$), and Machiavellianism($\alpha = .73$). Each

subscale correlated with the other at rates typically found in other studies

(psychopathy/narcissism $r = .38$, $p < .001$; psychopathy/Machiavellianism $r = .59$, $p < .001$;

narcissism/Machiavellianism $r = .40$, $p < .001$).

Revised Sources of Validation Scale. The Sources of Validation Scale (Harber, 1995)

asks participants to rank a list of values in order from "most important" to "least important".

These goals were slightly reworded and modified to fit the "goal motivation" intent of the study

(see Appendix D). The most important goal, overall, was "Having strong family/friend

relationships" ($N = 202$). The least important goal was "Mastering an instrument" ($N = 99$).

Intrinsic Motivation Inventory. In order to assess if the manipulation of motive prime was

successful, participants also filled out an adaption of the Intrinsic Motivation Inventory (see

Appendix E; IMI; Ryan, 1982). Participants read statements about their feelings on the topic of

the essay they just completed and are asked to rate how true each statement is to them on a 7-

point Likert-type scale. Three subscales from the IMI were used: interest/enjoyment, perceived

competence, and effort/importance. The interest/enjoyment subscale is commonly considered the

truest self-report measure of intrinsic motivation, though perceived competence is theorized to

positively predict intrinsic motivation (McAuley, Duncan, & Tammen, 1987). Effort/importance

is also considered a necessary covariate when assessing motivation according to the scale

developer (Ryan, 1982). This inventory has been validated across multiple studies and types of activities (i.e. Deci, Eghrari, Patrick, & Leone, 1994; Ryan, Koestner, & Deci, 1991; Ryan, Mims, & Koestner, 1983). The reliability for this scale was extremely high: α = .97.

Self-Assessment Manikin. The Self-Assessment Manikin (see Appendix F; SAM; Bradley & Lang, 1994) uses pictures to have participants rate their current feelings of valence/pleasure and arousal on a 9-point scale. The SAM is commonly used as a measure of positive and negative affect following experimental tasks and is praised for its ability, as a nonverbal measure, to reliably capture general affective states (Morris, Woo, Geason, & Kim, 2002). The mean of the valence variable was 6.86 (*sd* = 2.11), and the mean of the arousal variable was 4.09 (*sd* = 2.31). The correlation between the two was only slightly positive: *r* = .13, *p* = .047.

Displaced Hostility. To measure displaced hostility, six questions were asked on a 5-point Likert-type scale (see Appendix G). Three of these questions asked about the participants' perceptions of the experimenter, and three inquired as to the usefulness and enjoyment of the study. For each topic, the three questions were averaged to create an aggregated perception of the experiment and the research assistant. The mean rating for the experiment was 4.03 (*sd* = .65), and the mean rating for the research assistant was 4.66 (*sd* = .52). Over half of the participants in the sample rated the research assistant at the highest extreme of positive perceptions for all three questions, resulting in a negatively skewed and leptokurtotic distribution (*skew* = -1.89, *kurtosis* = 4.07). These two variables, experiment and experimenter ratings were positively correlated, but distinct (*r* = .36, *p* < .001).

2.3 PROCEDURE

Three participants were recruited for every lab session, but were kept separated for the entirety of the session. Although the participants never interacted directly, the presence of

another participant was necessary to strengthen the deception that an interpersonal interaction was occurring. Upon arriving in the lab, participants first completed an initial questionnaire including the personality measures of HEXACO H/H and Agreeableness and the Dark Triad. They then ranked the goals in the modified SOV scale from most to least important.

After completion of the initial survey, participants were randomly assigned to either the intrinsic or extrinsic motive prime through the form of a 10 minute essay. In the intrinsic motive prime, participants were given the following prompt for their essay: "Think about the motive/goal you ranked as being most important to you. You picked the goal: _____. Please spend 10 minutes writing about how you hope to achieve this goal and how accomplishing it will make you feel." In the extrinsic motive prime, participants were given this prompt instead: "Think about the motive/goal you ranked as being least important to you. You picked the goal: _____. Please spend 10 minutes writing about this goal and why it may be sometimes necessary to achieve it."

The screen on which participants wrote this essay was modified to look like an email composition to lend further credence to the deception that another participant would read their essay (see Appendix H). Participants were told not to sign the email with their name or information, and that the essay would either be sent when the participant pressed the "send" button, or when 10 minutes had passed.

After completing the essay, participants were asked to inform their experimenter to receive further instructions. The experimenter would then enter the room, tell the participant that she would inform the reviewer that the essay had been sent, and instruct them to complete the additional survey on the following page. This survey was the Intrinsic Motivation Inventory. Although the motive manipulation prime had already been pilot tested and found successful (see

next section), this survey was still included as a way for participants to pass time while waiting for feedback. The use of the Intrinsic Motivation Inventory was specifically chosen to keep participants thinking about the goal about which they wrote.

After a few minutes had passed, the experimenter would re-enter the testing room with a printed page of either positive or negative feedback. This feedback was randomly assigned through a coin flip. The experimenter would leave the feedback face down on the desk and leave the room for the participant to read the feedback and then complete the study. Both forms of feedback can be found in Appendix I. They were also formatted as if written as an email, and spelling errors were deliberately included to maximize believability.

After receiving this feedback, participants were invited to either write a response to their "participant reviewer" or to just finish the rest of the study. If participants chose to write a response, the response was coded for hostility, indifference, and sarcasm by two separate research assistants blind to the conditions and nature of the study. If participants chose not to write a response, it was considered an indifferent reaction. Next, participants filled out the Self-Assessment Manikin to assess their emotional valence and arousal. Further, participants were given the option to enter themselves in a raffle contest for a monetary prize. This dependent measure is a simplified version of the reward matrices used by Tajfel and colleagues (1971). Participants were able to choose any number of tickets between 0 and 10, but told that the " participant reviewer" would receive the same number of ticket entries in the raffle as them. If participants chose to not receive the maximum number of raffle tickets in order for the other participant to also not receive tickets, it was considered a measure of hostility towards the interpersonal other. Finally, participants rated their enjoyment and perceived importance of both the experiment and the experimenter in order to assess displaced hostility. Upon debriefing,

participants were made aware of all deception against them and the random assignment involved in the study.

2.4 PILOT STUDY

To ensure the feasibility of the intrinsic and extrinsic motive manipulation, 254 participants were recruited for a pilot study. Participants first completed the SOV ranking scale, and then were randomly assigned to either the intrinsic or extrinsic motive essay prompt. After completing the essay, participants completed the IMI. The reliability of the IMI measure was high ($\alpha = .97$). An independent samples t-test was conducted to ensure that participants in the intrinsic motive prime would score higher on the IMI than participants in the extrinsic motive prime. The results of the t-test indicated that the essay manipulation was successful ($t(252) = 14.24, p < .001$). Specifically, the mean of the IMI for the intrinsic motive group was 5.64 ($sd = 1.11$), and the mean for the extrinsic motive group was 3.27 ($sd = 1.51$). Therefore, the same manipulation was utilized in the present study.

Chapter 3: Results

As previously described, there were four dependent variables measured in this study: self-reported emotional valence and arousal, experiment/experimenter ratings, the number of raffle tickets chosen, and choosing whether to write a response to the participant reviewer. The correlation matrix between these variables can be found in Table 5. None of the correlations between the dependent variables exceeded $r = .40$. Thus, all analyses were conducted independently. The independent variables included in the presented analyses are: motive condition, feedback condition, trait hostility, trait indifference, and interaction terms between conditions and trait levels. The intrinsic motivation condition was coded as 1, whereas the extrinsic motivation condition was coded as -1. The positive feedback condition was coded as 1, and the negative feedback condition was coded as -1. Further, exploratory analyses including a common factor of the Dark Triad as a possible proxy variable for trait indifference were conducted.

Table 5. Correlations between Dependent Variables in Study 2.

	1.	2.	3.	4.	5.	6.
1. Choose to Respond	-					
2. Raffle Ticket Allocation	.06	-				
3. Emotional Valence	.16**	.20***	-			
4. Emotional Arousal	.12	-.01	-.13*	-		
5. Experiment Perception	.18**	.04	.26***	.15*	-	
6. Experimenter Perception	.01	.06	.07	-.03	.36***	-

*$p < .05$ ** $p < .01$ *** $p < .001$

An independent samples t-test was also conducted in this study to ensure that the motive condition manipulation worked similarly as in the pilot test. The results from the pilot test were replicated such that those participants writing about their most important goals scored significantly higher on the IMI ($m = 5.94$; $sd = .83$) than those writing about their least important goals ($m = 3.42$; $sd = 1.32$): $t(313) = 20.26$, $p < .001$.

3.1 SELF-REPORTED EMOTIONAL VALENCE AND AROUSAL

Consistent with previous research using the SAM, the valence and arousal variables were analyzed independently (see Bradley & Lang, 1994). An investigation of the plots of the standardized residuals for both variables indicated that neither significantly deviated from the assumptions of normality. Thus, stepwise ordinary least squares regressions were conducted to investigate the predictive effects of both conditions, dispositional traits, and the interactions between these variables. In the first step of both analyses, the variables entered into the regression were motive condition, feedback condition, and the interaction between conditions. In the second stage, trait hostility, trait indifference, and all two way interactions between conditions and traits were included, and in the third step, three way interactions were included.

Table 6. Stepwise Multiple Linear Regression Predicting Valence Levels of Positive Affect.

Predictor Variable	Regression 1		Regression 2		Regression 3	
	β	*95% CI*	β	*95% CI*	β	*95% CI*
Motive	.04	(-.11, .29)	.04	(-.12, .28)	.04	(-.12, .27)
Feedback	**.54*****	**(.95, 1.35)**	**.55*****	**(.96, 1.35)**	**.54*****	**(.95, 1.34)**
Motive*Feedback	**.10***	**(.01, .41)**	**.11***	**(.04, .44)**	**.11***	**(.04, .43)**
Honesty/Humility			.08	(-.06, .65)	.08	(-.08, .63)
Agreeableness			-.01	(-.35, .31)	-.01	(-.35, .31)
HH*Feedback			-.04	(-.29, .14)	-.04	(-.29, .14)
Agree*Feedback			.07	(-.07, .36)	.08	(-.06, .37)

	Regression 1		Regression 2		Regression 3	
	β	*95% CI*	β	*95% CI*	β	*95% CI*
HH*Essay			-.01	(-.24, .18)	-.01	(-.24, .19)
Agree*Essay			-.07	(-.36, .06)	-.07	(-.36, .07)
HH*Feedback*Motive					.07	(-.06, .37)
Agree*Feedback*Motive					.03	(-.15, .28)
R^2	.306		.328		.335	
R^2 change	.306***		.022†		.008	

†$p < .1$; *$p < .05$; **$p < .01$; ***$p < .001$

Table 6 shows the results of the stepwise multiple linear regression for the valence variable, and Table 7 shows the results for the arousal variable. Note that approximately 70 participants refused to answer the arousal variable, decreasing the level of power for this particular analysis. For emotional valence, the feedback condition was significant, such that individuals who received positive feedback reported higher levels of positive affect. Further, the interaction between motive and feedback was significant. Figure 5 plots the interaction. Specifically, although those receiving positive feedback generally reported higher levels of emotional valence, this effect was more pronounced when it was regarding an essay about an intrinsic motive (*p* for simple slope = .038). Reactions to negative feedback did not significantly differ across motive conditions. For the level of arousal, the only significant effect was for motive condition, such that participants in the intrinsic condition reported higher levels of arousal. Further, there was a marginally significant effect for Honesty/Humility, such participants higher in H/H reported slightly lower levels of arousal.

Table 7. Stepwise Multiple Linear Regression Predicting Arousal Levels of Affect.

	Regression 1		Regression 2		Regression 3	
Predictor Variable	β	*95% CI*	β	*95% CI*	β	*95% CI*
Motive	**.19****	**(.14, .71)**	**.19****	**(.16, .73)**	**.19****	**(.16, .73)**
Feedback	.09	(-.08, .49)	.09	(-.08, .49)	.09	(-.08, .49)

Motive*Feedback	.09	(-.09, .48)	.08	(-.10, .48)	.08	(-.10, .48)
Honesty/Humility			**-.12†**	**(-.94, .04)**	**-.13†**	**(-.98, .01)**
Agreeableness			-.02	(-.54, .43)	-.00	(-.51, .48)
HH*Feedback			-.00	(-.30, .29)	-.00	(-.30, .30)
Agree*Feedback			.07	(-.15, .48)	.09	(-.12, .51)
HH*Essay			-.06	(-.44, .16)	-.07	(-.45, .15)
Agree*Essay			.09	(-.10, .53)	.10	(-.09, .55)
HH*Feedback*Motive					.01	(-.28, .32)
Agree*Feedback*Motive					.07	(-.17, .47)
R^2	.059		.076		.081	
R^2 change	.059**		.018		.005	

$†p < .1; * p < .05; ** p < .01; *** p < .001$

The analyses above were conducted using the binary condition of motive manipulation. However, as part of the manipulation check, participants also completed the continuous measure of the Intrinsic Motivation Inventory. Because some participants may have varied on their IMI scores within the condition, I also conducted an exploratory regression analysis using IMI score as a continuous predictor, replacing the binary between-subjects condition of motive manipulation. In this regression, I only included the IMI score, feedback condition, and the interaction between these two variables, as the analysis was unplanned.

For emotional valence, results were very similar to the analysis using motive manipulation. IMI was not a significant predictor of emotional valence ($\beta = .05$, $p = .327$), but feedback was, such that positive feedback elicited higher levels of positive affect ($\beta = .54$, $p < .001$). Further, the interaction between IMI and feedback condition was significant ($\beta = .14$, $p = .004$). This interaction can also be found in Figure 5. Note that both simple slopes are significant (Negative Feedback: $p = .032$; Positive Feedback: $p = .005$). Thus, when individuals with high IMI scores received positive feedback, they reported higher levels of emotional valence. In

contrast, when individuals with high IMI scores received negative feedback, they reported
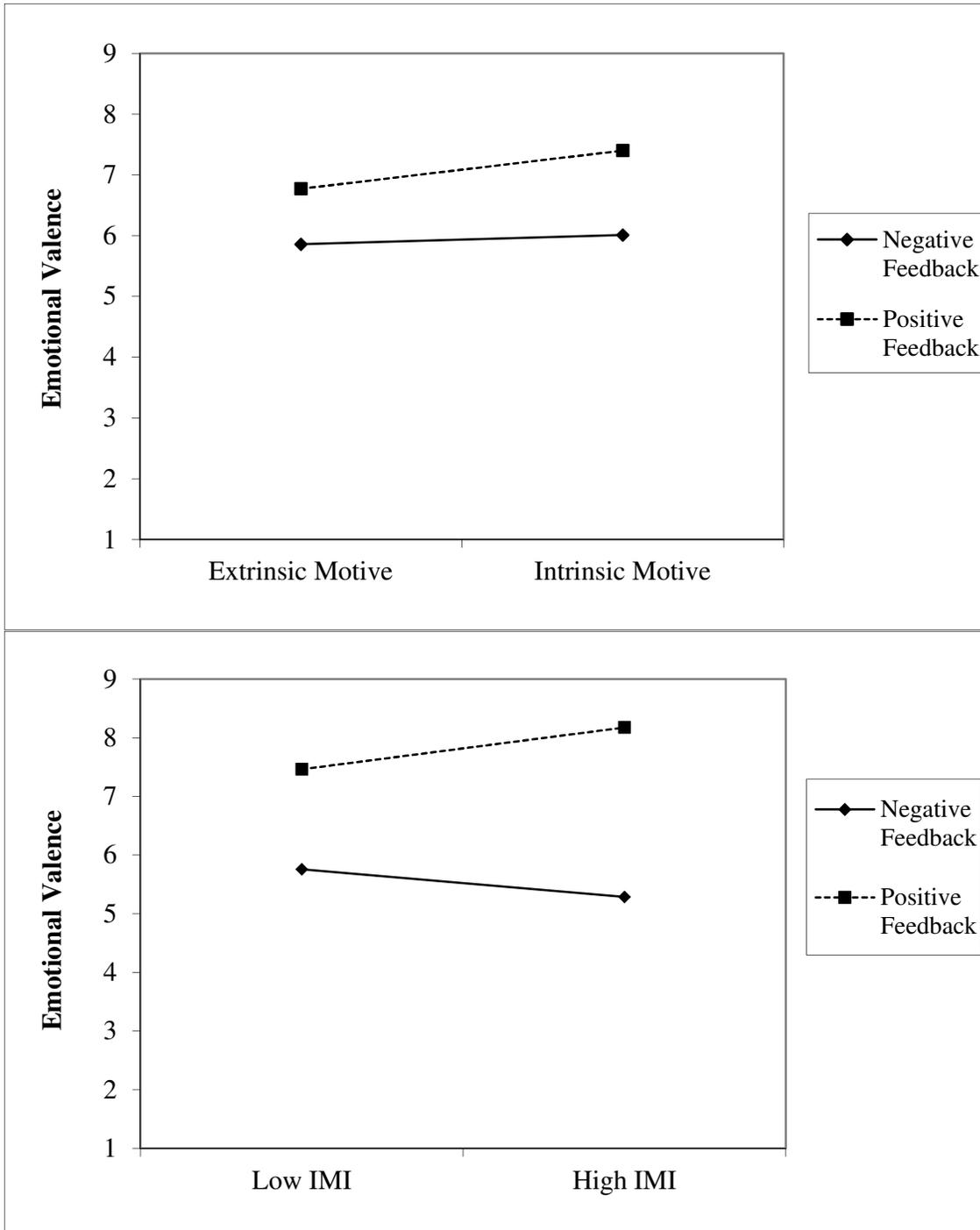
lower levels of emotional valence.

Figure 5: Plots of the Interaction between Motive and Feedback Conditions and IMI and Feedback Conditions predicting Emotional Valence.

For emotional arousal, the results were consistent with the analysis found in Table 7, but with stronger magnitudes of effect. IMI was a significant positive predictor of emotional arousal, such that participants reporting higher levels of IMI indicated higher levels of arousal ($\beta = .26$, $p < .001$). Further, feedback did not predict levels of arousal ($\beta = .08$, $p = .174$). However, the interaction between these two variables was marginally significant ($\beta = .12$, $p = .054$). Specifically, this interaction indicated that those with higher scores on the IMI measure reported more emotional arousal when receiving positive feedback. There was no difference for negative feedback.

3.2 DISPLACED HOSTILITY

The second dependent variable assessed was a measure of displaced hostility through a final rating of perceptions of the experiment and experimenter. As the correlation between experiment and experimenter ratings was only moderate (see Table 5), these composite variables were analyzed independently. Further, for both variables, only a total of 10 distinct values were reported (ranging from 2.0 to 5.0). Due to these descriptive restrictions, the dependent variables for displaced hostility were considered ordinal data, and analyses were conducted using an ordinal logistic regression model. The same stepwise approach was utilized as for the self-reported affect.

Table 8. Stepwise Ordinal Logistic Regression Predicting Positive Experiment Ratings.

Predictor Variable	Regression 1		Regression 2		Regression 3	
	B (SE)	*95% CI*	B (SE)	*95% CI*	B (SE)	*95% CI*
Motive	-.20(.20)	(-.59, .20)	-.22(.20)	(-.62, .17)	-.23(.20)	(-.63, .16)
Feedback	**-.76***(.20)**	**(-1.16, -.36)**	**-.75***(.20)**	**(-1.15, -.35)**	**-.75***(.21)**	**(-1.15, -.34)**

Motive*Feedback	**.17†(.10)**	**(-.02, .37)**	.16(.10)	(-.04, .36)	.16(.10)	(-.04, .36)
Honesty/Humility			.08(.18)	(-.27, .43)	.11(.18)	(-.24, .46)
Agreeableness			**.35*(.17)**	**(.02, .68)**	**.32†(.17)**	**(-.01, .66)**
HH*Feedback			.04(.11)	(-.17, .26)	.05(.11)	(-.17, .26)
Agree*Feedback			-.08(.11)	(-.29, .13)	-.10(.11)	(-.31, .11)
HH*Essay			.06(.11)	(-.16, .27)	.08(.11)	(-.14, .29)
Agree*Essay			.06(.11)	(-.15, .27)	.05(.11)	(-.16, .27)
HH*Feedback*Motive					-.07(.11)	(-.28, .14)
Agree*Feedback* Motive					**-.22*(.11)**	**(-.43, -.00)**
$\chi^2(df)$	21.10(4)		25.36(9)		31.46(11)	
χ^2 change (df)	21.10(4)***		4.26(5)		6.10(2)*	

†$p < .1$; * $p < .05$; ** $p < .01$; *** $p < .001$

None of the entered independent variables were significant predictors of research assistant ratings. Further, none of the three models assessed in stepwise fashion approached significance: $\chi^2(4)=.89$; $\chi^2(9)=4.69$; $\chi^2(11)=4.90$, p's > .85. However, significant results did emerge when investigating ratings of the experiment (see Table 8). Specifically, receiving negative feedback increased the likelihood of lower ratings of the experiment. Further, individuals higher in agreeableness gave more positive ratings of the experiment. There was also a significant three way interaction between agreeableness, motive, and feedback. A plot of this interaction can be found in Figure 6. Individuals low in agreeableness, when given positive feedback, rated the experiment more poorly when in the extrinsic motive condition as opposed to the intrinsic motive condition.
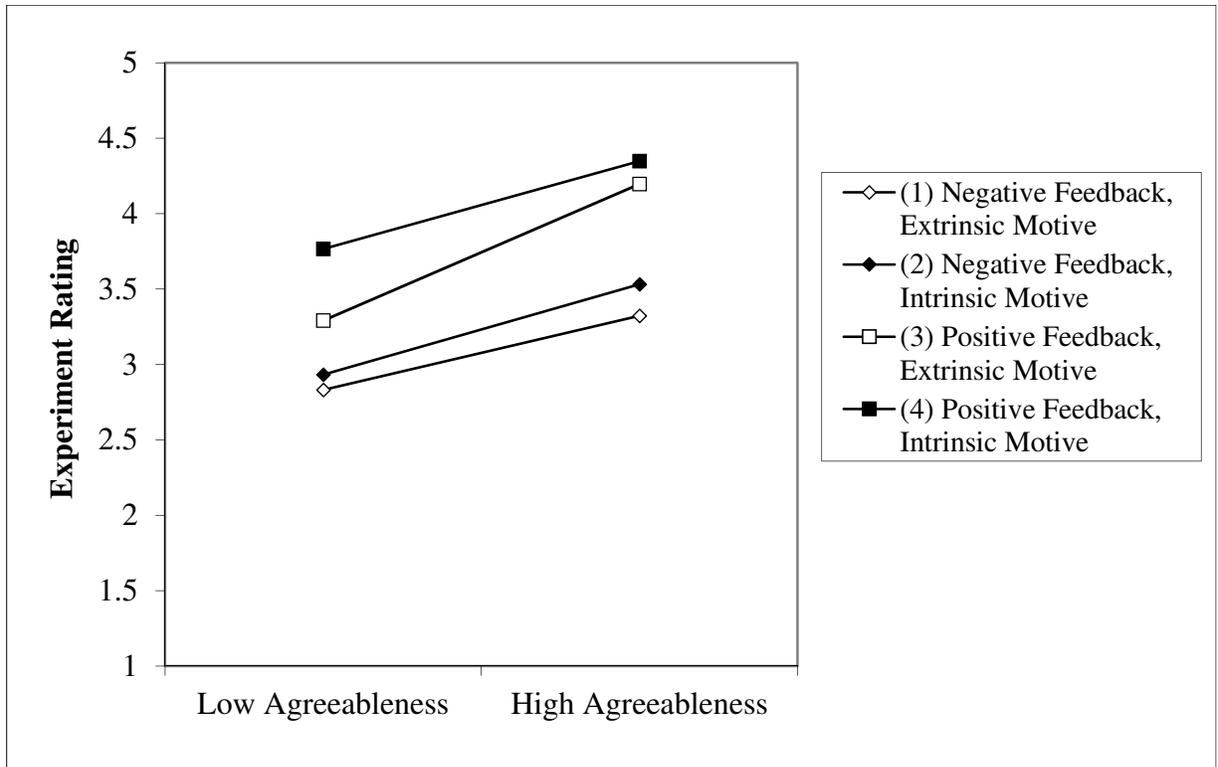
Figure 6: Plot of the Three-Way Interaction between Motive, Feedback, and Agreeableness predicting Experiment Rating.

As with the self-reported variables, this analysis was also replicated using the IMI instead of the manipulation condition, including only the IMI, feedback condition, and interaction. I only examined the experiment ratings for this analysis, as ratings of the RA had little variability. Results indicated that all three effects were significant. People with higher IMI ratings rated the experiment more positively ($B = .15$; *95% Wald CI:* (.03, .27), $p = .011$), and people in the negative feedback condition rated the experiment more negatively ($B = -.76$; *95% Wald CI:* (-1.16, -.36), $p < .001$). Further, the interaction between these two variables was also significant ($B = .22$; *95% Wald CI:* (.03, .42), $p = .023$), such that individuals in the positive feedback condition rated the experiment much more positively as their IMI scores increased.

3.3 RAFFLE TICKET ALLOCATION

As previously mentioned, participants were told that they could enter themselves in a raffle for a $100 Amazon Gift Card. They could enter themselves with anywhere between 0 and 10 tickets, but under the condition that their participant reviewer receive the same number of raffle ticket entries. On average, participants chose to receive 7.41 tickets ($sd = 3.34$) and 55% of the participants chose to award themselves the full number of tickets. Due to the count nature of this dependent variable and overabundance of 10s, data was reverse coded and analyzed using a zero inflated Poisson regression. Therefore, a code of 0 indicated that an individual maximized the amount of tickets available, and a code of 10 indicates that an individual chose to sacrifice all 10 tickets available. Zero-inflated Poisson regressions are recommended for dependent variables in which a count of 0 is abundantly common (Lambert, 1992). When estimating a zero-inflated Poisson regression, two analyses are conducted: a general linear regression model with over-abundant zeros excluded from the model, and a binary logistic regression predicting the likelihood of choosing all 10 tickets compared to sacrificing at least one ticket. Therefore, a positive beta value for the logistic regression indicates a greater likelihood to maximize ticket entries. The same stepwise progression of analyses were conducted to investigate the relationship between raffle ticket sacrifice and the aforementioned independent variables. Table 9 provides a summary of these results. Regarding the linear regressions that controlled for the overabundance of zero's, very little was significant or consistent. Motive type was a marginal predictor of raffle ticket sacrifice such that individuals in the intrinsic motive condition tended to sacrifice slightly more tickets. Further, a significant three way association between Honesty/Humility, feedback condition, and motive condition was observed. This three way association indicated that, among individuals who received positive feedback for an extrinsic motive, those higher in HH tended to sacrifice fewer tickets.

Table 9. Stepwise Zero Inflated Poisson Regression Predicting the Sacrifice of Raffle Tickets.

Predictor Variable	Regression 1 - B(SE)		Regression 2 - B(SE)		Regression 3 - B(SE)	
	Logistic	Linear	Logistic	Linear	Logistic	Linear
Motive	-.02(.12)	**.07*(.03)**	-.02(.12)	**.07†(.03)**	-.02(.13)	.05(.03)
Feedback	.06(.12)	-.02(.03)	-.05(.12)	-.02(.03)	.05(.13)	-.02(.03)
Motive*Feedback	.12(.12)	-.01(.03)	.14(.12)	-.02(.04)	.15(.14)	-.02(.03)
Honesty/Humility			**-.47†(.24)**	-.03(.07)	**-.49*(.25)**	-.06(.07)
Agreeableness			.34(.22)	.05(.07)	.36(.23)	.07(.07)
HH*Feedback			**-.43**(.15)**	-.05(.04)	**-.44** (.15)**	-.07(.05)
Agree*Feedback			**.27†(.14)**	.01(.05)	**.28†(.15)**	.02(.04)
HH*Essay			.12(.14)	.05(.04)	.13(.15)	.06(.05)
Agree*Essay			.07(.14)	-.04(.04)	.06(.15)	-.05(.04)
HH*Feedback*Motive					-.00(.15)	**.09*(.05)**
Agree*Feedback*Motive					.02(.15)	-.02(.04)

†$p < .1$; * $p < .05$; ** $p < .01$; *** $p < .001$

There were more consistent primary and interaction effects for the logistic regression conducted as part of the zero-inflated Poisson regression. Honesty/Humility always negatively predicted ticket allocation, indicating that individuals higher in HH had a significantly higher likelihood of sacrificing at least one raffle ticket. Further, HH significantly interacted with feedback condition, such that when given positive feedback, there was a lower probability of maximizing raffle tickets as HH scores increased. Figure 7 shows plots of both this interaction and the marginally significant interaction between Agreeableness and Feedback condition. This interaction indicated a trend where, in the positive feedback condition, as agreeableness increased, so too did the likelihood of maximizing raffle ticket entries. When using the IMI instead of the motive manipulation variable, no differences were observed.
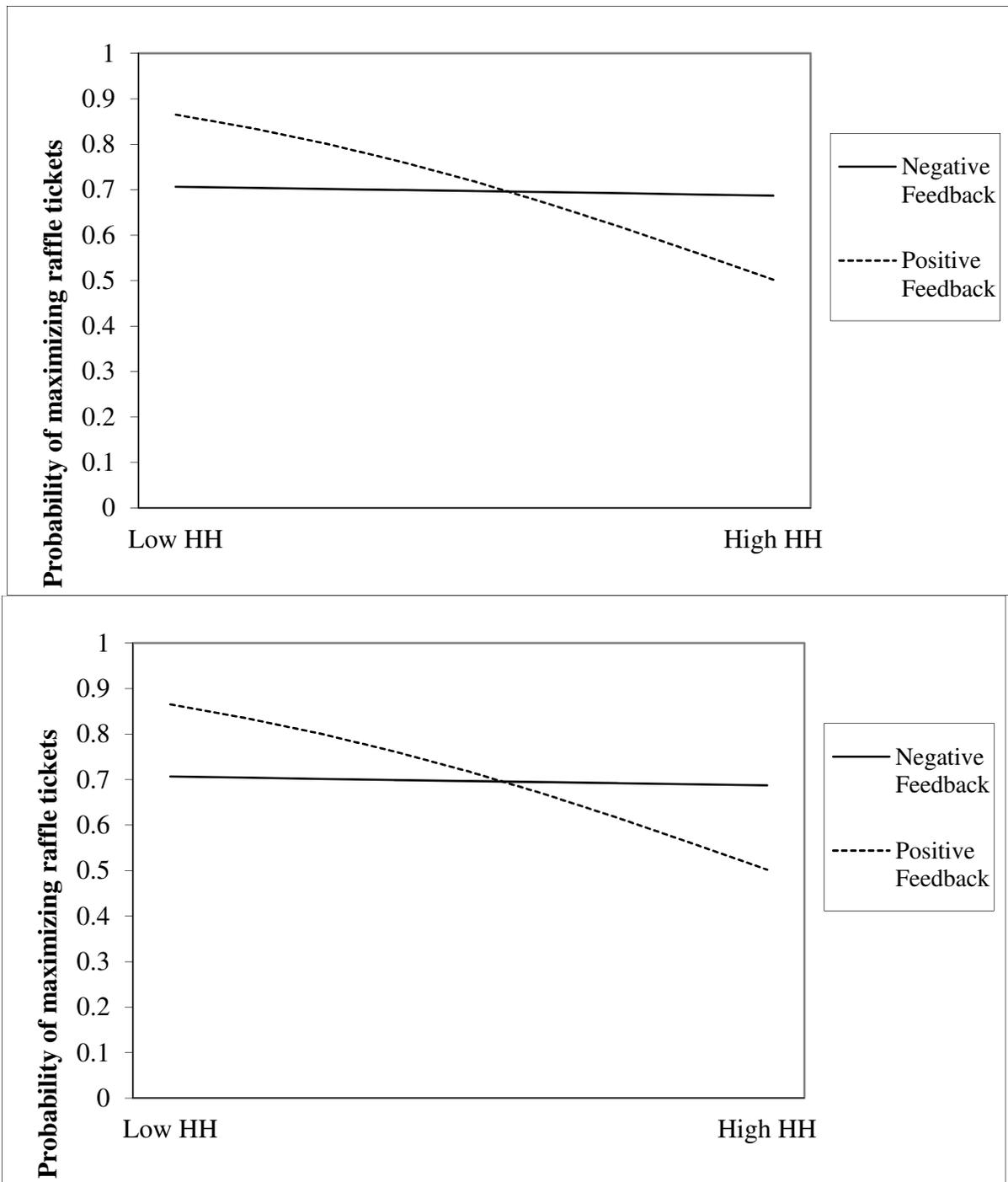
Figure 7: Plots of the two way interactions between HH*Feedback Condition and Agreeableness*Feedback Condition predicting the likelihood of maximizing raffle ticket entries.

3.4 RESPONSES TO THE PARTICIPANT REVIEWER

Immediately after receiving feedback, participants were asked if they would like to respond to their reviewer. 108 participants chose to do so. Of these 108, 19 were in the extrinsic/negative feedback conditions, 27 were in the extrinsic/positive feedback conditions, 29 were in the intrinsic/negative feedback conditions, and 33 were in the intrinsic/positive feedback conditions. A series of stepwise logistic regressions were conducted to determine the predictive variables contributing to the likelihood that a participant would respond. The only two effects were for each condition. Individuals in the intrinsic condition were marginally more likely to write a response ($B = .49$, $SE = .25$, *95% Wald CI*: (-.00; .99), $p = .051$), and individuals given positive feedback had a higher probability to respond to their reviewer ($B = .74$, $SE = .25$, *95% Wald CI*: (.25; 1.24), $p = .003$). Similar effects were found when using IMI instead of motive condition ($B = .19$, $SE = .08$, *95% Wald CI*: (.04; .33), $p = .014$).

Responses written by the participants ranged from one word to 144 words. Because word count was generally below 50 words, text analysis software was not used to identify negative affect. Instead, two trained research assistants read all responses and coded them, using a 1-7 Likert-type scale, on the presence of the following aspects: hostility, sarcasm, indifference, upsetness, and pleasure. For each variable, the intraclass correlations of responses between research assistants were moderate to very high (r's = .44 to .75), so these codes were averaged across reviewers. Further, the intercorrelations between these coded variables were all moderate to high, and a reliability analysis indicated a Cronbach's α=.85 for the five aspects. Thus, a single composite variable was computed from the average of all five scores, where a higher score indicated a higher level of hostility perceived in the written response. The mean of this variable was 3.03 ($sd = 1.18$), with slight positive skew (1.30) and kurtosis (1.05). However, an

examination of a plot of the standardized residual did not indicate a significant deviation from normality.

Due to the reduction in sample size, and anticipated reduction in power, only the main variables of motive condition, feedback condition, and the interaction between the two was included in a multiple linear regression. The dispositional traits of HH and Agreeableness, and the associated interactions with condition, were not included in this analysis. The regression model resulted in an $R^2 = .46$, and the effects of both feedback condition, and the interaction between both conditions were both significant predictors (Feedback: $\beta = -.61$, $p < .001$; Interaction: $\beta = -.20$, $p = .009$). Further, the effect of the motive manipulation was marginally significant ($\beta = .13$, $p = .070$). In addition, the interaction of motive and feedback (see Figure 8) was significant such that participants who received negative feedback responded with much more hostility in the intrinsic condition compared to the extrinsic condition ($p = .004$). Overall, participants who received negative feedback responded with far more hostility than those who received positive feedback. When the same analysis was conducted using IMI instead of motive manipulation, this interaction disappeared ($\beta = -.15$, $p = .110$).
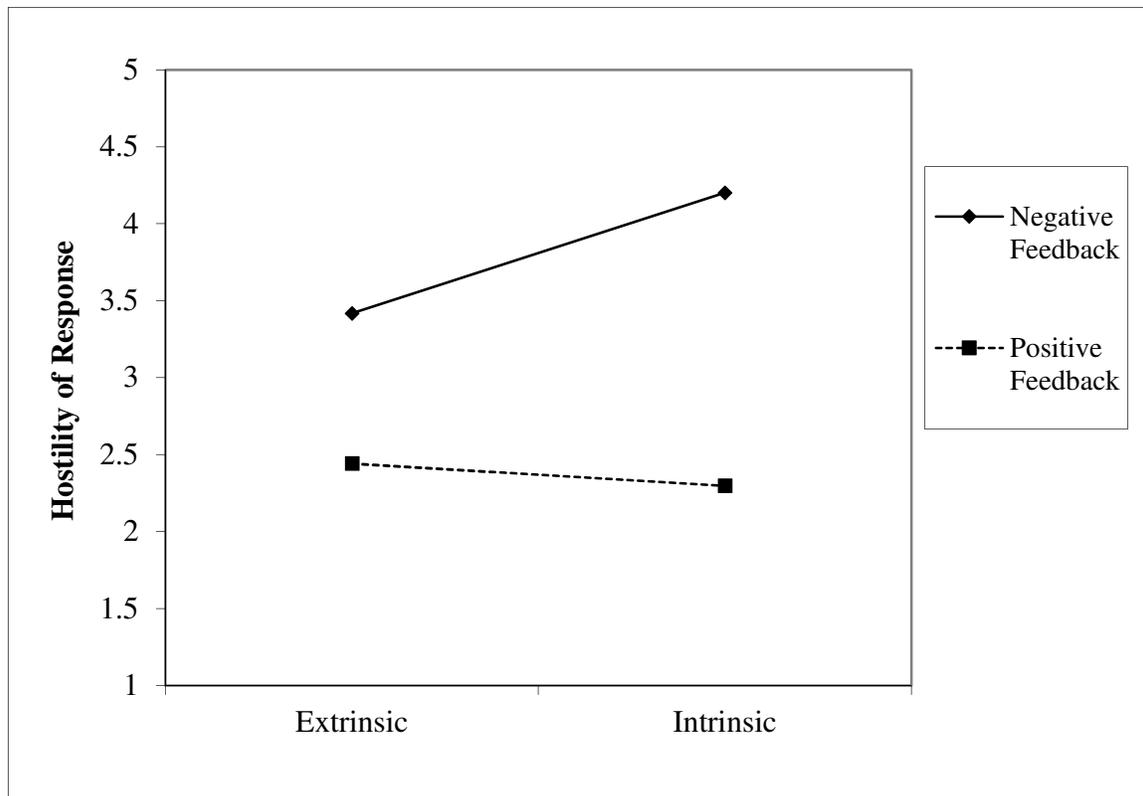
Figure 8: Plot of the two way interaction between motive condition and feedback condition predicting hostility in participant responses to reviewers.

3.5 THE DARK TRIAD AS A PROXY FOR TRAIT INDIFFERENCE

Finally, I conducted similar analyses as discussed above for each dependent variable using a common factor of the Dark Triad instead of HH scores. This set of analyses were exploratory and meant primarily to compare the trends and regression coefficients of these two constructs to further assess the viability of using the Dark Triad as a proxy measure of trait indifference. The correlations between HH and the individual Dark Triad traits were moderately large and nearly exactly the same across the three traits (r's all -.53, p's < .001). Further, when a common factor was extracted from the Dark Triad, this correlation became stronger in magnitude: $r = -.63$, $p < .001$. Table 10 contains a side by side comparison of the beta values and significance levels for HH (and its interactive terms) and the Dark Triad factor (and its

interaction terms). It should be noted that none of the other predictive results were significantly changed by the replacement of a Dark Triad factor for the HH variable and interactions. Thus, the full models are not reported here, just the comparisons of beta weights for the two current variables of interest.

Table 10. Comparisons of Beta weights and p-values for regressions using a Dark Triad factor instead of Honesty/Humility.

	Valence		Arousal		Experiment Rating		Raffle Tickets (Logistic)		Response choice	
	β	p	β	p	B	p	B	p	B	p
HH	.08	.13	**-.13**	**.06**	.11	.55	**-.49**	**.05**	-.19	.39
D3	.00	.96	.05	.44	-.04	.79	.25	.10	**.41**	**.01**
HH*Feedback	-.04	.47	-.00	.99	.05	.66	**-.44**	**.003**	.01	.96
D3*Feedback	-.02	.75	-.1	.15	-.03	.83	.14	.29	.03	.83
HH*Essay	-.01	.84	-.07	.31	.08	.49	.13	.40	.21	.11
D3*Essay	-.01	.84	.09	.19	**.20**	**.09**	-.14	.31	-.06	.68
HH*Feedback*Motive	.07	.16	.01	.89	-.07	.53	-.00	.99	-.14	.28
D3*Feedback*Motive	-.09	.11	-.07	.31	-.06	.62	-.19	.17	.07	.65

If a common factor of the Dark Triad was a suitable proxy of indifference, as measured through low Honesty/Humility, then comparisons across regression analyses should result in beta weights of equal magnitude, but opposing directions. As can be seen in Table 10, these comparisons were not consistently observed. Further, in cases in which a predictor or interaction was significant for one variable (such as HH predicting arousal), this same relationship was not observed for the complimentary analysis.

Chapter 4: Discussion

The present study tested the hypotheses that motive autonomy would interact with feedback condition to elicit more hostile or more indifferent reactions. Specifically, the following five hypotheses were tested across four dependent variables:

H1: A frustrated motive will elicit a hostile reaction when the motive is primed to be intrinsic.

H2: A frustrated motive will elicit an indifferent reaction when the motive is primed to be extrinsic.

H3: Dispositional indifference will interact with motive autonomy such that those individuals higher in dispositional indifference will not react with hostility across both extrinsic or intrinsic motive primes.

H4: When an intrinsic motive is satisfied, individuals will react with warmth and agreeableness towards an interpersonal other.

H5: When an extrinsic motive is satisfied, individuals will react with indifference towards an interpersonal other

Regarding H1, little systematic support was found. In many of the dependent variables, motive frustration did not interact with motive condition to elicit a more hostile response. However, this relationship was observed for the text responses that participants wrote to their reviewer. Specifically, individuals in the intrinsic condition responded with far more hostility when feedback was negative compared to those in the extrinsic condition or those individuals who received positive feedback.

Regarding H2, there was no support that the frustration of an extrinsic motive resulted in an indifferent reaction. Although the text response variable did elicit more hostile responses

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among intrinsic condition participants compared to extrinsic condition participants, a main effect of feedback still resulted. Participants in the extrinsic condition responded with more hostility when they received negative feedback compared to positive feedback. This main effect was observed for multiple dependent variables, including emotional valence, displaced hostility, choice of response, and levels of hostility within responses. Therefore, there is no evidence to support the hypothesis that negative feedback only elicits a hostile response for specific types of motives. However, there is evidence to suggest that participants primed with extrinsic motives are slightly less reactive overall: individuals in the extrinsic motive condition reported overall less emotional arousal, were less likely to choose to write a response, and wrote responses with fewer indications of hostility. This finding was not dependent on feedback condition.

There was no evidence to support H3: that dispositional indifference would interact with the conditions and mute reactions across both feedback conditions and motive prime. Only two findings regarding dispositional levels of hostility or indifference were significant. The first finding was in regards to trait hostility. Individuals low in agreeableness (high in trait hostility) rated the experiment more poorly in the positive feedback condition when the motive prime was extrinsic. It is possible that, in this condition, individuals low in agreeableness found the experiment less useful and important by receiving positive feedback about a goal they did not identify with intrinsically. The second significant finding regarding dispositional traits resulted from the dependent variable of raffle tickets. Dispositional levels of Honesty/Humility interacted with the positive feedback condition such that individuals low in H/H were more likely to maximize their raffle tickets when given positive feedback, and individuals high in H/H were more likely to sacrifice raffle tickets. This finding was unexpected, as positive feedback was

hypothesized to always result in a maximization of raffle tickets for both the individual and reviewer.

H4 was partially supported across the dependent variables. When rating the experiment, allocating raffle tickets, or writing text responses, there was no evidence that people in the intrinsic motive condition reacted with more interpersonal warmth in the positive feedback condition compared to those in the extrinsic motive condition. However, individuals in the intrinsic motivation condition were more likely take the effort to respond to the participant reviewer, and they reported more emotional arousal. Further, this hypothesis was supported when examining self-reported emotional valence: when given positive feedback, individuals in the intrinsic motive condition reported higher levels of emotional valence than individuals in the extrinsic motive condition.

Finally, findings for H5 largely corresponded to the findings for H2. Although there was no evidence that positive feedback for a extrinsic motive resulted in more indifference, there were main effects for the extrinsic motive condition such that individuals in these conditions reported less arousal, were less likely to choose to respond to the feedback, and wrote responses with fewer markers of hostility.

Overall, regardless of the dependent variable investigated, many of the hypothesized interactions between motive and feedback condition were not significant. However, these results often suggested a main effect for feedback condition. Across the variables of emotional valence, displaced hostility, choosing to respond, and levels of hostility in responses, participants who received negative feedback reacted with significantly more hostility than participants who received positive feedback. These findings provide further empirical support for the theory proposed by Horowitz et al. (2006): a frustrated motive elicits a hostile reaction. However, there

is still some evidence to suggest that the level of autonomy of a motive may differentially impact this reaction. For example, text responses from individuals in the negative feedback condition were significantly more hostile when the motive prime was intrinsic compared to extrinsic. Further, the exploratory analyses conducted using the IMI instead of binary motive condition suggest that there may be more nuances to how motive autonomy differentiates reactions to negative feedback. For example, although participants given negative feedback did not report more negative affect dependent on the motive prime they were assigned, individuals who reported higher levels of IMI for the motive prime reported significantly more negative affect in the negative feedback condition. This inconsistency requires further examination, such as through a moderated mediation model that investigates how variations of IMI scores within each motive condition may impact how negative and positive feedback affect hostile reactions.

The exploratory analyses using a common extracted core of the Dark Triad in place of H/H scores as a proxy for trait indifference did not yield consistent results. Effects for which H/H were significant throughout the study were not significant for the Dark Triad. Further, those higher in the Dark Triad core were more likely to choose to respond to the reviewer, whereas those higher in H/H were not less likely to do so. These inconsistencies suggest that, while H/H and a common factor of the Dark Triad are highly related ($r = .62$), they are not suitable replacements for each other when studying dispositional levels of indifference. Further, although an unintentional byproduct of this research study, these distinctions refute the arguments made by researchers who claim that the core of the Dark Triad is low H/H (see Book, Visser, & Volk, 2015; Lee & Ashton, 2014). The investigation of trait relations to dispositional motive autonomy is currently understudied, and this is one of the first attempts to untangle the relationship between indifference, hostility, and motive orientation.

Although the results found in the present study did not align directly with the hypotheses presented from a synthetization of the theories of the interpersonal circumplex, trait hostility, and motive autonomy, this study still makes several contributions to the scientific literature across these subfields. Further, it is impeded by several limitations that may have impacted the robustness and consistency of the presented results.

Hostile and indifferent behaviors have been rarely differentiated in past research. Four dependent variables were specifically chosen to investigate the feasibility of differentiating these two behavioral reactions. Therefore, some of these behavioral variables, such as the allocation of raffle tickets, may not have truly been measuring distinctions between hostile and indifferent reactions. However, self-report measures of affect as well as qualitative analysis of written responses do suggest that motive autonomy may impact how individuals react to motive frustration and motive satisfaction. In addition, it may be argued that the feedback manipulation utilized in the present study is not truly motive frustration. Although the negative feedback specifically stated that the reviewer *would* block a goal given the chance, the participants never interact interpersonally with another individual, and goals are not specifically blocked or assisted. A stronger, more direct manipulation of motive frustration may have elicited more consistent results across dependent variables. Therefore, it is encouraging, that even with the limitations presented by the feedback manipulation, to have consistent results suggesting an increase in hostility when presented with negative feedback that is partially moderated by motive autonomy.

Finally, the presentation of a choice to respond to the feedback could also be considered a limitation of the present study. Many participants chose not to write a response. This allowance of choice was initially theorized to distinguish an indifferent reaction from other reactions (such

as hostility or pleasure), but recent research suggests that interpersonal hate and hostility may also elicit avoidance responses in individuals (Merrick, 2017). Thus, participants who were hostile towards the feedback provider may have also chosen to not provide a response in order to avoid later potential confrontation. By forcing participants to write a response, a clearer differentiation between hostile and indifferent text responses at a higher level of power may have been identified.

In conclusion, the present study takes a novel approach at synthesizing literature across different subfields of personality and social psychology. Although trait hostility and indifference are empirically distinct according to basic factor models of personality, Interpersonal Circumplex research often collapses the two traits onto a single negative pole of communion. Building off of theories presented by Horowitz and colleagues (2006) arguing that hostility is a reaction to a frustrated motive, I used the lens of motive autonomy to investigate how individuals may react differentially to a frustrated motive depending on the level of autonomy of the frustrated motive. Although results were mixed overall, the present research provides support for Horowitz' and colleagues' (2006) claim that hostility is a natural reaction to a frustrated motive. Further, there is mixed evidence to support that motive autonomy may play a role in the degree to which an individual responds with hostility to a frustrated motive and warmth to a satisfied one. Future research should replicate these findings with more direct manipulations of motive frustration and both immediate nonverbal and verbal reactions.

References

Acheson, S. K. (2005). Review of the H*are Psychopathy Checklist-Revised* (2ⁿᵈ ed.). In R.A. Spies & B.S. Plake (Eds.), *The sixteenth mental measurements yearbook* (pp. 429-431). Lincoln, NE: Buros Institute of Mental Measurements.

Ashton, M. C., & Lee, K. (2009). The HEXACO–60: A short measure of the major dimensions of personality. *Journal of Personality Assessment, 91*(4), 340-345.

Ashton, M. C., Lee, K., de Vries, R. E., Hendrickse, J., & Born, M. P. (2012). The maladaptive personality traits of the personality inventory for DSM-5 (PID-5) in relation to the HEXACO personality factors and schizotypy/dissociation. *Journal of Personality Disorders, 26*(5), 641-659.

Ashton, M. C., & Lee, K. (2007). Empirical, theoretical, and practical advantages of the HEXACO model of personality structure. *Personality and Social Psychology, 11*(2), 150-166.

Bakan, D. (1966). *The duality of human existence*. Reading, PA: Addison-Wesley.

Baughman, H. M., Dearing, S., Giammarco, E., & Vernon, P. A. (2012). Relationships between bullying behaviours and the dark triad: A study with adults. *Personality and Individual Differences, 52*(5), 571-575.

Benjamin, L. S. (1974). Structural analysis of social behavior. *Psychological Review, 81*(5), 392-425.

Bereczkei, T. (2015). The manipulative skill: Cognitive devices and their neural correlates underlying Machiavellian's decision making. *Brain and Cognition, 99*, 24-31.

Berkowitz, L. (1989). Frustration-aggression hypothesis: Examination and reformulation. *Psychological bulletin*, *106*(1), 59-73.

Besser, A., & Priel, B. (2010). Grandiose narcissism versus vulnerable narcissism in threatening situations: Emotional reactions to achievement failure and interpersonal rejection. *Journal of Social and Clinical Psychology, 29*(8), 874-902.

Blackburn, R., & Lee-Evans, J. M. (1985). Reactions of primary and secondary psychopaths to anger-evoking situations. *British Journal of Clinical Psychology, 24*(2), 93-100.

Bogler, R., & Somech, A. (2002). Motives to study and socialization tactics among university students. *The Journal of Social Psychology, 142*(2), 233-248.

Book, A., Visser, B. A., & Volk, A. A. (2015). Unpacking "evil": Claiming the core of the dark triad. *Personality and Individual Differences, 73*, 29-38.

Bradley, M. M., & Lang, P. J. (1994). Measuring emotion: The self-assessment manikin and the semantic differential. *Journal of Behavior Therapy and Experimental Psychiatry, 25*(1), 49-59.

Buhrmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon's mechanical turk: A new source of inexpensive, yet high-quality, data? *Perspectives on Psychological Science : A Journal of the Association for Psychological Science, 6*(1), 3-5.

Bushman, B. J., & Baumeister, R. F. (1998). Threatened egotism, narcissism, self-esteem, and direct and displaced aggression: Does self-love or self-hate lead to violence? *Journal of Personality and Social Psychology, 75*(1), 219-229.

Carson, R. C. (1969). *Interaction concepts of personality*. Chicago: Aldine.

Cattell, R. B. (1973). *Personality and mood by questionnaire* Jossey-Bass.

Cleckley, H. M. (2016). *The mask of sanity: An attempt to clarify some issues about the so-called psychopathic personality 3rd edition* Pickle Partners Publishing.

Critchfield, K. L., Levy, K. N., Clarkin, J. F., & Kernberg, O. F. (2008). The relational context of aggression in borderline personality disorder: Using adult attachment style to predict forms of hostility. *Journal of Clinical Psychology, 64*(1), 67-82.

Deci, E. L., Eghrari, H., Patrick, B. C., & Leone, D. R. (1994). Facilitating internalization: The self-determination theory perspective. *Journal of Personality, 62*(1), 119-142.

Deci, E. L., & Ryan, R. M. (1985). The general causality orientations scale: Self-determination in personality. *Journal of Research in Personality, 19*(2), 109-134.

DeYoung, C. G., Quilty, L. C., & Peterson, J. B. (2007). Between facets and domains: 10 aspects of the big five. *Journal of Personality and Social Psychology, 93*(5), 880-896.

Dickinson, K. A., & Pincus, A. L. (2003). Interpersonal analysis of grandiose and vulnerable narcissism. *Journal of Personality Disorders, 17*(3), 188-207.

Dollard, J., Miller, N. E., Doob, L. W., Mowrer, O. H., & Sears, R. R. (1939). Frustration and aggression.

Dowgwillo, E. A., & Pincus, A. L. (2016). Differentiating dark triad traits within and across interpersonal circumplex surfaces. *Assessment, *, 1-21.

Dryer, D. C. (1993). *Interpersonal goals and satisfaction with interactions.* (Unpublished PhD). Stanford University.

Faul, F., Erdfelder, E., Buchner, A., & Lang, A. (2009). Statistical power analyses using G* power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods, 41*(4), 1149-1160.

Fritz, M. S., & Mackinnon, D. P. (2007). Required sample size to detect the mediated effect. *Psychological Science, 18*(3), 233-239.

Frodi, A., Dernevik, M., Sepa, A., Philipson, J., & Bragesjö, M. (2001). Current attachment representations of incarcerated offenders varying in degree of psychopathy. *Attachment & Human Development, 3*(3), 269-283.

Gabbard, G. O. (1989). Two subtypes of narcissistic personality disorder. *Bulletin of the Menninger Clinic, 53*(6), 527-532.

Gardner, D. L., Leibenluft, E., O'LEARY, K. M., & Cowdry, R. W. (1991). Self-ratings of anger and hostility in borderline personality disorder. *The Journal of Nervous and Mental Disease, 179*(3), 157-161.

Gebauer, J. E., Sedikides, C., Verplanken, B., & Maio, G. R. (2012). Communal narcissism. *Journal of Personality and Social Psychology, 103*(5), 854-878.

Geis, F. L. (1978). Machiavellianism. *Dimensions of Personality, ,* 305-363.

Gladden, P. R., Figueredo, A. J., & Jacobs, W. J. (2009). Life history strategy, psychopathic attitudes, personality, and general intelligence. *Personality and Individual Differences, 46*(3), 270-275.

Gunderson, J. G., & Phillips, K. A. (1991). A current view of the interface between borderline personality disorder and depression. *American Journal of Psychiatry, 148*(8), 967-975.

Hare, R. D. (2003). Manual for the hare psychopathy checklist. *Revised 2nd Ed.Toronto, ON: Multi-Health Systems,*

Hare, R. D. (1991). *The hare psychopathy checklist-revised: Manual* Multi-Health Systems, Incorporated.

Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* Guilford Press.

Hendin, H. M., & Cheek, J. M. (1997). Assessing hypersensitive narcissism: A reexamination of murray's narcissism scale. *Journal of Research in Personality, 31*(4), 588-599.

Hmel, B. A., & Pincus, A. L. (2002). The meaning of autonomy: On and beyond the interpersonal circumplex. *Journal of Personality, 70*(3), 277-310.

Horowitz, L. M., Wilson, K. R., Turan, B., Zolotsev, P., Constantino, M. J., & Henderson, L. (2006). How interpersonal motives clarify the meaning of interpersonal behavior: A revised circumplex model. *Personality and Social Psychology Review, 10*(1), 67-86.

Ináncsi, T., Láng, A., & Bereczkei, T. (2015). Machiavellianism and adult attachment in general interpersonal relationships and close relationships. *Europe's Journal of Psychology, 11*(1), 139-154.

Jonason, P. K., Li, N. P., & Teicher, E. A. (2010). Who is james bond? the dark triad as an agentic social style. *Individual Differences Research, 8*(2), 111-120.

Jones, D. N., & Neria, A. L. (2015). The dark triad and dispositional aggression. *Personality and Individual Differences, 86*, 360-364.

Jones, D. N., & Paulhus, D. L. (2010). Different provocations trigger aggression in narcissists and psychopaths. *Social Psychological and Personality Science, 1*(1), 12-18.

Jones, D. N., & Paulhus, D. L. (2011). Differentiating the dark triad within the interpersonal circumplex. *Handbook of Interpersonal Psychology: Theory, Research, Assessment, and Therapeutic Interventions,* 249-269.

Jones, D. N., & Figueredo, A. J. (2013). The core of darkness: Uncovering the heart of the dark triad. *European Journal of Personality, 27*(6), 521-531.

Jones, D. N., & Paulhus, D. L. (2014). Introducing the short dark triad (SD3): A brief measure of dark personality traits. *Assessment, 21*(1), 28-41.

Karpman, B. (1948). Conscience in the psychopath: Another version. *American Journal of Orthopsychiatry, 18*(3), 455-491.

Kern, M. L., Duckworth, A. L., Urzua, S. S., Loeber, R., Stouthamer-Loeber, M., & Lynam, D. R. (2013). Do as you're told! facets of agreeableness and early adult outcomes for inner-city boys. *Journal of Research in Personality, 47*(6), 795-799.

Kiesler, D. J. (1983). The 1982 interpersonal circle: A taxonomy for complementarity in human transactions. *Psychological Review, 90*(3), 185-214.

Krueger, R. F., Derringer, J., Markon, K. E., Watson, D., & Skodol, A. E. (2012). Initial construction of a maladaptive personality trait model and inventory for DSM-5. *Psychological Medicine, 42*(09), 1879-1890.

Lambert, D. (1992). Zero-inflated Poisson regression, with an application to defects in manufacturing. *Technometrics*, *34*(1), 1-14.

Leary, T. (1957). *Interpersonal diagnosis of personality*. New York: Ronald.

Lee, K., & Ashton, M. C. (2004). Psychometric properties of the HEXACO personality inventory. *Multivariate Behavioral Research, 39*(2), 329-358.

Lee, K., & Ashton, M. C. (2014). The dark triad, the big five, and the HEXACO model. *Personality and Individual Differences*, *67*, 2-5.

Levenson, M. R., Kiehl, K. A., & Fitzpatrick, C. M. (1995). Assessing psychopathic attributes in a noninstitutionalized population. *Journal of Personality and Social Psychology, 68*(1), 151-158.

Locke, K. D. (2000). Circumplex scales of interpersonal values: Reliability, validity, and applicability to interpersonal problems and personality disorders. *Journal of Personality Assessment, 75*(2), 249-267.

Locke, K. D., & Sadler, P. (2007). Self-efficacy, values, and complementarity in dyadic interactions: Integrating interpersonal and social-cognitive theory. *Personality & Social Psychology Bulletin, 33*(1), 94-109.

Lykken, D. T. (1995). *The antisocial personalities* Psychology Press.

Lynam, D. R., & Derefinko, K. J. (2006). Psychopathy and personality. *Handbook of Psychopathy,* , 133-155.

Malamuth, N. M. (2003). Criminal and noncriminal sexual aggressors. *Annals of the New York Academy of Sciences, 989*(1), 33-58.

Maples, J. L., Guan, L., Carter, N. T., & Miller, J. D. (2014). A test of the international personality item pool representation of the revised NEO personality inventory and development of a 120-item IPIP-based measure of the five-factor model. *Psychological Assessment, 26*(4), 1070-1084.

Maples, J. L., Lamkin, J., & Miller, J. D. (2014). A test of two brief measures of the dark triad: The dirty dozen and short dark triad. *Psychological Assessment, 26*(1), 326-331.

Markey, P. M., & Markey, C. N. (2009). A brief assessment of the interpersonal circumplex: The IPIP-IPC. *Assessment, 16*(4), 352-361.

McAuley, E., Duncan, T., & Tammen, V. V. (1989). Psychometric properties of the intrinsic motivation inventory in a competitive sport setting: A confirmatory factor analysis. *Research Quarterly for Exercise and Sport, 60*(1), 48-58.

McClelland, D. C., Koestner, R., & Weinberger, J. (1989). How do self-attributed and implicit motives differ? *Psychological Review, 96*(4), 690-702.

McCrae, R. R., & Costa, P. T. (1989). The structure of interpersonal traits: Wiggin's circumplex and the five-factor model. *Journal of Personality and Social Psychology, 56*(4), 586-595.

McCrae, R. R., Costa, J., Paul T, & Martin, T. A. (2005). The NEO–PI–3: A more readable revised NEO personality inventory. *Journal of Personality Assessment, 84*(3), 261-270.

McDonald, M. M., & Donnellan, M. B. (2012). Is ostracism a strong situation? the influence of personality in reactions to rejection. *Journal of Research in Personality, 46*(5), 614-618.

McHoskey, J. W. (1999). Machiavellianism, intrinsic versus extrinsic goals, and social interest: A self-determination theory analysis. *Motivation and Emotion, 23*(4), 267-283.

Merrick, C. (2017). *Give hate a chance: An exploration of the affective state of interpersonal hate* (Unpublished master's thesis). University of Arkansas, Fayetteville, USA.

Miller, J. D., Dir, A., Gentile, B., Wilson, L., Pryor, L. R., & Campbell, W. K. (2010). Searching for a vulnerable dark triad: Comparing factor 2 psychopathy, vulnerable narcissism, and borderline personality disorder. *Journal of Personality, 78*(5), 1529-1564.

Miller, J. D., Hoffman, B. J., Gaughan, E. T., Gentile, B., Maples, J., & Keith Campbell, W. (2011). Grandiose and vulnerable narcissism: A nomological network analysis. *Journal of Personality, 79*(5), 1013-1042.

Miller, J. D., & Lynam, D. (2001). Structural models of personality and their relation to antisocial behavior: A meta-analytic review. *Criminology, 39*(4), 765-798.

Morf, C. C., & Rhodewalt, F. (2001). Unraveling the paradoxes of narcissism: A dynamic self-regulatory processing model. *Psychological Inquiry, 12*(4), 177-196.

Morris, J. D., Woo, C., Geason, J. A., & Kim, J. (2002). The power of affect: Predicting intention. *Journal of Advertising Research, 42*(3), 7-17.

Morrison, D., & Gilbert, P. (2001). Social rank, shame and anger in primary and secondary psychopaths. *Journal of Forensic Psychiatry, 12*(2), 330-356.

Newman, J. P., MacCoon, D. G., Vaughn, L. J., & Sadeh, N. (2005). Validating a distinction between primary and secondary psychopathy with measures of gray's BIS and BAS constructs. *Journal of Abnormal Psychology, 114*(2), 319-323.

Orford, J. (1986). The rules of interpersonal complementarity: Does hostility beget hostility and dominance, submission? *Psychological Review, 93*(3), 365-377.

Orford, J. (1994). The interpersonal circumplex: A theory and method for applied psychology. *Human Relations, 47*(11), 1347-1375.

Patrick, C. J., Fowles, D. C., & Krueger, R. F. (2009). Triarchic conceptualization of psychopathy: Developmental origins of disinhibition, boldness, and meanness. *Development and Psychopathology, 21*(03), 913-938.

Patrick, C. J., & Zempolich, K. A. (1999). Emotion and aggression in the psychopathic personality. *Aggression and Violent Behavior, 3*(4), 303-338.

Paulhus, D. L., Neumann, C. S., & Hare, R. D. (2016). *Manual for the Hare Self-Report Psychopathy scale*. Toronto, Ontario, Canada: Multi-Health Systems.

Paulhus, D. L., & Williams, K. M. (2002). The dark triad of personality: Narcissism, machiavellianism, and psychopathy. *Journal of Research in Personality, 36*(6), 556-563.

Pincus, A. L., Ansell, E. B., Pimentel, C. A., Cain, N. M., Wright, A. G., & Levy, K. N. (2009). Initial construction and validation of the pathological narcissism inventory. *Psychological Assessment, 21*(3), 365-379.

Rauthmann, J. F. (2012). The dark triad and interpersonal perception: Similarities and differences in the social consequences of narcissism, machiavellianism, and psychopathy. *Social Psychological and Personality Science, 3*(4), 487-496.

Rauthmann, J. F., & Kolar, G. P. (2013). Positioning the dark triad in the interpersonal circumplex: The friendly-dominant narcissist, hostile-submissive machiavellian, and hostile-dominant psychopath? *Personality and Individual Differences, 54*(5), 622-627.

Rauthmann, J. F., & Will, T. (2011). Proposing a multidimensional machiavellianism conceptualization. *Social Behavior and Personality: An International Journal, 39*(3), 391-403.

Reidy, D. E., Zeichner, A., Miller, J. D., & Martinez, M. A. (2007). Psychopathy and aggression: Examining the role of psychopathy factors in predicting laboratory aggression under hostile and instrumental conditions. *Journal of Research in Personality, 41*(6), 1244-1251.

Ryan, R. M. (1982). Control and information in the intrapersonal sphere: An extension of cognitive evaluation theory. *Journal of Personality and Social Psychology, 43*(3), 450-461.

Ryan, R. M., & Connell, J. P. (1989). Perceived locus of causality and internalization: Examining reasons for acting in two domains. *Journal of Personality and Social Psychology, 57*(5), 749-761.

Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology, 25*(1), 54-67.

Ryan, R. M., Koestner, R., & Deci, E. L. (1991). Ego-involved persistence: When free-choice behavior is not intrinsically motivated. *Motivation and Emotion, 15*(3), 185-205.

Ryan, R. M., Mims, V., & Koestner, R. (1983). Relation of reward contingency and interpersonal context to intrinsic motivation: A review and test using cognitive evaluation theory. *Journal of Personality and Social Psychology, 45*(4), 736-750.

Samuel, D. B., & Widiger, T. A. (2008). A meta-analytic review of the relationships between the five-factor model and DSM-IV-TR personality disorders: A facet level analysis. *Clinical Psychology Review, 28*(8), 1326-1342.

Sanislow, C. A., Grilo, C. M., Morey, L. C., Bender, D. S., Skodol, A. E., Gunderson, J. G., . . . McGlashan, T. H. (2002). Confirmatory factor analysis of DSM-IV criteria for borderline personality disorder: Findings from the collaborative longitudinal personality disorders study. *American Journal of Psychiatry, 159*(2), 284-290.

Seah, S. L., & Ang, R. P. (2008). Differential correlates of reactive and proactive aggression in asian adolescents: Relations to narcissism, anxiety, schizotypal traits, and peer relations. *Aggressive Behavior, 34*(5), 553-562.

Shechtman, N., & Horowitz, L. M. (2006). Interpersonal and noninterpersonal interactions, interpersonal motives, and the effect of frustrated motives. *Personality & Social Psychology Bulletin, 32*(8), 1126-1139.

Sheldon, K. M., Ryan, R. M., Deci, E. L., & Kasser, T. (2004). The independent effects of goal contents and motives on well-being: It's both what you pursue and why you pursue it. *Personality & Social Psychology Bulletin, 30*(4), 475-486.

Skeem, J. L., Poythress, N., Edens, J. F., Lilienfeld, S. O., & Cale, E. M. (2003). Psychopathic personality or personalities? exploring potential variants of psychopathy and their implications for risk assessment. *Aggression and Violent Behavior, 8*(5), 513-546.

Skeem, J., Johansson, P., Andershed, H., Kerr, M., & Louden, J. E. (2007). Two subtypes of psychopathic violent offenders that parallel primary and secondary variants. *Journal of Abnormal Psychology, 116*(2), 395-409.

Smolewska, K., & Dion, K. (2005). Narcissism and adult attachment: A multivariate approach. *Self and Identity, 4*(1), 59-68.

Sullivan, H. S. (1953). *The interpersonal theory of psychiatry*. New York: W. W. Norton.

Tajfel, H., Billig, M. G., Bundy, R. P., & Flament, C. (1971). Social categorization and intergroup behavior. *European Journal of Social Psychology*, *1*(2), 149-178.

Tracey, T. J. G. (2004). Levels of interpersonal complementarity: A simplex representation. *Personality and Social Psychology Bulletin, 90*(9), 1211-1225.

Trapnell, P. D., & Paulhus, D. L. (2012). Agentic and communal values: Their scope and measurement. *Journal of Personality Assessment, 94*(1), 39-52.

Trapnell, P. D., & Wiggins, J. S. (1990). Extension of the interpersonal adjective scales to include the big five dimensions of personality. *Journal of Personality and Social Psychology, 59*(4), 781-790.

Twenge, J. M., & Campbell, W. K. (2003). "Isn't it fun to get the respect that we're going to deserve?" narcissism, social rejection, and aggression. *Personality & Social Psychology Bulletin, 29*(2), 261-272.

Wagner, C., Riley, W., Schmidt, J., McCormick, M., & Butler, S. (1999). Personality disorder styles and reciprocal interpersonal impacts during outpatient intake interviews. *Psychotherapy Research, 9*(2), 216-231.

Washburn, J. J., McMahon, S. D., King, C. A., Reinecke, M. A., & Silver, C. (2004). Narcissistic features in young adolescents: Relations to aggression and internalizing symptoms. *Journal of Youth and Adolescence, 33*(3), 247-260.

Widiger, T. A. (2006). Psychopathy and DSM-IV psychopathology. *Handbook of Psychopathy,* , 156-171.

Wiggins, J. S. (1979). A psychological taxonomy of trait-descriptive terms: The interpersonal

 domain. *Journal of Personality and Social Psychology, 37*(3), 395-412.

Wiggins, J. S. (1982). Circumplex models of interpersonal behavior in clinical psychology.

 Handbook of research methods in clinical psychology (pp. 183-221).

Williams, K. M., & Paulhus, D. L. (2004). Factor structure of the self-report psychopathy scale

 (SRP-II) in non-forensic samples. *Personality and Individual Differences, 37*(4), 765-

 778.

Williams, K. M., Paulhus, D. L., & Hare, R. D. (2007). Capturing the four-factor structure of

 psychopathy in college students via self-report. *Journal of Personality Assessment, 88*(2),

 205-219.

Wink, P. (1991). Two faces of narcissism. *Journal of Personality and Social Psychology, 61*(4),

 590-597.

Zanarini, M. C., Vujanovic, A. A., Parachini, E. A., Boulanger, J. L., Frankenburg, F. R., &

 Hennen, J. (2003). A screening measure for BPD: The McLean screening instrument for

 borderline personality disorder (MSI-BPD). *Journal of Personality Disorders, 17*(6),

 568-573.

Zeigler-Hill, V., & Abraham, J. (2006). Borderline personality features: Instability of self-esteem

 and affect. *Journal of Social and Clinical Psychology, 25*(6), 668-687.

Appendix A

HEXACO-PI-R: Agreeableness

Instructions: Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who likes to spend time with others? Please indicate the extent to which you agree or disagree with each of the below statements about yourself.

1	*2*	*3*	*4*	*5*
Strongly Disagree	*Disagree*	*Neither Agree nor Disagree*	*Agree*	*Strongly Agree*

1. ____ I rarely hold a grudge, even against people who have badly wronged me.

2. ____ My attitude toward people who have treated me badly is "forgive and forget".

3. ____ If someone has cheated me once, I will always feel suspicious of that person.

4. ____ I find it hard to fully forgive someone who has done something mean to me.

5. ____ People sometimes tell me that I am too critical of others.

6. ____ I generally accept people's faults without complaining about them.

7. ____ I tend to be lenient in judging other people.

8. ____ Even when people make a lot of mistakes, I rarely say anything negative.

9. ____ People sometimes tell me that I'm too stubborn.

10. ____ I am usually quite flexible in my opinions when people disagree with me.

11. ____ When people tell me that I'm wrong, my first reaction is to argue with them.

12. ____ I find it hard to compromise with people when I really think I'm right.

13. ____ People think of me as someone who has a quick temper.

14. ____ I rarely feel anger, even when people treat me quite badly.

15. ____ Most people tend to get angry more quickly than I do.

16. ____ I find it hard to keep my temper when people insult me.

Appendix B

HEXACO-PI-R: Honesty/Humility

Instructions: Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who likes to spend time with others? Please indicate the extent to which you agree or disagree with each of the below statements about yourself.

1	*2*	*3*	*4*	*5*
Strongly Disagree	*Disagree*	*Neither Agree nor Disagree*	*Agree*	*Strongly Agree*

1. ____ If I want something from a person I dislike, I will act very nicely toward that person in order to get it.

2. ____ I wouldn't use flattery to get a raise or promotion at work, even if I thought it would succeed.

3. ____ If I want something from someone, I will laugh at that person's worst jokes.

4. ____ I wouldn't pretend to like someone just to get that person to do favors for me.

5. ____ If I knew that I could never get caught, I would be willing to steal a million dollars.

6. ____ I would be tempted to buy stolen property if I were financially tight.\

7. ____ I would never accept a bribe, even if it were very large.

8. ____ I'd be tempted to use counterfeit money, if I were sure I could get away with it.

9. ____ Having a lot of money is not especially important to me.

10. ____ I would like to live in a very expensive, high-class neighborhood.

11. ____ I would like to be seen driving around in a very expensive car.

12. ____ I would get a lot of pleasure from owning expensive luxury goods.

13. ____ I am an ordinary person who is no better than others.

14. ____ I wouldn't want people to treat me as though I were superior to them.

15. _____ I think that I am entitled to more respect than the average person is.

16. _____ I want people to know that I am an important person of high status.

Short Dark Triad

Instructions: Please indicate how much you agree with the following questions using the

scale below:

1	*2*	*3*	*4*	*5*
Strongly Disagree	*Disagree*	*Neither Agree nor Disagree*	*Agree*	*Strongly Agree*

1. _____ It's not wise to tell your secrets.

2. _____ I like to use clever manipulation to get my way.

3. _____ Whatever it takes, you must get the important people on your side.

4. _____ Avoid direct conflict with others because they may be useful in the future.

5. _____ It's wise to keep track of information that you can use against people later.

6. _____ You should wait for the right time to get back at people.

7. _____ There are things you should hide from other people because they don't need to know.

8. _____ Make sure your plans benefit you, not others.

9. _____ Most people can be manipulated.

10. _____ People see me as a natural leader.

11. _____ I hate being the center of attention.

12. _____ Many group activities tend to be dull without me.

13. _____ I know that I am special because everyone keeps telling me so.

14. _____ I like to get acquainted with important people.

15. _____ I feel embarrassed if someone compliments me.

16. _____ I have been compared to famous people.

17. _____ I am an average person.

18. ____ I insist on getting the respect I deserve.

19. ____ I like to get revenge on authorities.

20. ____ I avoid dangerous situations.

21. ____ Payback needs to be quick and nasty.

22. ____ People often say I'm out of control.

23. ____ It's true that I can be mean to others.

24. ____ People who mess with me always regret it.

25. ____ I have never gotten into trouble with the law.

26. ____ I enjoy having sex with people I hardly know.

27. ____ I'll say anything to get what I want.

Appendix D

Revised Sources of Validation Scale

Instructions: Below is a list of goals and values people strive for in their lives. Some of these may be important to you, whereas others may be unimportant. Please rank these goals in order of their importance to you, from 1 to 9 (1 = most important item, 9 = least important item). Click and drag each item into your preferred order. When ranking importance, think about how much inherent satisfaction you would get from accomplishing each goal.

1. ____ Making other people happy

2. ____ Having strong family/friend relationships

3. ____ Being well-liked by others; being popular

4. ____ Excelling in a sport

5. ____ Mastering an instrument

6. ____ Being physically attractive to others

7. ____ Creating original content; being creative

8. ____ Running a successful business; making money

9. ____ Finding romantic love

Appendix E

The Post-experimental Intrinsic Motivation Inventory

Instructions: Regarding the *topic* of the essay you just completed, please answer the following. For each of the following statements, please indicate how true it is for you, using the following scale:

1	2	3	4	5	6	7
Not at all true			*Somewhat True*			*Very True*

1. _____ I enjoy doing this activity very much.

2. _____ This activity is fun to do.

3. _____ I think this was a boring activity.

4. _____ This activity does not hold my attention at all.

5. _____ I would describe this activity as very interesting.

6. _____ I think this activity is quite enjoyable.

7. _____ While I am doing this activity, I think about how much I enjoy it.

8. _____ I think I am pretty good at this activity.

9. _____ I think I do pretty well at this activity, compared to others.

10. _____ After working at this activity for a while, I feel pretty competent.

11. _____ I am satisfied with my performance at this task.

12. _____ I am pretty skilled at this activity.

13. _____ This is an activity that I can't do very well.

14. _____ I put a lot of effort into this.

15. _____ I don't try very hard to do well at this activity.
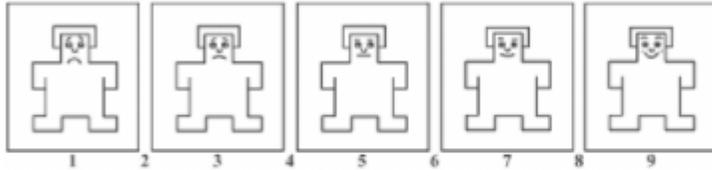
16. _____ I try very hard on this activity.

17. ____ It is important to me to do well at this task.

18. ____ I don't put much energy into this.
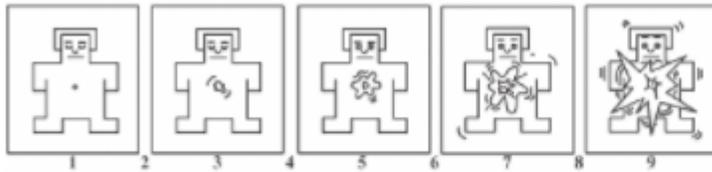
The Self-Assessment Manikin

Keeping in mind, the feedback you received from the other participant, please answer the following questions.

Using the scale and pictures above, which number corresponds with how you feel right now emotionally about the feedback you received?

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

1

Using the scale and pictures above, which number corresponds with the amount of arousal you feel right now about the feedback you received?

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

1

Displaced Hostility

Instructions: For this last portion, we would like you to rate the experimenter and the study you just completed. Please answer honestly to all questions. Your responses to these questions will be used to evaluate our experimenters and determine whether or not we will continue to employ them next semester.

1. How important/useful do you think that your participation in this study was?

   - Extremely useless
   - Somewhat useless
   - Neither useful or useless
   - Somewhat useful
   - Extremely useful

2. How much did you enjoy the study you just participated in?

   - None at all
   - A little
   - A moderate amount
   - A lot
   - A great deal

3. How likeable did you find the experimenter?

   - Extremely unlikable
   - Somewhat unlikable
   - Neither likable or unlikable
   - Somewhat likable
   - Extremely likable

4. How professional did you find the experimenter?

   - Extremely unprofessional
   - Somewhat unprofessional
   - Neither professional or unprofessional
   - Somewhat professional
   - Extremely professional

5. How competent did you find the experimenter?

- Extremely incompetent
- Somewhat incompetent
- Neither competent or incompetent
- Somewhat competent
- Extremely competent

6. Overall, how would you rate your experience in this study?

- Extremely negative
- Somewhat negative
- Neither positive or negative
- Somewhat positive
- Extremely positive

Appendix H

Email Prompt Screen for Goal Essay

THE UNIVERSITY OF TEXAS AT EL PASO   UTEP

0 0 0 0 5 9

Think of the motive/goal you ranked as being most important to you. You picked the
goal: Finding romantic love. Please spend 10 minutes writing about how you hope to
achieve this goal and how accomplishing it will make you feel. After 10 minutes, or when
you press "Send", this essay will immediately be sent to another participant in a different
room. Do not sign this e-mail with your name or information.

To: Essay Reviewer (TMreview3@gmail.com)

Subject: Goal Essay

                                                                              Send

Appendix I

Positive and Negative Feedback

Positive Feedback:

M Gmail   Email Reviewer <tmreview3@gmail.com>

_____

Feedback

_____

Email Reviewer <tmreview3@gmail.com>   Wed, Sep 13, 2017 at 12:45 PM
To: TMparticB@gmail.com

Hi,

Based on your essay, I think you are spending your time well with your goal and should keep trying to reach it. I'd definetely help you get this goal if I could, because I think it's really important.

Reviewer 3

Negative Feedback:

M Gmail   Email Reviewer <tmreview3@gmail.com>

_____

Feedback

_____

Email Reviewer <tmreview3@gmail.com>   Wed, Sep 13, 2017 at 12:42 PM
To: TMparticA@gmail.com

Hi,

Based on your essay, I think you are just wasting your time with your goal. I would definetely not help you to get this goal. Actually, I'd probably even try to keep you from getting it because it's just not worth your time.

Reviewer 3

Vita

Shelby Rae Curtis was raised in Fountain Hills, AZ. The eldest child of Pamela and Jay Curtis, she graduated from the University of Arizona in May of 2013. During her time at the University of Arizona, she worked in several research laboratories in both psychology and sociology, interned with the Federal Bureau of Investigation, and completed an honor's thesis under the supervision of Judith Becker, PhD.

As a graduate student, Shelby has published five authored papers, one of which is first authored. She has also presented multiple posters at national psychology conferences, such as the Society for Personality and Social Psychology, and will be giving two oral presentations at international conferences this June. Broadly, her research focuses on interpersonal persuasion and manipulation through a theoretical perspective of both individual differences and situational factors.

During her time as a graduate student, she has worked as a program evaluator and a teaching assistant for statistics courses. She has also pursued and completed a certificate in Quantitative Methods in Psychology. Currently, she is an ad-hoc reviewer for the Journal of Personality and Individual Differences, and serves on the Faculty Senate Scholarship Committee as a graduate student representative. Shelby will continue her studies as a doctoral student in the Interdisciplinary Social Psychology program at the University of Nevada, Reno.

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This thesis/dissertation was typed by Shelby Rae Curtis.