

THE DARK TRIAD, EMPLOYEE CREATIVITY,
AND EMPLOYEE PERFORMANCE
IN THE NEW VENTURE CONTEXT

By

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Submitted to the Faculty of the
Graduate College of the
Oklahoma State University
in partial fulfillment of
the requirements for
the Degree of
DOCTOR OF PHILOSOPHY
May 8, 2015

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ACKNOWLEDGMENTS

I am grateful to Bruce Barringer, Robert Baron, Bryan Edwards, and Brandon Mueller for their patience, support, and guidance through the many early iterations of my dissertation research. For the fantastic team of professors and support staff from the Watson Graduate School of Management provided an excellent foundation that prepared me well. Thank you.

A special group of four individuals deserve my heartfelt thanks for all of their sacrifice and support as I changed careers, spending the better part of the last 42 months locked up in my office. I could not have made it without you DeVella, Addison, Kennedy, and Delaney. Thank you for your patience and understanding as you watched me age from the other side of my office doors.

Finally, I thank my Lord and savior, Jesus Christ, who has walked with me through the highs and lows as I started my PhD program, sold my home, interviewed all over the country, started a new career, moved across country, and prayed that there would be enough; enough of me, enough time, enough ideas, enough money. I am not surprised that you have been faithful through it all. I owe you more than a debt of gratitude.

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CHAPTER I

INTRODUCTION

“It might be that those high on traits like the Dark Triad are not so much ‘bad apples,’ but...apples that are just not that sweet. With those apples one must find another purpose for them - like making cider, sauce, pie, and even hard cider.”
Jonason, Wee, & Li, 2014 p. 117

Dark characteristics have been largely ignored in existing entrepreneurship literature. The study of entrepreneurial dispositions has primarily emphasized positive characteristics (Baron, Tang, & Hmieleski, 2011; Hmieleski & Baron, 2009; Leutner, Ahmetoglu, Akhtar, & Chamorro-Premuzic, 2014; Miller, 2015; Rauch & Frese, 2007). Only a handful of published studies have explored the entrepreneur’s dark side (Akhtar, Ahmetoglu, & Chamorro-Premuzic, 2013; Haynes, Hitt, & Campbell, *accepted article*; Hayward, Forster, Sarasvathy, & Fredrickson, 2010; Hayward et al., 2006; Mathieu & St-Jean, 2013; McLarnon, Carswell, & Schneider, 2014; Morris, Schindehutte, Walton, & Allen, 2002). In personality and social psychology research, interest in dark characteristics has recently exploded with 578 articles on the topic published in the past ten years. Entrepreneurship research has lagged behind, with few published articles on the subject of dark characteristics available in its top journals (Akhtar et al., 2013; Haynes et al., *accepted article*; Mathieu & St-Jean, 2013). Consequently, very little is

known about dark characteristics, entrepreneurs, and the new venture environment.

Miller (2015), recognizing this significant gap, recently called for increased research into the dark characteristics of entrepreneurs:

We would urge future scholars to research the possible downsides of the entrepreneurial personality, if only to distinguish those entrepreneurs who contribute to our economic and social well-being from those whose economic contributions are negated by the harm they cause to their families and other stakeholders. (p. 5)

Toward that end, this present study seeks to examine the relationships between founder levels of the dark triad and ‘others-focused’ outcomes.

Grounded in the new venture context, the research questions that will be addressed include: (1) what are the possible positive and negative outcomes associated with higher levels of founder dark triad characteristics? and (2) when and how do short-term versus extended employee interactions with founders high on these characteristics potentially change outcomes?

The following sections present the definitions and history of the dark triad, as well as its components – Machiavellianism, narcissism, and psychopathy.

Subsequently, the three characteristics are compared, exploring both commonalities and differences. Next, significant questions such as the dark triad’s origins, moral implications, and outcomes in different contexts are considered. A framework is then presented based on contextual cues to predict positive or negative outcomes associated with higher levels of dark triad characteristics. Finally, the framework is empirically tested in the new venture context.

The Dark Triad

The most commonly studied negative characteristics are the dark triad. Paulhus and Williams (2002) introduced this trio comprised of Machiavellianism, subclinical narcissism, and subclinical psychopathy. Early research (McHoskey, 1995; McHoskey, Worzel, & Szyarto, 1998) suggests that the overlap among the three characteristics was significant enough to treat them as a single variable. Rejecting the single factor argument, Paulhus and Williams (2002) successfully demonstrate that though each construct does correlate with the other two variables, the majority of the shared variance could be attributed to a negative correlation with the Big Five inventory's agreeableness dimension (Machiavellianism $r = -0.47$; narcissism $r = -0.36$; psychopathy $r = -0.25$). None of the other dimensions of the Big Five show common correlations across all three dark triad characteristics. In fact, the three variables behave very differently; some have no significant correlation, while others show correlations in opposing directions. The results support treating each of the dark triad variables as unique, while appreciating a significant amount of commonality.

Scholars have published a great deal of research on Machiavellianism, narcissism, and psychopathy individually. The problem with examining any one of the dark triad alone is the failure to account for shared variance resulting in an overestimation of the relationship to dependent variables. Because of the need to control for shared variance, as well as to demonstrate the distinctiveness of each construct, it is important to study the dark triad together (Jones & Figueredo, 2013; Lee & Ashton, 2005; Veselka, Schermer, & Vernon, 2012). In spite of evidence to the contrary, recent studies have continued to treat the dark triad as a single complex (Jonason, Kavanagh, Webster, & Fitzgerald,

2011; Kavanagh, Signal, & Taylor, 2013). The problem with treating the dark triad as a composite measure, aside from the previously mentioned arguments, is the erroneous assumption that each characteristic has the same antecedents and consequences (Jonason, Strosser, Kroll, Duineveld, & Baruffi, in press).

Before moving into a discussion of the individual characteristics, the differences between subclinical and clinical levels of narcissism and psychopathy should be stressed. While Machiavellianism was introduced as a characteristic found in normal populations (Christie & Geis, 1970), narcissism and psychopathy have roots in clinical psychology. The DSM-5 (2013) identifies clinical levels of narcissism and psychopathy (anti-social personality disorder) as high levels of said characteristics which impair functionality, flexibility, and social relationships – creating subjective distress. Normal, non-clinical levels of these characteristics do not present the same social obstacles as found in those with clinical levels. Rather than being maladaptive and causing functional impairment, individuals exhibiting subclinical characteristics may be highly successful according to the DSM-5 (2013). Common self-report measures such as the Narcissistic Personality Inventory (Raskin & Terry, 1988) and Hare’s Psychopathy Checklist-Revised (PCL-R) (Hare, 1991) were designed to measure these characteristics in normal populations (Brunell et al., 2008).

Machiavellianism

The manipulative political tactics introduced by Niccolò Machiavelli in his work "Il Principe" ("The Prince," 1532) were quickly branded Machiavellianism (Yalden, 1681). This type of individual is known to be charismatic, charming, seductive, strategically prosocial, and duplicitous (Deluga, 2001; Hawley, 2003; Veselka et al.,

2012). It was not recognized as a quantifiable temperament found in the general population until the research of Richard Christie introduced the Mach-IV measure (Christie & Geis, 1970). Christie's early conceptions of Machiavellianism were sparked by observing the leaders of extremist groups. These powerful leaders amassed large crowds of followers using manipulative tactics. Examining historical figures, four attributes emerged: (a) low empathy, (b) utilitarian morality, (c) normal range of personality (no extreme psychopathology which would prevent effective social interaction), and (d) focus on immediate versus idealistic goals. In addition to these four characteristics, Machiavellian behaviors are thought to be motivated by three philosophies. First, man is weak, fallible, and gullible. Second, rational man should take advantage of man's weak, fallible, and gullible condition to maximize personal gain. Third, one should protect self-interests from the folly of others who cannot be trusted.

While Machiavellian behaviors are typified by low empathy, they are also typified by social adroitness; the ability to recognize (and exploit) the emotions of others. In a study of 1,700 children fourth through tenth grade, in self-reports, peer-reports, and teacher-reports, high Machiavellians were the centers of social activity, liked by peers, and well-adjusted (Hawley, 2003). This high degree of social skill is counter-intuitive in light of the low empathy associated with higher levels of Machiavellianism. Yet, a closer look at the common Empathy Quotient Scale [EQS] (Muncer & Ling, 2006) reveals the Machiavellian paradox. The empathy scale's three factors are constructed with the underlying assumption that the ability to gauge others' emotions will elicit an altruistic response. The first factor measures the ability to sense another's emotional condition with items such as, "I am good at predicting how

someone else will feel,” and “I can easily work out what another person might want to talk about.” Factor 2 measures a lack of social skill with questions such as, “I find it hard to know what to do in a social situation.” Factor 3 measures altruistic response with items such as, “I really enjoy caring for other people.” The Machiavellian is exceptionally skilled in social situations but has selfish vs. altruistic motivations. As a result, the Machiavellian should have negative correlations with the second and third factors of the empathy scale. A study attempting to link Machiavellianism to low empathy supports this idea with significant negative correlations between Machiavellianism and EQS factor 2 ($r = -0.40$, $p < 0.001$) and factor 3 ($r = -0.21$, $p = 0.001$)(Andrew, Cooke, & Muncer, 2008).

A recent study in the *Journal of Management* tested a sample of sales people for Machiavellianism and empathetic response using an innovative technique of measuring brain systems thought to be responsible for psychological and social responses. Bagozzi et al. (2013) compared levels of Machiavellianism to levels of social and emotional intelligence and found support for their hypothesis that Machiavellianism is linked to higher brain region activation in areas thought to correspond to empathetic processing. (Correlations with Machiavellianism and activation of the brain’s insula area were $r = 0.64$ (right side) $r = 0.56$ (left side) both $p < 0.01$ and opercularis area $r = 0.48$ ($p < 0.05$)(right side) and $r = 0.51$ ($p < 0.01$)(left side). Rather than labeling Machiavellianism with low-empathy, a more precise definition might be social cunning driven not by altruism but by selfishness.

In the workplace, Machiavellianism may appear as social chameleons who manipulate situations toward their own ends by assuming the attitudes and behaviors of

key individuals (Hurley, 2005), occasionally resorting to bullying behavior (Linton & Power, 2013). Kessler et al. (2010) proposed an empirically-based three-factor model of Machiavellian workplace behavior summarized by striving to maintain power, using harsh management tactics, and employing manipulative behaviors. These behaviors result in counterproductive employee outcomes. Greenbaum, Hill, Mawritz, and Quade (in press) find that Machiavellianism is related to increased unethical behavior in the presence of an abusive supervisor. Becker and O'Hair (2007) find that higher levels of Machiavellianism are associated with decreased employee compliance and organizational citizenship behaviors.

In leadership positions, Machiavellian tendencies may also produce negative outcomes. It is proposed that leaders higher on Machiavellian characteristics will be related to higher levels of employee behavior motivated by self-interest vs. collective interests (Todorovic & Schlosser, 2007).

Despite supporting evidence that higher levels of Machiavellianism are traditionally problematic in organizations (Becker & O'Hair, 2007; Greenbaum et al., in press), Belschak, Den Hartog, and Kalshoven (in press) find these behaviors may be channeled toward positive ends. In job contexts where management leadership provides higher job autonomy and inspires higher levels of intrinsic motivation, employees higher on Machiavellian are linked to higher levels of organizational citizenship behavior.

The sales context offers those high in Machiavellianism potentially positive outcomes. A study published by Ricks and Fraedrich (1999) find that higher levels of Machiavellianism in salespersons was related to higher sales performance.

Nonetheless, their sales success did not correspond to increased managerial ratings. The study finds that Machiavellian tendencies generally correspond to lower performance reviews by managers.

The political contexts offers another area of potential success for those high on Machiavellianism. (Deluga, 2001). Deluga contends that presidents with high levels of Machiavellianism (based on coding of historical documents) were more often thought of as charismatic leaders. An excerpted quote about Franklin Roosevelt characterizes him as “dazzling, exciting, and a lover of crowds.” (Deluga, 2001 p. 357). The same study finds Machiavellianism associated with higher levels of rated performance based on two widely accepted archival measures of *perceived greatness* (Spangler & House, 1991).

Subclinical Narcissism

Formally defining subclinical narcissism is challenging. The original definition of clinical narcissism, published in 1980 (DSM-III), includes eight characteristics: (1) grandiosity; (2) fantasies (of unlimited success, power, beauty, etc.); (3) exhibitionism; (4) inability to accept criticism; (5) entitlement; (6) interpersonal exploitation; (7) vacillation between over-idealizing and devaluing relationships; and (8) lack of empathy. The current DSM-5 definition of narcissism has undergone several changes, most notably removing relationship vacillation and replacing exhibitionism with “belief that self is special.” Three new concepts have been added, including “need for excessive admiration,” “envy” (of others and belief that others are envious of him/her), and “arrogance.” The inability to accept criticism, while not specifically mentioned in the nine diagnostic criteria, is still included in the features supporting the diagnosis.

If Machiavellianism can be concisely defined as manipulation, then narcissism would be concisely defined as an inflated sense of self. Examining the components of the clinical narcissism definition, each component may be related to exaggerated self-worth. Arrogance, grandiosity, fantasies of unlimited success, and the belief that one is special (with entitlement, need, and expectations for others to treat them as special) are types of inflated views of self. Even the empathy deficits and exploitation that help to identify the narcissist are likely related to an inflated view of self. Because narcissists are consumed with their own welfare (and expect others to be equally consumed with their welfare), they have difficulty recognizing the needs or feelings of others (DSM-5, 2013). Narcissists' exploitation is motivated by the perception that others' needs are less important than their own. As a result, narcissists expect to be given whatever they want, regardless of the consequences to others (DSM-5, 2013). Even the duplicity of the narcissist may be a type of inflated self-view. Narcissists believe laws, rules, and policies are for common individuals. These individuals see no reason to follow rules which do not apply to them; they are special (i.e., deserving special privileges or extra resources) (Campbell & Miller, 2011).

The difference between subclinical and clinical narcissism, according to the DSM-5 (2013), is determined by levels of flexibility, adaptiveness, and social functioning. Clinical levels of narcissism are accompanied by impaired social functioning stemming from these issues. Subclinical narcissism (included in the Paulhus & Williams (2002) conception of the dark triad) does not impair social functioning. Rather than being maladaptive, individuals exhibiting subclinical narcissistic characteristics may be highly successful (DSM-5, 2013).

Correspondingly, subclinical narcissism is thought to be a common characteristic found and measured in the general population (Brunell et al., 2008).

Since its introduction, subclinical narcissism has been commonly defined by the Narcissistic Personality Inventory (NPI) developed by Raskin and Hall (1979). The measure captures the eight components of the DSM-III narcissistic personality definition. However, scholars cannot agree on the NPI factor structure, proposing anywhere from two factors (Leadership/Authority and Exhibitionism/Entitlement) (Corry, Merritt, Mrug, & Pamp, 2008) to seven factors (authority, exhibitionism, superiority, vanity, exploitativeness, entitlement, and self-sufficiency) (Raskin & Terry, 1988). The seven-factor structure, although suffering from low reliability scores ($\lambda_3 = 0.39$ to 0.74) on six factors, is theoretically most similar to the clinical definition. The NPI is still the most generally accepted measure of subclinical narcissism (Furnham, Richards, & Paulhus, 2013).

Narcissism is generally associated with leadership. An inflated self-view and grandiosity lead those high on narcissism not only to seek leadership positions, but feel entitled to them (Rosenthal & Pittinsky, 2006). In a study of leadership emergence in military cadets, higher levels of narcissism were effective at predicting leadership emergence (Paunonen 2006).

Whereas individuals with high levels of narcissism tend to rise to organizational leadership (Brunell et al., 2008), evidence points to several negative outcomes (Rosenthal & Pittinsky, 2006). Often, the leader's pursuit of power and admiration foster unethical behaviors (Godkin & Allcorn, 2011) and in political contexts, even tyrannical behavior (Glad, 2002). Leaders high on these characteristics are likely to establish a corporate culture of arrogance linked to impaired organizational learning (Godkin & Allcorn, 2009).

Higher levels of narcissism in CEOs correspond to poor judgement, excessive risk taking, and extreme variability in organizational performance (Chatterjee & Hambrick, 2007). When offered counsel (Ma & Karri, 2005) or confronted with feedback and objective performance reviews, CEO's with higher levels of narcissism respond with indifference or hostility (Chatterjee & Hambrick, 2011).

Aside from negative outcomes, the high levels of confidence and self-efficacy associated with narcissism may correspond to beneficial outcomes in organizational settings. The notably higher levels of self-confidence among those with narcissistic tendencies often lead to increased probabilities for selection in an interview setting (Paulhus, Westlake, Calvez, & Harms, 2013). Mathieu and St-Jean (2013) find that among nascent student entrepreneurs, narcissism is a significant predictor of intent to start a new venture. Hayward et al. (2010) suggest that for entrepreneurs, the excessive levels of confidence typical of narcissists provide the resilience needed to succeed in new ventures in spite of prior failures.

Subclinical Psychopathy

Psychopathy is a continuous variable, however in literature individuals with relatively high levels of psychopathy are labelled "psychopaths." The following discussion keeps with this tradition, not meaning to imply a dichotomous condition.

Seminal research conducted by Cleckly (1988) with adult males hospitalized in a closed institution resulted in a comprehensive description of characteristics typical of psychopathy. The following patterns of behavior emerged from his research: superficial charm; absence of delusions, irrational thinking, and distress; unreliability; duplicity (believing legal penalties for crimes committed should not apply to them

and would be totally inappropriate); lack of shame; poor judgment; egocentricity; shallow affect; inability to see themselves for what they are; manipulation; resistance to suicide; low impulse control; and low conscientiousness combined with short sightedness.

In his accounts of those interactions and observations, Cleckley (1941) describes psychopathic individuals as initially indistinguishable from normal individuals. He equates their behavior to masks of sanity, intelligence, and competence covering up markedly abnormal tendencies. Surprisingly, displays of social graces come easily to those with high levels of psychopathy. “In relatively small matters, psychopaths sometimes behave so as to appear very considerate, responsive, and obliging. Acquaintances who meet them on grounds where minor issues prevail may find it difficult to believe that they are not highly endowed with gratitude and eager to serve others” (Cleckley, 1988 p. 354). This description of psychopathy has remained strikingly consistent, with contemporary research still portraying the psychopath as someone who eludes detection, covertly moving from victim to victim once the utility of each is exhausted (Babiak, 2000). Scholars agree that psychopathy is the most toxic, dangerous, aggressive, and socially undesirable of the three dark triad characteristics (Jonason, Baughman, Carter, & Parker, 2015; Jonason, Duineveld, & Middleton, 2015; Mathieu, Neumann, Hare, & Babiak, in press; O’Boyle, Forsyth, Banks, & McDaniel, 2012).

Individuals with clinical levels of psychopathy are typically confined to institutions (i.e., prisons and mental hospitals) due to the social maladaptation attributed to extremes in the above-mentioned items. Subclinical levels of this profile can be measured in the general population with the Self-Report Psychopathy (SRP) scale (Forth,

Brown, Hart, & Hare, 1996; Hare, 1985). This widely accepted measure is based on the longer list of psychopathic characteristics, generating a four-factor definition including tendencies of interpersonal problems, affective deficiencies, erratic lifestyle, and antisocial behaviors. Using this measure, research has found that only 2 to 5% of the population will show very high scores of psychopathy that lead to maladaptive antisocial behaviors (Clarke, 2005; Salekin, Trobst, & Krioukova, 2001).

There is a growing body of research examining the differences between successful (unincarcerated) psychopaths and unsuccessful (incarcerated) psychopaths. While some may attribute criminal psychopathy to lower levels of empathy, Sifferd and Hirstein (2013) suggest that low empathy is not a sufficient explanatory factor. Autistic individuals suffer from similar empathy deficits and yet are even less likely to become criminals than normal individuals. Instead, the researchers point to executive functioning as the primary dissimilarity. Higher executive functions facilitate self-awareness (the ability to see themselves for what they are), strategic planning, abstraction, and contextually appropriate behaviors. Ishikawa, Raine, Lencz, Bihrlé, and Lacasse (2001) support this argument, showing that successful psychopaths have even higher executive function than non-psychopathic controls. As a result, while the unsuccessful psychopath's low executive functions fail to suppress impulses, the successful psychopath's high executive function allows him or her to either suppress or channel impulses into more socially accepted behaviors. For example, Gao and Raine (2010) found that in industry, successful psychopaths use relational aggressive behavior rather than physical violence to reach their goals.

In the workplace, research examining the negative outcomes associated with leadership psychopathy include increases in employee psychological distress, work-family conflict, and discontent (Mathieu et al., in press). In 360° assessment of managers, employees' overall performance appraisals were significantly lower for managers with higher levels of psychopathy ($r = -0.41$). Shockingly, the same study shows that employees related higher levels of manager psychopathy to increases in strategic thinking and creativity (Babiak, Neumann, & Hare, 2010).

Creativity has been consistently linked to psychopathy (Eysenck, 1993; Feist, 1998; Galang, 2010), although the specific underlying reasons are not fully understood. Eysenck (1993) suggests the “over-inclusive” thinking patterns of psychopathy provide a cognitive advantage. Galang (2010) purposes a theory attributing the “prosocial” psychopath’s inhibition and divergent thinking to improved creative processes. Because psychopathy is associated with higher executive functioning, that link may provide a possible path to understanding why individuals with higher levels of psychopathy are more able to conceive relationships between seemingly unrelated concepts. A great deal of additional research is needed to support existing theories and determine why creativity and psychopathy appear to be related.

Commonality in the Dark Triad

Comparing the definitional criteria for each of the dark triad characteristics, three overlapping features are immediately evident: a sense of being above the law, callousness, and an inflated sense of self (to name a few). A large body of empirical research demonstrates a great deal of commonality among the three characteristics

using two different approaches. One approach links the dark triad to existing personality taxonomies such as the Big Five (Barrick & Mount, 1991), HEXACO (Lee & Ashton, 2004), and the Supernumerary Personality Inventory (SPI) (Paunonen, 2002). Another approach compares the dark triad to existing measures such as antagonistic social strategies, callousness, social dominance, and morality.

Low agreeableness has emerged as a consistent finding in research examining relationships between the dark triad and the Big Five dimensions of personality.

Paulhus and Williams (2002) found agreeableness significantly correlates with Machiavellianism ($r = -.047$), narcissism ($r = -0.36$), and psychopathy ($r = -0.25$). Vernon, Villani, Vickers, and Harris (2008) support this link with very similar results. However, these findings were disputed by Lee and Ashton (2004), who found that narcissism uncorrelated with agreeableness when additional control variables were introduced.

Using the HEXACO model of personality structure, the dark triad had significant correlations with the honesty-humility dimension: Machiavellianism ($r = -0.57$), narcissism ($r = -0.53$), and psychopathy ($r = -0.72$) (Lee & Ashton, 2005). Similar support is found in a study by Lee et al. (2013). The honesty-humility factor measures levels of sincerity, fairness, greed avoidance, and modesty.

One of the most informative studies was completed by Veselka, Schermer, and Vernon (2011). They compared levels of dark triad characteristics with the dimensions of the Supernumerary Personality Inventory (SPI), finding significant correlations among the SPI dimensions and all three dark triad characteristics: seductiveness ($r=0.32, 0.41, 0.45$), manipulativeness ($r=0.48, 0.43, 0.53$), thriftiness ($r=-0.16, -0.22, -$

0.24), humorousness ($r=0.15, 0.27, 0.32$), integrity ($r = -0.52, -0.27, -0.59$), femininity ($r= -0.24, -0.11, -0.43$), risk taking ($r=0.20, 0.22, 0.40$), and egotism ($r = 0.13, 0.52, 0.22$)—all correlations for Machiavellianism, narcissism, and psychopathy respectively.

Looking at how the dark triad's shared variance might be explained through specific variables, Jones and Figueredo (2013) found that the triad was significantly related to the use of antagonistic vs. mutualistic social strategies. Mutualistic social strategies include team work, compromise, and communality, while antagonistic social strategies are aggressive and individualistic. Both Jones and Paulhus (2010) and Wai and Tiliopoulos (2012) link all three members of the dark triad to callousness. Hodson, Hogg, and MacInnis (2009) found that the triad was significantly correlated with social dominance (Machiavellianism $r=0.37$, narcissism $r=0.23$, and psychopathy $r=0.38$).

Differences in the Dark Triad

In spite of the demonstrated conceptual overlap in a number of areas, each dark triad component often produces unique correlations with particular variables. In relation to the Big Five personality dimensions, while agreeableness shows a negative relationship across all three components, neuroticism is tied only to Machiavellianism ($r=0.23$), extraversion to narcissism ($r=0.36$), and conscientiousness to only Machiavellianism and psychopathy ($r = -0.32; -0.37$) (Veselka, 2012). Narcissism also shows a significantly strong correlation to the extraversion dimension of the HEXACO model ($r=0.49$) (Lee & Ashton, 2005).

The dark triad produces different relationships relative to impulsivity and temporal orientation (Jones & Paulhus, 2011a). Both narcissists and psychopaths are

related to short-term orientations, while Machiavellian behavior is associated with a long-term orientation. Narcissism shows mixed results related to any impulse deficit, while psychopathy and Machiavellianism positively correlate with low impulsiveness (McDonald, Donnellan, & Navarrete, 2012).

In terms of social malevolence, narcissism appears to present a unique advantage over the other two members of the dark triad. Aside from the previously mentioned correlation with extraversion, narcissists are correlated with higher levels of emotional intelligence (Petrides, Vernon, Schermer, & Veselka, 2011) and only employ soft manipulation tactics such as humor and charm (Jonason, Slomski, & Partyka, 2012) and have no significant relationship to the low levels of moral development related to Machiavellianism and psychopathy after controlling for common variance (Jonason et al., in press).

Born or Made?

The origin of these three negative characteristics has been a topic of ongoing debate. Are individuals born with these dispositions, or are they produced by environmental factors? In studies of monozygotic (identical) and dizygotic (non-identical) twins, both narcissism and psychopathy tend to be most related to genetic characteristics ($r = 0.59, 0.64$ respectively $p < 0.05$), while Machiavellianism is most related to environmental factors $r = 0.39$ (shared i.e., cultural and family behaviors / experiences) and $r = 0.30$ (non-shared, i.e., non-family experiences). So, for the most part, narcissistic and psychopathic tendencies are inherited and either strengthened or weakened by environmental factors. Machiavellianism, on the other hand, is generally shaped by environmental factors.

Does Dark Insinuate Negative?

There are ample reasons to vilify the dark triad. Machiavellianism, subclinical narcissism, and subclinical psychopathy have all been linked to prejudice (Hodson et al., 2009), low agreeableness (Lee et al., 2013; Paulhus & Williams, 2002), low moral values (Jonason et al., in press), manipulation, and callousness (Jones & Figueredo, 2013). Conventional wisdom, as supported by Miller (2014), suggests that founders higher on dark characteristics will inevitably harm stakeholders, diminishing any success created. Several scholars support this theory, advocating the dark triad's inevitable "derailment" due to acute negative consequences related to striving for dominance, relationship damage, and morality flexibility (Babiak & Hare, 2006; Furnham, Richards, et al., 2013; Hogan & Hogan, 2001; Kets de Vries, 2006). Haynes et al. (accepted article) have suggested a new theory proposing that dark attributes (greed and hubris) of founders and family business owners would be consistently related to negative human and social capital outcomes.

Conventional wisdom leads us to believe that founders high on dark triad characteristics are repulsive, deviant, abusive, and calculating—akin to cold-blooded criminals such as Ed Gein. Jonason, Slomski, et al. (2012) support these assumptions, finding that the dark triad is highly correlated with the hard manipulative tactics of threats and conscious manipulation ($r = 0.64$ $p < 0.01$). In contrast, Jonason, Webster, Schmitt, Li, and Crysel (2012) propose that individuals higher on dark triad characteristics are actually popular and seductively appealing as "antiheroes" in popular culture. James Bond and Donald Trump are cases in point. These types of individuals are physically attractive (Holtzman & Strube, 2012) and more attractive to members of

the opposite sex than those with low levels of dark triad attributes (Carter, Campbell, & Muncer, 2014).

Evidence points to the possibility of situations where the dark triad may provide brighter, more positive outcomes (Judge, Piccolo, & Kosalka, 2009). Narcissism has been associated with bold, aggressive, and visionary leadership (Chatterjee & Hambrick, 2011). A study of 111 CEOs revealed that narcissism is positively related to measured strategic growth. Like narcissists, Machiavellians are highly motivated to assume leadership positions (Judge et al., 2009). These individuals are strategic thinkers and easily exert influence by using idiosyncratic tactics based on the psychological preferences of key players. The psychopath can also be a fearless and persuasive leader (Lilienfeld et al., 2012). Accordingly, Jonason, Wee, and Li (2014) suggest that rather than simply rejecting individuals high on the dark triad as “bad,” discarding them as categorically unfit, certain settings may capitalize on their unique characteristics.

Politics is one of those settings that seems particularly well-suited for individuals higher on the dark triad. Deluga (1997, 2001) found that not only did presidents with higher levels of narcissism and Machiavellianism fail to derail, they were actually more successful in building alliances, approval ratings, and perceived levels of charisma. Most strikingly, presidents higher on these characteristics outperformed those at lower levels. Even psychopathy, which is more prone to negative consequences (Jonason, Duineveld, et al., 2015), provided significant political advantages related to increased levels of dominance and fearlessness (Lilienfeld et al., 2012).

If dark triad characteristics can produce both negative and positive outcomes, is the dark triad bad? Based on universally accepted intuitions about right and wrong, Graham et al. (2011) proposes five dimensions to evaluate “bad” behavior: harm, fairness, loyalty, authority, and purity. A simple correlational analysis of the relationships between the dark triad and the five dimensions of morality reveals a negative relationship across all five dimensions of morality (Jonason et al., in press). However, a more robust analysis of the same data demonstrates that only psychopathy and Machiavellianism are bad, while narcissism is generally good. Psychopathy is negatively linked to each of the five areas of morality (β between -0.21 and -0.24), while Machiavellianism shows slightly higher negative associations with each area (β - 0.24 to -0.33) except the purity dimension (no significant relationship). The interesting finding is that narcissism positively corresponded to all dimensions of moral behavior (β 0.13 to 0.23) except fairness (no significant relationship). Though Graham’s research links only Machiavellianism and psychopathy to immoral behaviors when the shared variance of all three characteristics is removed, Jones and Figueredo (2013) found that the majority of shared variance is accounted for by the common core of manipulation and callousness. So, when narcissism’s core of manipulation and callousness are incorporated into its relationship with immoral behaviors (i.e. the correlation analysis), the results show that narcissism is equally “bad” across all five morality dimensions.

CHAPTER II

THEORETICAL DEVELOPMENT AND HYPOTHESES

Contextual Alignment-Distance Model of the Dark Triad

Because the dark triad is generally “bad” (morality negative), what can we learn from environments where the dark triad is associated with positive results? Why do individuals higher on the dark triad experience positive outcomes in some contexts but experience negative outcomes in others? Both Spain, Harms, and LeBreton (2014) and Padilla, Hogan, and Kaiser (2007) suggest that in reference to dark characteristics, context plays an important role in predicting positive or negative outcomes. In positive contexts, why does the dark triad’s core of manipulation and callousness not cause problems? A comparison of these different contexts (established businesses versus political settings) reveals two variables that should help to predict dark triad outcomes: interest alignment and relational distance. The first variable, interest alignment, measures the degree of self-interest and group-interest alignment. The second concept of relational distance can be described as both the time focus of social interactions and the amount of intimacy achieved in those relationships.

Interest alignment. The theory of interest alignment is grounded in agency theory that highlights the conflict often found between individual goals and

organizational goals. Interest alignment is defined as “the degree to which the members of the organization are motivated to behave in line with organizational goals” (Gottschalg & Zollo, 2007). Competitive advantage, according to this approach, is gained by increasing the performance of human assets, which are more difficult to imitate than tangible assets (Coff, 1997; Gottschalg & Zollo, 2007). Performance is thought to significantly improve when individuals are motivated to behave in line with organizational goals.

For example, a primary driver of dark triad-related behavior is striving for social dominance, power, and positions of authority (Brunell et al., 2008; Burris, Rempel, Munteanu, & Therrien, 2013; Campbell & Campbell, 2009; Lilienfeld et al., 2012). Situations that reward social dominance may be well suited for individuals with high levels of the dark triad. Settings where they are recognized as leaders with significant latitude for control may satiate dominance striving, minimizing negative outcomes associated with this struggle for control. However, in situations where these individuals are not in leadership positions, their striving for dominance and dislike of authority may be construed as selfish, deviant, and socially malevolent, leading to negative outcomes both up and down the corporate ladder. In an executive role, where social dominance is aligned with role expectations, the very same actions may be considered appropriate or even admirable (O'Boyle et al., 2012).

Even at the highest levels of corporations, agency issues create obstacles for shareholders because CEO interests are often not aligned with ownership interests (Nyberg, Fulmer, Gerhart, & Carpenter, 2010). Problems of agency have brought down a number of companies in which a CEO's personal agenda was not aligned with the

interests and goals of shareholders (Milton & Raviv, 2008). In the political environment, personal objectives are often the basis for political platforms and agendas (Bruff, 2015). This alignment of personal and political agendas means that for the high dark triad individual, manipulation achieves not only personal goals, but also political goals. The self-centered motivations of the dark triad's manipulation are obscured because the manipulation appears to be for the greater good (Price, 2003).

Thus, in higher interest alignment contexts, attributed motivations for success (and the behaviors used to achieve that success) may be masked. The motivation of tactics employed cannot be easily determined because the dark individual's actions may be interpreted as motivated by the diligent pursuit of goals to benefit the group instead of for selfish gain.

Relational Distance. Campbell and Campbell (2009) introduced the Contextual Reinforcement Theory, which describes the positive and negative outcomes of dark characteristics (specifically narcissism) in terms of emerging and enduring zones. Positive outcomes are primarily associated with the emerging zone, which is characterized by early-stage, low-intimacy relationships in short-term contexts. Negative outcomes associated with narcissism are found primarily in the enduring zone, which involves higher-intimacy relationships with a longer-term focus.

These same principles apply to both Machiavellianism and psychopathy. The dark triad's social dominance and increased popularity (Hawley, 2003) may be attributed to the use of charm, humor, compliments, and other manipulation tactics (Jonason, Slomski, et al., 2012). In the short-run, these tactics work very well to help individuals higher on the dark triad achieve success and popularity. The corporate setting favors social

interactions oriented toward a long-term focus, where trust is gradually gained and performance is consistent enough to mandate advancement (Rousseau, Sitkin, Burt, & Camerer, 1998). As a result, in these settings the social costs related to the dark tendencies of callousness, manipulation, and self-promotion overtake early success (Campbell & Campbell, 2009).

In contrast, most political environments favor short, impersonal social interactions such as with voters and constituents. The public rarely gets past the carefully crafted veneer designed to be seductive and appealing. Working relationships are of limited duration, specifically motivated by policies and agendas (i.e., interactions with other politicians and special interest groups). Few people spend enough time with the “dark” personality to uncover the selfish motivations and callous manipulation that lies beneath the polished façade (Cleckley, 1988). Accordingly, the negative consequences associated with extended or enduring zone (Campbell & Campbell, 2009) social interactions are ameliorated for all interactions, except for a small group of strategic insiders (Bass & Steidlmeier, 1999).

Based on these two variables and their relationships to the success or failure of varying levels of dark triad characteristics, the following statements provide a set of propositions based on the model shown in Figure 1:

Proposition 1: In situations of low interest alignment and low relational distance, individuals with higher levels of dark triad will experience higher levels of negative outcomes regardless of time frame.

Proposition 2: In situations of high interest alignment and high relational distance, individuals with higher levels of dark triad will experience higher levels of positive outcomes in both emerging and enduring zones.

Proposition 3: In situations of high interest alignment and low relational distance, individuals with higher levels of dark triad will experience lower levels of negative outcomes in the emerging time zone and higher levels of negative outcomes in the enduring zone.

Proposition 4: In situations of low interest alignment and high relational distance, individuals with higher levels of dark triad will experience higher levels of positive outcomes in the emerging time zone and lower levels of positive outcomes in the enduring zone.

The New Venture Context

If the political setting provides a clear advantage over the corporate setting for individuals higher on dark triad characteristics, how are these individuals likely to fare in the new venture context? Very little is known about the dark triad in this context. Published research on any of the dark triad variables and new ventures has been focused on either predicting entry or demonstrating over-representation of these attributes within samples of entrepreneurs and nascent entrepreneurs (Akhtar et al., 2013; Hmieleski & Lerner, 2013; Mathieu & St-Jean, 2013). Examining the dark triad-entrepreneurial relationship in light of the aforementioned contextual model should provide a realistic prediction of possible outcomes.

Interest Alignment. New venture contexts do not create the same agency issues found in corporate contexts where ownership and management are separated

(Audretsch, Lehmann, & Plummer, 2009). In most instances, founders also have ownership interests in their ventures. Aside from the issue of ownership, agency issues are reduced because personal and venture interests are nearly identical in many emerging ventures (Cardon, Zietsma, Saporito, Matherne, & Davis, 2005). Cardon describes new ventures as extensions of the entrepreneur's identity, with strong emotional connections between the entrepreneur and his or her business. These very high levels of interest alignment between the founders and their venture may be an advantage to founders high on the dark triad. Stakeholders and potential stakeholders in the new venture look for attributional queues in order to assess the underlying motives for founder behaviors (Martinko, Harvey, & Douglas, 2007). Though the "darker" founder's behavioral motivations are rooted in self-advancement, these behaviors also advance the new venture. Consequently, founders appear to be acting in the best interests of the venture (when, in actuality, they are acting in their own self-interest). Stakeholders' attributions of the founder's motivation may not account for the founder's selfish motives because of this overlap.

Relational Distance. New ventures are emerging enterprises. As such, the time period for relationship interaction is, by nature, short-term. Founder relationships with employees in the venture have not typically extended into the enduring zone described by Campbell and Campbell (2009) because employees may still view founders higher on the dark triad in a favorable light. In fact, with short-term exposure to founders higher on these attributes, employees (as well as other stakeholders) may feel founders are highly likable and exciting. Because the majority of negative consequences associated with dark characteristics are found in longer-

term relationship contexts (Campbell & Campbell, 2009), founders higher on dark triad characteristics should avoid many of the negative outcomes associated with their manipulation and interpersonal callousness.

Taking into account the high interest alignment and high relational distance expected in the new venture setting, interpersonal outcomes are anticipated to be generally positive for founders higher on the dark triad. In order to test this theory, the following sections describe several hypotheses related to employee outcomes relative to interactions with supervisors (or in this case, new venture founders).

New Venture Employee Creativity

According to Amabile (1996), levels of employee creativity are extremely sensitive to subtle social-environmental influences—the most important being relationships with supervisors—thus providing a sensitive gauge of the dark triad’s negative social outcomes. The concise definition of creativity as “the production of novel and useful ideas” offered by Amabile, Conti, Coon, Lazenby, and Herron (1996) is used throughout entrepreneurship literature (Cardon, Wincent, Singh, & Drnovsek, 2009; Chen, 2007; Gielnik, Frese, Graf, & Kampschulte, 2012; Ward, 2004; Wu, McMullen, Neubert, & Yi, 2008). According to Amabile (1996), the novel or useful ideas of entrepreneurial creativity may pertain to products and services, methods of production or delivery, means of obtaining resources, or identification of new markets at any point in the startup process.

“Creative ideas do not appear, *ex nihilo*, full-blown in the minds of their originators, but rather must be crafted from the person’s existing knowledge,” (Ward, 2004, p. 176). This process is what Koestler (1964) and Smith and Di Gregorio (2002)

label as bisociation, finding novel and applicable connections between existing experience and knowledge. The componential theory of creativity (Amabile, 1993; Amabile, 1988) suggests that creativity is dependent on four factors, including intrinsic motivation, the social environment, and the aforementioned skills and cognitive ability. In management literature, the most immediate and direct predictor of employee creative task motivation is their relationship with management (Amabile, 2013).

Specific to the interest-alignment argument, positive employee attributions of a manager's motives seem to weaken the damage relating to abusive manager behaviors that clearly violate social expectations. In their study of the effects of abusive supervision on employee creativity, Liu, Liao, and Loi (2012) find that while abusive supervision is negatively related to employee creativity, the relationship is moderated by employee motive attribution. When employees perceive a supervisor's abusive behavior to be motivated by selfish or harmful desires, employee creativity declines significantly. Alternatively, when motives are attributed to the supervisors' desire to increase performance for group benefit, employee creativity is only minimally reduced. Thus, in the new venture context where there is a high degree of interest alignment, employees are more likely to attribute positive motives to even hard manipulative tactics.

Existing empirical research shows employee creativity is related to several other factors beyond the interest-alignment argument. First, employee creativity is consistently linked to transformational leadership (Gong, Huang, & Farh, 2009; Gumusluoglu & Ilsev, 2009; Shin & Zhou, 2003). It is also well documented that dark triad characteristics, when in leadership positions, can resemble transformational leadership

(Bass & Steidlmeier, 1999; Khoo & Burch, 2008; Price, 2003; Schuh, Zhang, & Tian, 2013). This case of mistaken identity is likely due to perceptions of charisma, grand vision (Rosenthal & Pittinsky, 2006), and fearless dominance (Lilienfeld et al., 2012) often recognized in dark triad leaders. Bass and Steidlmeier (1999) suggest that these pseudo-transformational leaders are experts at impression management, inspiring and empowering their employees to face challenging goals. The leader is idealized by employees who see a grand and compelling vision presented to be for the good of the employees, the business venture, and society. The main difference between authentic transformational leaders and pseudo-transformational leaders is their motivation (Bass & Steidlmeier, 1999). Authentic leaders focus on altruistic goals and the common good, while pseudo-transformational leaders are primarily concerned with personal power and position, even at the expense of their followers' achievements (Schuh et al., 2013). In the new venture setting the lines between selfish and venture goals are blurred, making the distinction between genuine and pseudo-transformational leaders difficult. Based on these arguments, founder dark triad levels should be related to increases in employee creativity.

Hypothesis 1a: Founder Machiavellianism is positively related to employee creativity.

Building on the previous line of reasoning, narcissism should be positively related to employee creativity. Additionally, the argument suggesting an hypothesized relationship between narcissism and employee creativity benefits from two unique characteristics associated with narcissism. First, narcissism is the only member of the dark triad positively linked to extraversion in both the Big Five and HEXACO personality models (Lee & Ashton, 2005; Paulhus & Williams, 2002; Veselka et al., 2011). Narcissism is also correlated with higher levels of emotional intelligence (Petrides

et al., 2011). Both extraversion and emotional intelligence are related to LMX (quality leader-member exchange) relationships (Phillips & Bedeian, 1994; Xiaqi, Kun, Chongsen, & Sufang, 2012). High quality leader-member exchange relationships are known to be positively related to employee creativity (Pan, Sun, & Chow, 2012; Volmer, Spurk, & Niessen, 2012). Lee, Scandura, Kim, Joshi, and Lee (2012) find that high quality LMX relationships between supervisor and employees significantly predict higher levels of creativity ($\beta=0.70$). Thus, higher levels of extraversion associated with narcissism should be related to higher quality founder-employee relationships, which have been linked to higher levels of employee creativity.

Second, unlike Machiavellianism, four studies find narcissism is associated with higher levels of creativity. The first study by Gino and Ariely (2012) finds that narcissism is significantly and positively correlated with self-reported creativity ($r=0.23$) and existing creative behavior (Hocevar's Creative Behavior Inventory) ($r=0.36$). The second published article examines both individual and group levels of narcissism, significantly linking individual narcissism to other-reported levels of creativity ($\beta=0.30$ $p<0.05$), as well as others' perceptions of creative personality ($\beta=0.34$ $P<0.05$). Examining group levels of narcissism, the researchers find a curvilinear relationship between group narcissism and group creativity. Creativity levels increase with group scores up to six and then begin to decrease as group narcissism scores increase (Goncalo, Flynn, & Kim, 2010). The third article supports both self-reported creativity increase and actual creativity increases related to individual narcissism levels (Raskin, 1980). Furnham, Hughes, and Marshall (2013) find narcissism to be positively linked to both self-reported and historical creativity levels.

Cattell and Butcher (1968, p. 285) posit that “creativity is best acquired by association with creativity.” Thus, founder creativity should have some association with employee creativity. In an ethnographic study of an Internet startup between 1995 and 2003, Drori, Honig, and Sheaffer (2009) find that founder modeled creative behavior did correspond to higher levels of employee creativity. Two quantitative studies find similar results, demonstrating that when founders model creativity and unconventional behavior, follower creative performance increases (Jaussi & Dionne, 2003; Shalley & Perry-Smith, 2001).

Consequently, in light of prior arguments and in light of increasing in extraversion and creativity, founder levels of narcissism should be positively related to employee creativity.

Hypothesis 1b: Founder narcissism is positively related to employee creativity.

The earlier discussion of psychopathy mentioned that it is the most toxic, dangerous, aggressive, and socially undesirable of the three dark triad characteristics (Jonason, Baughman, et al., 2015; Jonason, Duineveld, et al., 2015; Mathieu et al., in press; O'Boyle et al., 2012). This is not to suggest that psychopathy will always result in negative outcomes. Aspects of subclinical psychopathy can produce high levels of sustained success in certain contexts (Lilienfeld et al., 2012). However, given the sensitive nature of employee creativity to even slight issues in the social environment, levels of founder psychopathy should be negatively related to employee creativity.

This premise is based on two distinct differences between psychopathy and the other two members of the dark triad (Machiavellianism and narcissism). First, when the dark triad was evaluated based on use of hard or soft manipulation (Jonason, Slomski, et al., 2012), psychopathy relied exclusively on the hard manipulative tactics of threats

and aggression. Narcissism was linked to only soft manipulation (charm, humor, etc.). Machiavellianism was linked to both soft and hard manipulation. Because employee creativity is known to decrease when faced with threatening, abusive supervision (Liu et al., 2012), higher levels of founder psychopathy should be negatively related to employee creativity.

The second key difference between psychopathy, Machiavellianism, and narcissism is impulse control. In a study comparing each member of the dark triad to impulse control, psychopathy was the only attribute showing a significant relationship (Jones & Paulhus, 2011b). The consequence of low impulse control is self-destructive behavior and antisocial behavior because individuals with higher levels of psychopathy are unable to inhibit impulses for self-gratification, which, in turn, manifest in markedly antisocial behaviors.

Though there is a high level of interest alignment and high relational distance in new venture settings, founders with higher levels of psychopathy seem to correlate with lower levels of employee creativity.

Hypothesis 1c: Founder psychopathy is negatively related to employee creativity.

Employee Creativity-Performance Relationship

One of the hallmarks of Schumpeter's (1934) vision of entrepreneurship is "creative destruction," extolling the value of divergent thinking that breaks from societal norms. Congruently, it is widely acknowledged that employee creative performance is a necessary ingredient of sustaining a firm's competitive advantage (Amabile, 1988; Andries & Czarnitzki, 2014; Liao, Liu, & Loi, 2010; Oldham & Cummings, 1996; Volmer et al., 2012). Specifically, research demonstrates that small, entrepreneurial firms

benefit significantly from increased employee contributions and performance. Comparing the contributions of founding CEOs, new venture managers, and non-managerial employees in these firms, Andries and Czarnitzki (2014) found the contributions of non-managerial employees were more strongly related to new product sales and process innovation than those of managers. Given the importance of employee creativity to the new venture, a reasonable assumption is that employee creativity would be valued by founders and reflected in employee performance reviews.

Examining employee creativity in an established Taiwanese insurance firm, Gong et al. (2009) find a very strong, significant correlation between employee creativity and supervisor-related job performance ($r = 0.73$) as well as sales ($r = 0.17$). Other studies find similar results (Madjar & Ortiz-Walters, 2009).

For the purposes of the current study, the relationship of employee creativity to employee performance facilitates another path for a demonstrated relationship between founder levels of dark triad characteristics and employee performance. While not a direct relationship to employee performance, the following hypotheses do point to an anticipated indirect relationship between employee performance and founder Machiavellianism, narcissism, and psychopathy through the founder-employee creativity association previously hypothesized.

Hypothesis 2: In new ventures, employee creativity will be positively linked to founder-rated employee performance.

Hypothesis 3a: Through employee creativity, founder levels of Machiavellianism will be indirectly and positively related to employee performance.

Hypothesis 3b: Through employee creativity, founder levels of narcissism will be indirectly and positively related to employee performance.

Hypothesis 3c: Through employee creativity, founder levels of psychopathy will be indirectly and negatively related to employee performance.

New Venture Employee Performance

Notwithstanding a wealth of research on the topic, according to Li, Barrick, Zimmerman, and Chiaburu (2014), researchers have underestimated the predictive validity of personality characteristics. A meta-analysis of 222 correlations from 73 samples demonstrates the importance of individual characteristics to predicting effective leadership (Judge, Bono, Ilies, & Gerhardt, 2002). Relevant to the current discussion, in a study measuring manager empathy and its link to employee performance over a two-week period, Scott, Colquitt, Paddock, and Judge (2010) find a significant link between higher levels of manager empathy and higher employee performance. Consequently, a negative relationship between founders high on dark triad characteristics (which are known to be associated with low levels of empathy) and employee performance should be expected. However, an important factor in the founder empathy-employee performance relationship may be how well the founder is able to mask their low levels of empathy.

Observing dark triad behavior is a masterclass of manipulative tactics. They are social chameleons, cleverly manipulating individuals and situations by mirroring their attitudes and behaviors (Hurley, 2005). This skill allows founders high on these attributes to gain employees' trust and extract the desired outcome—performance. Trust is a key antecedent to performance. In a study of 333 employees of a small Midwestern

manufacturing facility, Mayer and Gavin (2005) find that higher levels of trust in supervisors corresponds to higher levels of employee in-role performance. Similar results were obtained in a study of 176 hairstylists from 14 Paul Mitchell salons (trust to employee performance $\beta=0.24$) (Madjar & Ortiz-Walters, 2009)

Jonason and Webster (2012) suggest that individuals with higher levels of dark triad attributes employ a number of different manipulation strategies to avoid detection and maintain target trust. These tactics include coercion, charm, pleasure induction, social comparison, seduction, debasement, responsibility invocation, monetary rewards, humor, alliances, threats (of appeal or punishment), compromise, compliments, appearance, exchange of favors . . . and the list goes on (Jonason, Slomski, et al., 2012; Jonason & Webster, 2012). The end goal of the manipulation is to control others' performance. Consequently, hypothesizing a link between employee performance and founder dark triad characteristics is not a significant logical leap.

Using the alignment-distance model in the new venture context, as mentioned previously, there is a high degree of alignment between founder and venture interests. In this context, the manipulative behaviors archetypal of the dark triad, specifically directed towards employees, are difficult for others to attribute to selfish motives. Believing that the founder/manager is working toward the goal of business success, employees are likely to see manipulation as being beneficial to the venture. Employees may even construe these aggressive and unconventional behaviors as authentic transformational leadership (Khoo & Burch, 2008; Schuh et al., 2013). Transformational leadership is positively linked to increases in employee performance (Walumbwa & Hartnell, 2011).

High relational distance makes motive discovery even more challenging to employees. Given the short-term nature of relationships in new ventures, a founder high on the dark triad may easily gain employee trust and respect, extracting desired outcomes from employees (O'Boyle et al., 2012). Employees do not have long-term relationships with founders and may have limited daily interactions; both issues limit a deeper understanding of the founder's personal motives.

Narcissism, though still employing manipulative tactics to control the performance of others, only uses soft manipulation tactics. These tactics, as mentioned previously, include charm, appearance, humor, and ingratiation. Socially, soft manipulation often creates a veneer of friendship (Jonason & Schmitt, 2012). Thus, the likelihood of negative outcomes – associated with true motive discovery – are minimal.

As in the hypothesized relationships between founder dark triad levels and employee creativity, the dark triad characteristics are expected to have different outcomes in relation to employee creativity. The social effectiveness of Machiavellianism and narcissism may permit the founders to mask the true nature of their manipulation (Witt & Ferris, 2003), thus making these two characteristics more successful in eliciting higher levels of employee performance.

Hypothesis 4a: Founder levels of Machiavellianism are positively related to employee performance.

Hypothesis 4b: Founder levels of narcissism are positively related to employee performance

In a sample of 114 leader-follower dyads testing transformational and pseudo-transformational leaderships, Schuh et al. (2013) find that if employees are able to

determine that the leader was acting for personal gain, employee performance decreased. If employees did not attribute manager motives to selfish ends (immoral goals), then employee performance increased. Because psychopathy is more prone to hard manipulation (Jonason, Slomski, et al., 2012) and to being antisocial and socially maladaptive (Lilienfeld et al., 2012), a negative link to employee performance is expected.

Hypothesis 4c: Founder levels of psychopathy are negatively related to employee performance.

Tenure Moderation of Employee Creativity

A significant threat to the dark triad is the discovery of their true motives. Relationships, whether in business, politics, or social groups, are governed by tacit rules of social exchange and fairness. Economic exchanges are quid pro quo interactions with predetermined rewards for behavior. In social exchanges the rewards are rarely specified in advance. This reward ambiguity opens the door for perceived opportunistic behavior (Cook, Cheshire, Rice, & Nakagawa, 2013). As a way of reducing exposure to opportunistic behavior, the vulnerable party (employee) looks for signs of trustworthiness in the other party (founder). If, in early exchanges, the founder provides an adequate act of reciprocity, it signals a level of trustworthiness, and commitment begins to develop (Molm, 2010).

A cursory view of dark triad characteristics may lead to the assumption that striving for personal goals violates basic fair-exchange relationship assumptions, leading to negative consequences (Hogan & Hogan, 2001; Miller, 2015). If this is the case, then a pertinent question is, “why are there successful individuals with high levels of dark triad characteristics?”(Babiak & Hare, 2006; Deluga, 1997, 2001; Hall &

Benning, 2006; Lilienfeld et al., 2012) A more considered understanding of the dark triad (Machiavellianism in particular) reveals an experienced use of manipulative tactics, which not only help them avoid discovery, but build trust and establish powerful social networks (O'Boyle et al., 2012).

Campbell and Campbell's (2009) contextual reinforcement model provides a way to clearly visualize the costs and benefits of narcissism, which have application for the dark triad as a whole. Most benefits associated with dark leaders like James Bond, Donald Trump, and Tony Soprano are in the emerging zone, where followers find relationship satisfaction, emergent leadership, and excitement. However, in the enduring zone, relationships suffer from little intimacy, impulsive behaviors, aggression, and accrued outcomes of moral deficits. Unfortunately for the dark founder, "emerging situations naturally drift into enduring situations" (Campbell & Campbell, 2009 p. 221).

Specifically examining employee creativity and emerging vs. enduring zone relationship outcomes, creativity is likely to be higher in the emerging zone, given the consistent use of manipulative tactics and emotional callousness across all three dimensions of the dark triad. The proverbial saying "tempus omnia revelat" (time reveals all things) means that the underlying selfish drive and moral deficits of the founder higher on the dark triad will cause relational damage. Because, as mentioned earlier, creativity is sensitive to even the slightest social violations, the interaction of time and all dark triad characteristics should weaken the founder's relationship with employee creativity.

Hypothesis 5a: Employee tenure moderates the positive relationship between Machiavellianism and creativity, weakening the relationship.

Hypothesis 5b: Employee tenure moderates the positive relationship between narcissism and creativity, weakening the relationship.

Hypothesis 5c: Employee tenure moderates the negative relationship between psychopathy and creativity, weakening the relationship.

Tenure Moderation of Employee Performance

In a meta-analysis of 350 empirical studies with a sample size of 249,841, Ng and Feldman (2010) find a strong and significant link between increased employee performance and tenure. Thus, a hypothesis suggesting that there is a relationship between increases in tenure and decreased employee performance opposes existing findings. However, in the case of the dark triad, long-term exposure should correspond to decreased employee performance.

It is commonly assumed that the dark side of dark triad personalities often emerges later in the tenure of a leader (Campbell & Campbell, 2009; Hogan & Hogan, 2001; House & Howell, 1992). While in certain occupational roles such as sales (Ricks & Fraedrich, 1999) or politics (Deluga, 2001) the charisma and extraversion of narcissism and Machiavellianism enable longer-term success, in positions where success depends on building sustained relationships and trust, these characteristics will likely be much less successful (Robins & Paulhus, 2001).

In entrepreneurship, the emerging pre-launch and launch stages of the venture (Baron, 2007) are highly unstable. As such, dark triad leadership may be an advantage because the short-term focus and volatility may obscure motives. However, because the self-beneficial tactics of the dark triad are often toxic, destructive, fraudulent, exploitative, or manipulative (Jonason & Schmitt, 2012; Jones & Paulhus, 2011;

Paulhus & Williams, 2002), eventually employees may suffer. In the post-launch phase, as the venture becomes established, dark triad leadership should be less effective (Rosenthal & Pittinsky, 2006) because their initial success was at the expense of relationships with those around them (Campbell & Campbell, 2009). These selfish behaviors and tendencies erode trust and undermine relationships over time (Blair, Hoffman, & Helland, 2008; Hogan & Kaiser, 2005), corresponding to a negative relationship between employee-rated leadership and dark characteristics (Judge, LePine, & Rich, 2006).

Several studies support this difference between employee perceptions of short-term vs. long-term 'dark' leadership effectiveness (Brunell et al., 2008; Campbell & Campbell, 2009; Judge, Bono, Ilies, & Gerhardt, 2002). During the short term emerging period, Brunell et al. (2008) found that narcissism significantly predicted group member ratings of leadership. Conversely, a study by Rosenthal and Pittinsky (2006) found that when leadership evaluations were tracked over time, narcissism predicted initial positive evaluations and, in later interactions, predicted negative evaluations.

In business organizations, trust is defined as a party's willingness to be vulnerable to another in spite of being unable to control or monitor them (Mayer, Davis, & Schoorman, 1995). Kanfer and Ackerman (1989) propose a theory of limited cognitive and attentional resources that Mayer and Gavin (2005) suggest reduces employee work performance. The lack of trust diverts the employee's attention away from productivity. When employees lack trust in the founder/manager and are unwilling to be vulnerable, they will be preoccupied with self-protection or defensive behaviors as a way of protecting themselves against the opportunistic behavior. When the selfish behaviors and

tendencies of the founder begin to erode trust and undermine relationships, the new venture employees will then likely experience decreased productivity.

Hypothesis 6a: Employee tenure moderates the relationship between Machiavellianism and performance, strengthening the relationship.

Hypothesis 6b: Employee tenure moderates the relationship between narcissism and performance, strengthening the relationship.

Hypothesis 6c: Employee tenure moderates the relationship between psychopathy and performance, strengthening the relationship.

CHAPTER III

METHODOLOGY

Study One

Participants. The participants for this study were small business founders residing in West Virginia, Ohio, Kentucky, Oklahoma, Kansas, and Texas selected from the Reference USA database. Participants were selected based on the following criteria: (1) were in business for less than ten years, (2) have 20 employees or fewer, and (3) had active email accounts in the database. Candidates were selected based on employee number to ensure sufficient interaction between the founder and employee. High-growth ventures exceeding 20 employees may have at least one layer of management between employees and the founder, making the characteristics of the founder less important to employee daily performance. Active email accounts were necessary due to time and budget constraints, preventing the mailing of printed surveys, survey return, and manual data entry of responses. Based on the above criteria, the final list included 3,233 candidates

Each candidate received an email invitation with a link to an online survey via Qualtrics on four separate occasions over a three-month period. Of the 11,489 emails sent, 20.6% (2,376) were opened, 15.4% (365) opened the embedded link and began the survey.

The dropout rate was 56.4%, resulting in 159 completed surveys. This response rate of 4.9% was significantly higher than the ReferenceUSA estimated response rate for this type of email contact list with no payment or financial incentive for participation.

Each survey included standard demographic questions for the individual business owner as well as two of their employees. The business owners completed a 27 item self-reported characteristics assessment and two employee evaluations. Once the survey data were collected, all records with missing data or employees listed as owner (seven records) were deleted. Of the 314 remaining surveys, 65 unengaged responses (calculated by change in standard and reverse-scored items omitting neutral scores) were deleted, resulting in a final dataset of 245 unique business owner-employee records.

Measures.

The dark triad. For this study, the dark triad characteristics were measured with the 27-item short dark triad measure (SD3) recently introduced by Jones and Paulhus (2014). This brief measure is a proxy that captures the essence of the 20-item Mach-IV (Christie & Geis, 1970) measuring Machiavellianism, the 40-item Narcissistic Personal Inventory (NPI) (Raskin & Terry, 1988), and the 64-item self-report psychopathy scale (SRP-III) (Paulhus, Neumann, & Hare, in press). In spite of the short time since its publication, the SD3 measure has already been employed successfully in studies of the dark triad (Arvan, 2012; Baughman, Dearing, Giammarco, & Vernon, 2012; Lee et al., 2013).

The SD3 measure uses a five-point Likert scale ranging from 1 = disagree strongly to 5 = agree strongly. Participants are instructed to answer 27 questions (nine for each dark triad characteristic) by indicating how much they agree with each of the statements. The questions used in the measure were selected based on four underlying

concepts for each characteristic. Machiavellianism, according to the MACH-IV (Christie & Geis, 1970) is typified by four factors: reputation, planning, coalition building, and cynicism. Questions for Machiavellianism theoretically based on reputation include (a) “It’s not wise to tell your secrets,” and (b) “There are things you should hide from other people to preserve your reputation.” Questions based on the cynicism factor include (a) “I like to use clever manipulation to get my way,” and (b) “Most people can be manipulated.” Coalition building questions include (a) “Whatever it takes, you must get the important people on your side,” and (b) “Avoid direct conflict with others because they may be useful in the future.” Finally, questions theoretically based on the factor of planning include (a) “It’s wise to keep track of information that you can use against people later,” (b) “You should wait for the right time to get back at people,” and (c) “Make sure your plans benefit yourself, not others.”

Narcissism is measured by six positively worded items and three negatively worded items. The questions were selected based on four factors that typify narcissism: leadership, exhibitionism, grandiosity, and entitlement. Only one question tests for leadership: “People see me as a natural leader.” Two negatively worded questions measure exhibitionism: (a) “I hate being the center of attention,” and (b) “I feel embarrassed if someone compliments me.” Grandiosity is measured with five questions, the fifth of which is negatively worded: (a) “Many group activities tend to be dull without me,” (b) “I know I am special because everyone keeps telling me so,” (c) “I like to get acquainted with important people,” (d) “I have been compared to famous people,” and (e) “I am an average person.” Finally, one question measures the entitlement factor: I insist on getting the respect I deserve.

The nine questions measuring psychopathy are based on four factors from the SRP-III: antisocial behavior, erratic lifestyle, callous affect, and short-term manipulation. Three questions were designed to measure antisocial behavior: (a) “I like to get revenge on authorities,” (b) “People who mess with me always regret it,” and (c) “I have never gotten into trouble with the law.” Two questions are based on the underlying factor of erratic lifestyle, the first of which is negatively worded: (a) “I avoid dangerous situations,” and (b) “People often say I’m out of control.” Callous affect is measured by two questions: (a) “Payback needs to be quick and nasty,” and (b) “It’s true that I can be mean to others.” Finally, short-term manipulation is measured by two questions: (a) “I enjoy having sex with people I hardly know,” and (b) “I’ll say anything to get what I want.”

The published factor loadings of the final three factor measures range from 0.31 to 0.71, with 13 of the 27 items having factor loadings less than 0.50. Additionally, eight of the items have cross-factor loadings ≥ 0.30 . However, overall the measure has acceptable reliabilities (Machiavellianism $\alpha = 0.71$, narcissism $\alpha = 0.77$, and psychopathy $\alpha = 0.74$).

Employee tenure. The time of the founder-employee relationship was measured by subtracting the start date of each employee from the date the founder completed the survey. This resulted in a variable measuring the relationship duration between the employee and business owner by the number of days of employment in the new venture.

Employee creativity. There are three methods currently used in literature to measure employee creativity levels including counting the number of patents filed (Chen, 2007), self-reported creativity (Choi, Moon, & Ko, 2013; Ruppel & Harrington, 2000), and supervisor evaluation of employee creativity (Tierney, Farmer, & Graen, 1999; Zhou & George, 2003). Perry-Smith (2006) developed a new, five-item measure for

knowledgeable observers to rate subordinate creativity over a given period (e.g., two years) using a five-item scale.

The participants in the sample selected represent multiple industries including agriculture, mining, construction, manufacturing, transportation, distribution, retail, finance, and services. Because the sample represents a wide diversity of industries, counting patents filed may not be an appropriate measure of creativity. Many of these industries do not typically file patents. As for the self-report approach to measuring creativity, prior research demonstrates that self-reported creativity differs from actual creativity levels (Goncalo et al., 2010; Raskin, 1980). Supervisor reported creativity was tested ($t[97] = -4.20$ $p \leq 0.01$) against recognized creative accomplishment. Those recognized by senior management other than the direct supervisor for their creative accomplishments had a mean supervisor creativity score of 3.8 (s.d.= 0.77) compared to unrecognized employees in the same company who had a mean supervisor creative score of 3.0 (s.d.= 0.81). Accordingly, supervisor- measured creativity was selected for this study.

The Perry-Smith (2006) creativity measure items load on one factor, which explains 74.4 percent of variance ($\alpha = 0.91$). Business owners were instructed to rate two employees with different lengths of service (the newest hire employed at least 90 days and a long-term employee) on a 5-point Likert scale from 1= not at all characteristic to 5 = extremely characteristic, considering their performance over the prior 12 months (or from the time of hire, whichever is shorter). Items include (a) “has new ideas/approaches to customer problems,” (b) “finds new ways to apply existing technology,” (c) “takes risks,” (d) “has radical new ideas”, and (e) “has original long-term vision.” The original

survey asked supervisors to rate based on the prior 24 month time period. The period of 12 months (or from date of hire) was selected because recall bias at 24 months is likely to be lower than recall bias for a 12 month period (Connelly, Brown, & Knuth, 2000).

Employee performance. In order to obtain employee performance scores, founders measured each employees' in-role performance using four items from the Williams and Anderson (1991) scale (Liden, Wayne, Liao, & Meuser, in press). Business owners were asked to rate two employees (the newest hire employed at least 90 days and a long-term employee) on a 5-point Likert scale from 1= not at all characteristics to 5 = extremely characteristic, considering their performance over the prior 12 months (or from the time of hire, whichever is shorter). The specific list includes items such as "Employee adequately completes assigned duties," and "Fulfills responsibilities specified in job description." The internal consistency of the measure from Liden et al. (in press) was $\alpha = 0.92$.

Control variables. Five employee variables significantly related to creativity and performance were added to the model as controls (Shalley & Gilson, 2004). Levels of industry-specific knowledge and education were included because they are known to increase creative cognitive ability by providing a greater amount of information in the creative bisociation process (Ireland, Hitt, & Sirmon, 2003). Industry-specific knowledge was measured in years of experience prior to hire date. Education was measured on a five-point Likert scale with 1 representing some high school, 2 representing high school graduate, 3 representing some college, 4 representing a four-year college degree, and 5 representing an advanced degree.

Age is known to be a significant factor predicting creativity (Wu, Cheng, Ip, & McBride-Chang, 2005) and employee performance (Kooij et al., 2013). There is evidence that in some contexts age negatively correlates with performance (Cleveland & Lim, 2012). Gender is also an important variable in predicting creativity, although many other variables influence this relationship (Baer & Kaufman, 2008). Industry context, based on prior arguments, is likely to be related to the hypothesized relationships. For this study, respondents were asked to provide titles for employees. The titles were manually coded into a dichotomous variable with 2 representing sales-related functions and industries. All others were coded to 1. Founder education and experience were also included as control variables because of the likely connection to both creativity and performance.

Results

A summary of descriptive statistics, correlations, and scale reliabilities for each variable in Study One has been provided in Table 2. As expected from literature, Machiavellianism and psychopathy were significantly intercorrelated. The composite dark triad variable has been included for informational purposes only. Lumping the three variables together is not recommended because it does not account for their unique properties. Each measure's reliabilities (Cronbach's alpha) are reported on the diagonal (Short Dark Triad (SD3) measure $\alpha = 0.73$; employee creativity $\alpha = 0.80$; employee performance $\alpha = 0.90$).

Structural equation modeling was used to test all hypotheses. Prior to testing the hypothesized model, a check for common method bias was completed. The SD3 is a self-reported measure of individual characteristics and may be subject to common method variance. Using Harmon's single factor method, the 27 items of the SD3

measure, five items measuring employee creativity and four items measuring employee performance were tested using an unrotated principle component extraction. If more than 50% of the cumulative variance is explained by one common factor, then common method bias may be contributing to inflated or deflated responses. The total cumulative variance explained by one variable is 15.10%; therefore, common method bias does not significantly affect responses.

The measurement model was tested with five latent variables (Machiavellianism, narcissism, psychopathy, employee creativity, and employee performance) and 36 indicators (9 for each dark triad variable, 5 for employee creativity, and 4 for employee performance). The measurement model revealed irregular factor loadings but produced an acceptable model fit ($X^2/df = 2.52$ $p < 0.001$, GFI = 0.756, RMSEA=0.08). After confirming adequate fit of the measurement model, the hypothesized model was tested. Results of the structural portion of the analysis provided an acceptable fit to the data ($X^2 = 1988.17$, $df = 926$, $p < 0.001$, $X^2/df = 2.15$, GFI = 0.75, RMSEA = 0.07). The results of the structural analysis are provided in Table 3.

Hypothesis testing.

Based on the results of the structural equation model analysis, hypotheses were examined to test the suggested relationships. Hypotheses 1a and 1b predicted that founder (a) Machiavellianism and (b) narcissism would be positively related to employee creativity. Hypothesis 1c predicted that founder psychopathy would be negatively related employee creativity. The standardized regression coefficients for all three hypothesized relationships were not significant. Hypotheses 1a, b, and c were not supported.

Hypothesis 2 predicted that employee creativity would be positively related to supervisor-rated employee performance. The results from the analysis show a strong and significant relationship ($\beta = 0.30$ $p < 0.001$) supporting hypothesis 2. However, because the relationships among all dark triad variables and employee creativity were not significant, no support was found for hypotheses 3a-3c that predicted significant indirect relationships between each dark triad variable and employee performance through creativity.

Hypotheses 4a and 4b proposed positive relationships between both independent variables, Machiavellianism and narcissism, and dependent variable employee performance. The standardized regression coefficient for Machiavellianism was 0.47 and significant at the 0.01 level, strongly supporting hypothesis 4a. The relationship between narcissism was neither strong nor significant ($\beta = 0.08$). Thus, hypothesis 4b was not supported. Hypothesis 4c predicted a negative relationship between founder psychopathy and employee performance. Results strongly support hypothesis 4c ($\beta = 0.40$ $p < 0.05$).

The results did not support the anticipated relationships for the hypotheses predicting employee tenure moderation between each dark triad variable and employee creativity (hypotheses 5a-5c). The interaction effects were not statistically significant. However, hypotheses 6a-6c, which predicted a significant interaction between employee tenure and each of the dark triad characteristics' relationships with employee performance were partially supported. While the results of the analysis showed significant interaction, the interaction terms between each dark triad variable and employee tenure were all significant, but only psychopathy was in the anticipated direction, giving full support for hypothesis 6c ($\beta = 0.43$ $p < 0.001$). For hypotheses 6a and 6b, the results supported the existence of a significant interaction, but, interestingly

enough, in the opposite direction. Figure 3 is an interaction plot of the analysis results for the dependent variable employee performance.

Study Two

Participants. The participants for this study were provided through a partnership with and grant from Qualtrics. Approximately 1,198 participants took part in the survey. Once participants began the survey, they were screened out based on the following two criteria: The participant must have founded the business vs. acquisition, and the business must have been founded since 2005.

Each survey included standard demographic questions for the individual business owner as well as two of their employees. The business founders completed a survey that included the self-reported dark triad inventory (Jonason & Webster, 2010); items from the short social desirability scale (Greenwald & Satow, 1970); and assessments for two employees who were not co-owners, partners, or family members. For employee evaluations, each founder was asked to provide an evaluation for a recent hire who had been with the company at least three months as well as an evaluation for a longer-term employee who had been with the company for at least three years (or since the company was founded, if less than three years). In order to ensure quality responses, three specific questions asking the participant to select a predetermined response (i.e., “Please check very often for this statement.”) were included in the survey. If participants did not answer appropriately, the Qualtrics survey flow immediately advanced them to the end of the survey and thanked them for their participation. Once the survey data were collected, all records listing employee titles as owner, co-owner, or spouse were removed. The final dataset provided 299 usable survey responses.

Measures.

The dark triad. For this study, the dark triad characteristics were measured with the 12-item Dirty Dozen measure (Jonason & Webster, 2010). This brief measure uses a five-point Likert scale ranging from 1 = disagree strongly to 5 = agree strongly. Participants were instructed to answer 12 questions (four for each dark triad characteristic) by indicating how much they agree with each statement. Sample statements included, “I tend to manipulate others to get my way,” “I tend to lack remorse,” and “I tend to want others to admire me.” The published Chronbach’s alpha scores for reliability are $\alpha = 0.77$ for the Machiavellian subscale, $\alpha = 0.78$ for the narcissism subscale, and $\alpha = 0.69$ for the psychopathy subscale.

Employee tenure. Similar to Study One, employee tenure was computed by subtracting employee start date and date of survey completion to provide a day-measure of tenure.

Employee measures. Both employee creativity and employee performance were measured with the same scales used in Study One. Creativity was a five-item measure (Perry-Smith, 2006) and employee performance a four-item measure (Williams & Anderson, 1991).

Control variables. This study included each of the control variables used in the prior study. In order to control impression management/social desirability response bias, items from the short social desirability scale (Greenwald & Satow, 1970) were mixed in with the rest of the survey questions. Sample questions included, “No matter who I’m talking to, I’m always a good listener,” and “I am always courteous, even to people who are disagreeable.”

Results

A summary of descriptive statistics, correlations, and scale reliabilities for each variable in Study One is provided in Table 4. Each measure's reliabilities (Cronbach's alpha) are reported on the diagonal (Short Dark Triad (SD3) measure $\alpha = 0.73$; employee creativity $\alpha = 0.80$; employee performance $\alpha = 0.90$).

Structural equation modeling was used to test all hypotheses. Prior to testing the hypothesized model, a check for common method bias was completed. Using Harmon's single factor method, the 12 items of the Dirty Dozen measure, five items measuring employee creativity and four items measuring employee performance were tested using an unrotated principle component extraction. The total cumulative variance explained by one variable was 26.89%, indicating that common method bias is not a significant issue.

The measurement model was tested with five latent variables (Machiavellianism, narcissism, psychopathy, employee creativity, and employee performance) and 21 indicators (4 for each dark triad variable, 5 for employee creativity, and 4 for employee performance). The measurement model revealed strong, consistent factor loadings between 0.50 and 0.90 for all measures with an acceptable model fit ($\chi^2/df = 2.79$ $p < 0.001$, GFI = 0.87 RMSEA = 0.08). After confirming adequate fit of the measurement model, the hypothesized model was tested. Results of the structural portion of the analysis provided acceptable fit to the data ($\chi^2 = 775.11$, $df = 372$, $p < 0.001$, $\chi^2/df = 2.08$, GFI = 0.87, RMSEA = 0.06). The results of the structural analysis are provided in Table 5.

Hypothesis Testing.

Based on the results of the structural equation model analysis, hypotheses were examined to test the suggested relationships. Hypotheses 1a and 1b predicted that founder (a)

Machiavellianism and (b) narcissism would be positively related to employee creativity. The results did support a positive relationship but were not significant. Thus, hypotheses 1a and 1b were not supported. Hypothesis 1c predicted that founder psychopathy would be negatively related employee creativity. The standardized regression coefficient for this relationship showed a significant negative relationship ($\beta = -0.31$) supporting hypothesis 1c.

Hypothesis 2 predicted that employee creativity would be positively related to supervisor-rated employee performance. The results from the analysis show a strong and significant relationship ($\beta = 0.51$ $p < 0.001$) supporting hypothesis 2.

Hypotheses 4a and 4b proposed positive relationships between both independent variables Machiavellianism and narcissism and dependent variable employee performance. The regression coefficient for the Machiavellian to employee performance relationship was significant ($\beta = -0.27$); however, the relationship was in the opposite direction of what was hypothesized. The results for narcissism and employee performance were not significant. Hypotheses 4a and 4b were not supported. Hypothesis 4c predicted a negative relationship between founder psychopathy and employee performance. Results for the analysis were not significant. Hypothesis 4c was not supported. The interaction effects are plotted in Figure 5.

Hypotheses 5a-5c predicted employee tenure moderation of the dark triad—employee creativity relationships. The results show that a negative and highly significant relationship between employee creativity and Machiavellianism strongly support hypothesis 5a ($\beta = -0.43$). Significant relationships were also found between the interaction of both narcissism – tenure ($\beta = 0.17$) and psychopathy – tenure ($\beta = 0.35$)

and employee creativity. Nonetheless, the results were in the opposite direction of hypothesized relationships, providing no support for hypotheses 5b and 5c.

No support was found for hypotheses 6a-6c, which suggests a relationship between the employee performance and the interaction of tenure and the dark triad variables.

CHAPTER IV

DISCUSSION

These two studies examine the role of time in relationship to founder dark triad characteristics and “others-focused” outcomes (employee performance and creativity). The results show that higher levels of Machiavellianism had no relationship to short-term employee performance but related to increased performance for long-term employees. For employee creativity, higher levels of Machiavellianism correspond to significantly higher levels of short-term employee creativity but show the exact opposite relationship with long-term employees. Narcissism shows improved results over long-term vs. short-term for both employee performance and employee creativity.

Conversely, higher levels of psychopathy make little difference for short-term employee performance but correspond to significantly lower-levels of performance for long-term employees. Interestingly, the exactly opposite is true for employee creativity, with significantly lower levels of short-term employee creativity but little difference for long-term employees.

Overall, the research serves as an important illustration that outcomes of dark characteristics are not negative across the board. Context, characteristics, time frames, and dependent variables all play a significant role in the outcome valence.

A Paradox.

Over time, some dark characteristics such as Machiavellianism and narcissism are linked to positive outcomes. Koopman, Lanaj, and Scott (in press) demonstrate that many things traditionally viewed as positive appear to have darker sides when viewed over time. The same paradox may be true of dark constructs, which may have brighter sides over time. The dark triad is generally viewed as a negative, morally dysfunctional set of characteristics that harm others (Jonason et al., in press). However, a few scholars have pointed out there are potential benefits (Jonason & Webster, 2012; Judge et al., 2009). Much of the existing dark triad literature deals with the question, “Are these characteristics good or bad?” A more appropriate question may be, “When are these characteristics good or bad?”

There are three relevant domains specific to answering the former question: (a) characteristic distinctiveness, (b) measurement levels, and (c) context. First, as demonstrated in both the present study and in several other studies cited earlier, the dark triad is not a “unitary construct.” The individual attributes of each characteristic are unique, producing unique outcomes. In this study, results supported the link of Machiavellianism to increased employee performance over time, while also showing the psychopathy connection to substantial decreases. A partial answer to the question of when these characteristics are bad is found by simply specifying which unique characteristic is being examined.

The second domain to consider when attempting to answer the “when” question is measured levels. While the research study did not test for a curvilinear relationship, such a relationship is implied by the DSM-5 (2013). Extremely high levels of both narcissism and psychopathy dramatically change an individual’s ability to function in society, higher levels producing many negative outcomes. The results of our study show generally mid-range levels of the dark triad using a 5-point Likert scale (means between 1.86 and 2.97 in both studies).

Looking at levels of empathy among the three dark characteristics supports the idea that “others-focus” may mitigate harm. In their study of the dark triad-empathy relationship, Jonason and Krause (2013) find that only psychopathy showed strong, negative relations with both cognitive ($\beta = -0.18$) and affective empathy ($\beta = -0.40$). Machiavellianism had no significant ties to either, and narcissism actually showed a positive link to affective empathy ($\beta = 0.20$). In light of the dark triad’s differing relationship with empathy, one explanation for the conflicting results may lie in empathy levels.

Context is the final domain relevant to the question of when dark triad characteristics may be harmful or beneficial. Prior studies have shown that for dark attributes, context is an important predictor of success or failure (Padilla et al., 2007; Spain et al., 2014). In the context of new ventures, with high interest alignment and high relational distance, narcissists experience the most constantly positive results over time. Machiavellianism appears to be highly relevant to increasing employee performance and creativity, at least in the short-term “emerging zone” (Campbell & Campbell, 2009).

Selfish or Selfless Morality

A second question that this study raises is one of selfish vs. selfless morality. Must a person's focus always be on others in order to be moral? What are the benefits of a self-focus? Are the two mutually exclusive? In his seminal book, Schumpeter (1934) describes what some may consider to be very selfish (and dark) motives for starting an entrepreneurial venture: the desire for a private dynasty, proving oneself superior to others, an impulse to fight. At least in the new venture context, selfish motives are in line with communal interests. If the business succeeds, aside from founder benefit, many individuals will continue to have jobs, income, and be able to support their loved ones.

Traditionally, morality is viewed as "other-centric." Graham et al. (2011) present five universal moral institutions, all of which represent an interest in others over self. Several of the questions relating to defining each of these moral institutions appear to run in direct contrast with Schumpeterian goals: unequal treatment, lack of loyalty, lack of respect for traditions, authority, and causing chaos or disorder. In fact, in entrepreneurship these characteristics are often the very reasons individuals chose to start a new venture (Markman & Baron, 2003; Rindova, Barry, & Ketchen, 2009). In new ventures, selfish goals are a benefit for the venture and its stakeholders. If those individuals gain from the high degree of interest alignment, is it possible that selfish interests are also moral?

Implications

Creativity is one of the least studied outcomes of dark characteristics, according to Spain, Harms, & Lebreton (2014). The current study seeks to fill this significant gap by investigating how dark triad levels in founders are related to employee creativity. The

results of study two provide clear support for the hypothesis that founders (as managers) are linked to a significant reduction in employee creativity ($\beta = -0.31$). The results also demonstrate that time significantly weakens Machiavellian behavior's relationship to employee creativity; in higher tenured employees, as levels of founder/manager Machiavellianism increase, employee levels of creativity decrease. Findings also show an interesting result: Higher levels of narcissism and psychopathy actually weaken their negative relationships to employee creativity as employee tenure increases. This result is likely due to higher levels of creativity related to both narcissism and psychopathy.

Recognizing this gap, Miller (2015) called for increased research into the possible downsides of entrepreneurial personality. Thus, in addition to filling a significant gap in our understanding of dark triad outcomes, this research also fills an important gap in entrepreneurship literature and research into the dark side of the entrepreneur's personality.

Beyond filling an important void in extant literature, this study provides an important theoretical contribution. Harms & Spain (2015) cite the need for "theoretical models to guide research and practice concerning when dark personality characteristics should matter most and potential moderators of their effects" (p. 19). The Contextual Alignment-Distance Model of the Dark Triad presented in this study provides an elementary framework for "dark" research to increase our understanding of where dark characteristics may produce positive results.

Practically, the results of this study may offer insight into both the negative and positive implications for dark characteristics. In spite of their morally and socially aversive attributes, there may be something we can learn from the dark triad's successes.

Narcissistic characteristics are associated with high levels of self-confidence, charisma associated with a willingness to step into leadership roles, and grand vision casting.

Though higher levels of narcissism do prove dysfunctional for founders in general, these three narcissistic tendencies may offer an advantage. The startup process can benefit from high levels of self-confidence (Hayward et al., 2010; Hayward et al., 2006), a charismatic leadership style (Todorovic & Schlosser, 2007), and visionary goal setting (Renko, El Tarabishy, Carsrud, & Brännback, 2015).

Machiavellianism, in spite of selfish motives, is a grand master in achieving results through human resources. While the current study shows the detrimental outcomes associated with self-serving manipulation, there may be something we can learn from Machiavellian tactics. In many business settings, especially new ventures, motivating individuals to become investors or employees is a key to success. If a founder can learn to motivate others towards a certain desirable outcome that is mutually beneficial, then Machiavellianism's persuasive tactics may be advantage learning opportunity.

Aside from learning from the dark triad, the current study provides some insight into how established companies might deal with individuals with high levels of these characteristics. Applying the contextual alignment-distance framework may help identify areas within a company where success is more likely (i.e., positions with a high degree of self-benefit and multiple, short-term relationships). As Belschak et al. (in press) point out, jobs with significant interest alignment (autonomy, control, etc.) harness the brighter side of a dark characteristic.

One final implication for practice is evidence supporting the link between various founder characteristics and both positive and negative outcomes. It would be beneficial

for investors to use a screening measure to determine levels for a range of founder characteristics. Of special importance would be a measure to determine levels of founder psychopathy. Aside from a modest benefit in divergent thinking and slight increases in long-term employee creativity, the majority of outcomes associated with psychopathy are significantly negative. Knowing levels of founder psychopathy (along with other characteristics) would enable investors to make a more informed investment decision in light of outcomes linked to founder characteristics.

Future Research

A principle concern about higher levels of dark triad characteristics is their harm of others. This study does not look specifically at levels of harm experienced by any of the various stakeholders associated with a new venture. Future research would benefit from studies that specifically measure perceptions from a diverse group of new venture stakeholders. Graham's (Graham et al., 2011) moral foundations theory (and subsequent measurement tool) describes five areas of morality: harm, fairness, ingroup, authority, and purity. Harm is defined by causing others emotional suffering, use of violence, or failure to care for the weak or vulnerable. Fairness measures perceptions of people being treated differently, denied rights, and unfairly profiting from group activities. Ingroup is determined by betrayal, lack of loyalty, and placing self-interest ahead of the group. Authority is measured by the failure to fulfill assigned duties, lack of respect for legitimate authority, failing to protect subordinates, and disregard for society's traditions. Finally, purity tests violation of decency standards, degrading behavior, and failure to control impulses. Based on known correlations of the dark triad to several of Graham's aforementioned factors of morality, the author suspects that the majority of "harm"

created by founders higher on dark triad characteristics may be captured by the five factors of the moral foundations theory.

Additionally, future research should explore the dark triad from an employee viewpoint. Employee ratings of founder characteristics and morality—as well as self-rated measures of harm, turnover intentions, intrinsic motivation, and performance—may all provide a more comprehensive view of the outcomes related to founder dark triad characteristics.

CHAPTER V

CONCLUSION

This study sought to examine the relationships between founder dark triad levels and ‘others-focused’ outcomes; specifically employee performance and creativity. The findings were mixed regarding potentially positive outcomes associated with founder dark triad characteristics. Though, of the direct relationships tested, all but one (Machiavellianism in study one) of the significant results showed that higher levels of the dark triad in founders corresponded to decreases in employee performance and decreases in employee creativity (study two).

The second question asked when and how do short-term versus extended employee interactions with founders high on the dark triad potentially change outcomes? Both studies provided support for the idea that extended interaction with ‘dark’ founders does alter relationship outcomes. In the case of employee performance, Machiavellianism is significantly linked to decreased employee performance. However, with the interaction of employee tenure, the results indicate that performance increases the longer an employee works for a founder high on Machiavellianism. A similar outcome is supported for narcissism’s link to employee

performance. Psychopathy, conversely, shows that as employee tenure increases, already low levels of employee performance are compounded, making founder psychopathy the most toxic of the triad as it relates to employee performance.

Study two presents a slightly different picture of the relationship between founder dark triad characteristics and employee creativity. Machiavellianism is linked to a slight, but insignificant increase in employee creativity. However, as employee tenure increases, employee creativity levels decrease substantially. Narcissism is linked to a modest, but insignificant increase in employee creativity. Unlike Machiavellianism, as employee tenure increases, higher levels of narcissism are significantly linked to higher levels of employee creativity.

One of the more interesting results of the study relates to founder psychopathy and employee creativity. While generally, higher levels of founder psychopathy correspond to a significant decrease in employee creativity – as employee tenure increases, employee creativity improves. A possible explanation for the increase in employee creativity may lie in the divergent thinking associated with psychopathy (Eysenck, 1993). This disregard for social norms and tradition (Hare, Hart, & Harpur, 1991) may play a role in research findings supporting a positive link between psychopathy and creativity (Feist, 1998; Galang, 2010). Employees, as they spend more time with founders with higher levels of psychopathy, may begin to enact the founder's modeled behavior – including creativity and divergent thinking (Jaussi & Dionne, 2003).

Aside from the specific studies' findings, a practical framework was presented as a means of analyzing various contexts and the potential for positive or negative outcomes relating to higher levels of the dark triad. The study proposed (proposition 2) that in

contexts with high interest alignment and high relational distance, positive outcomes could be expected. The results for outcomes relating to Machiavellianism in both study one and two – as well as results for psychopathy related outcomes in study one – provide support for this proposition.

Proposition three states that “in situations of high interest alignment and low relational distance, individuals with higher levels of dark triad will experience lower levels of negative outcomes in the emerging zone and higher levels of negative outcomes in the enduring zone. The study’s results partially supported this proposition – with psychopathy in study one and Machiavellianism in study two showing a significant relationship to negative outcomes in the enduring zone.

In summary, psychopathy appears to be the most detrimental member of the dark triad. In the emerging zone of the new venture, higher levels of founder psychopathy show a significant relationship with decreased employee creativity. This can be devastating for a new venture, where creativity and innovation are key to recognizing new opportunities (Baron & Ensley, 2006; Shane, 2003) as well as creating and sustaining a competitive advantage (Ireland & Webb, 2007). In both the emerging and enduring zones, high founder psychopathy has a strong, negative link to employee performance; therefore, what starts as a bad situation for employees appears to get much worse as time goes on. Based on employee reaction, it would be appropriate to label founders with higher levels of psychopathy as “toxic founders” (Lipman-Blumen, 2006).

Narcissism appears to be the least harmful of the dark triad. The two studies show that during the emerging zone for both employee performance and employee creativity, higher levels of founder narcissism are linked to slightly negative results.

Due to their social skill and use of soft (friendly) manipulation, narcissistic tendencies are related to long-term increases in both employee performance and creativity.

Because of their charisma and charm, combined with a great deal of self-serving confidence, an appropriate label for narcissistic founders may be “antihero founders” (Jonason, Webster, et al., 2012).

Machiavellianism appears to be unusually skilled in eliciting performance, in both the emerging and enduring zones. Study one shows a positive link between founder Machiavellianism and employee performance, which is made even stronger in long-term settings. These results demonstrate the talent this member of the dark triad has for manipulating individuals to obtain desired performance. However, in a new venture setting, while higher levels of Machiavellianism aren't immediately linked to killing employee creativity, they are strongly associated with decreased employee creativity in the long run. Hence, a price of Machiavellianism's link to increased employee performance may be employee creativity; mechanistic 'obedience' without intrinsic motivation. Founders high on Machiavellianism may be aptly labeled, “creativity killers.”

The dark triad should not be treated as a singular construct. Machiavellianism, narcissism, and psychopathy are related to different outcomes. The assumption that all founders with higher levels of these characteristics will consistently be linked to negative outcomes may not be accurate. In the words of Jonason et al. (2014), “It might be that those high on traits like the Dark Triad are not so much “bad apples,” but...apples that are just not that sweet. With those apples one must find another purpose for them - like making cider, sauce, pie, and even hard cider.” (p. 117)

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APPENDICES

MEASURES

The Dirty Dozen

(Jonason and Webster, 2010)

Please answer the following questions on a scale of 1 to 5 with 1 = strongly agree and 5 = strongly disagree:

1. I tend to manipulate others to get my way.
2. I have used deceit or lied to get my way.
3. I have use flattery to get my way.
4. I tend to exploit others towards my own end.
5. I tend to lack remorse.
6. I tend to be unconcerned with the morality of my actions.
7. I tend to be callous or insensitive.
8. I tend to be cynical.
9. I tend to want others to admire me.
10. I tend to want others to pay attention to me.
11. I tend to seek prestige or status.
12. I tend to expect special favors from others.

The Short Dark Triad (SD3)
(Jones and Paulhus, 2014)

Instructions: Please indicate how much you agree with each of the following statements from (1) strongly disagree to (5) strongly agree

Machiavellianism sub-scale

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 to preserve your reputation.
8. Make sure your plans benefit yourself, not others.
9. Most people can be manipulated.

Narcissism sub-scale

1. People see me as a natural leader.
2. I hate being the center of attention. (R)
3. Many group activities tend to be dull without me.
4. I know that I am special because everyone keeps telling me so.
5. I like to get acquainted with important people.
6. I feel embarrassed if someone compliments me. (R)
7. I have been compared to famous people.
8. I am an average person. (R)
9. I insist on getting the respect I deserve.

Psychopathy sub-scale

1. I like to get revenge on authorities.
2. I avoid dangerous situations. (R)
3. Payback needs to be quick and nasty.
4. People often say I'm out of control.
5. It's true that I can be mean to others.
6. People who mess with me always regret it.
7. I have never gotten into trouble with the law. (R)
8. I enjoy having sex with people I hardly know
9. I'll say anything to get what I want.

Note. The subscale headings should be removed before the SD3 is administered. Items should be kept in the same order. Reversals are indicated with (R)

Supervisor-reported Employee Creativity and Performance Measures

Based on the prior 12 months (from hire date if less than 12 months), please rate each employee's performance on a scale of 1 to 5 where: "1" represents "not at all characteristic" and "5" represents "extremely characteristic."

Employee Creativity

1. Has new ideas/approaches to customer problems
2. Finds new ways to apply existing technology
3. Risk taking
4. Radical new ideas
5. Original long-term vision

Employee Performance

1. Adequately completes assigned duties
2. Fulfills responsibilities specified in job description
3. Performs tasks that are expected of him/her
4. Meets formal performance requirements of the job

APPENDIX B

IRB APPROVAL LETTER

Oklahoma State University Institutional Review Board

Date: Tuesday, October 28, 2014
IRB Application No BU1471
Proposal Title: Qualitative Study of Small Business Entrepreneur Burnout

Reviewed and Processed as: Exempt

Status Recommended by Reviewer(s): Approved Protocol Expires: 10/27/2017

Principal Investigator(s):

Jonathan Butler 113 E. 125th Ct S. Jenks, OK 74037	Bruce Barringer 107 Business Stillwater, OK 74078
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The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

- The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval. Protocol modifications requiring approval may include changes to the title, PI advisor, funding status or sponsor, subject population composition or size, recruitment, inclusion/exclusion criteria, research site, research procedures and consent/assent process or forms
2. Submit a request for continuation if the study extends beyond the approval period. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of the research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Dawnett Watkins 219 Cordell North (phone: 405-744-5700, dawnett.watkins@okstate.edu).

Sincerely,



Hugh Cretnar, Chair
Institutional Review Board

APPENDIX C
Participant Phone Call Follow-up Script

Good Morning (first name)! This is Jonathan Butler from Oklahoma State University School of Entrepreneurship. How are you this morning? You were recommended to me as a creative, innovative new startup that is a prototype which may help other entrepreneurs and individuals thinking about starting their own business. Since you have had a great deal of experience, I value your input as I work to develop research that may be a tremendous benefit to new entrepreneurs and venture capitalists looking for startup investment opportunities.

Would you be willing to complete a survey that's part of a study I'm completing on founder personal characteristics and employee performance? (Response)

(IF YES)

Great! I'm going to send you an email with a link to a Qualtrics-based online survey. It's important that you answer all of the questions. Because the research is about you and your employees, there are 12 questions about two of your newest and two of your most tenured employees. I'm working to get the research completed by mid-December. Is there a way you can fit this into your schedule? It should take about 30 minutes.

Thank you in advance for your help! I really do appreciate your willingness to share your experience and insight! I'm excited to process your survey and, once I receive the small number of survey's I've sent out and I process the information, I'll be sure to send you the results.

Do you have any questions?

Thank you and I'll be in touch!

(IF NO)

I understand, thank you for your time today. If you change your mind, we sent an email to you a few days ago. If you'd like, just pull that up and click on the link to the survey. Have a great day and I wish you the best!

Updated: November, 2012

10-28-14
10-27-17
84-14-71



ENTREPRENEUR SURVEY

Thank you for taking time to complete this study of entrepreneurs and their employees. Please read this carefully and feel free to contact Jonathan Butler or the Oklahoma State University School of Entrepreneurship if you have any questions concerning this research.

WHAT THE STUDY IS ABOUT

The purpose of this study is to understand the relationships between the founder and new venture employee productivity.

CONFIDENTIALITY AND CONSENT

The data collected from this study will be kept on a private, secured computer. Any reports that are made public will not include any information which will make it possible to identify you or your employees. Each participant will be identified only by a numeric code which will be deleted upon receipt. Participation in this survey is voluntary and you are free to discontinue the survey at any time. No monetary compensation is provided for participation. Completing and returning the survey by mail, email, other electronic submission indicates participant consent to take part in this study.

CONTACT AND QUESTIONS

The researchers conducting this study are Jonathan Butler and Dr. Bruce Barringer. Both individuals are affiliated with Oklahoma State University School of Entrepreneurship. If you have any questions or concerns, please feel free to contact Jonathan Butler at (918) 344-5222 or jonathan.butler@okstate.edu. You may also reach the OSU Institutional Review Board (IRB) at 405-744-3377 or email irb@okstate.edu.

THANK YOU

I understand that your time is valuable and I greatly appreciate your willingness to share your experience and insight.

Jonathan Butler
School of Entrepreneurship
One Business Building
Stillwater, OK 74074

Updated: November, 2012

10-28-14
10-29-17
BU-14-71

**APPENDIX B
EMAIL RECRUITMENT LETTER**

<First Name> <Last Name>
<Company Name>
<Address>
<City>, <State> <Zip>

Dear <Title> <Last Name>:

Good Morning! Because you've decided to start your own business, you're part of a few, driven individuals that are critical to the sustained competitive advantage of the US economy. You and your firm have been recommended to me as a creative, innovative new startup that is a prototype which may help other entrepreneurs and individuals thinking about starting their own business. Since you have had a great deal of experience, I value your input as I work to develop research that may be a tremendous benefit to new entrepreneurs and venture capitalists looking for startup investment opportunities.

Specifically, your response to the attached survey will shed light on founders and employees within their ventures. This is a confidential survey and results will kept private. Only the trends and percentages of the entire group of participants will be published. No information will be stored linking you or your company to the completed surveys once the data collection period is completed.

In appreciation for your participation, once the data is analyzed and findings are determined, completed findings will be sent back to your business with a summary of the results.

As the owner of several businesses myself, I know that your time is invaluable so I greatly appreciate your input and the time involved to complete the attached survey. It should take approximately 30 minutes to complete. If you have any questions, or want to talk to be personally about my specific research in entrepreneurship, please feel free to send me an email (jonathan.butler@okstate.edu) or call my cell phone at (918) 344-5222.

Thank you in advance for your help!

My Best,
Jonathan Butler
Oklahoma State University
School of Entrepreneurship
One Business Building
Stillwater, OK 74074

Updated: November, 2012

10.28.14
10.27.17
64.14.71

Oklahoma State University Institutional Review Board

Date: Monday, February 09, 2015 Protocol Expires: 10/27/2017
IRB Application No: BU1471
Proposal Title: Qualitative Study of Small Business Entrepreneur Burnout

Reviewed and Processed as: Exempt Modification

Status Recommended by Reviewer(s) Approved

Principal Investigator(s):

Jonathan Butler
113 E. 125th Ct S.
Jenks, OK 74037

Bruce Barringer
107 Business
Stillwater, OK 74078

The requested modification to this IRB protocol has been approved. Please note that the original expiration date of the protocol has not changed. The IRB office MUST be notified in writing when a project is complete. All approved projects are subject to monitoring by the IRB.

The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

The reviewer(s) had these comments:

Modification to 1) add two questions to survey to control for socially desirable responding, 2) replace the SD3 measure with a more concise 12-item measure and 3) add 13-item passion measure.

Signature :

[Handwritten Signature]
Hugh Crethar, Chair, Institutional Review Board

Monday, February 09, 2015
Date

Oklahoma State University Institutional Review Board

Date: Monday, February 02, 2015 Protocol Expires: 10/27/2017

IRB Application No: BU1471

Proposal Title: Qualitative Study of Small Business Entrepreneur Burnout

Reviewed and
Processed as: Exempt
Modification

Status Recommended by Reviewer(s) **Approved**

Principal
Investigator(s):

Jonathan Butler
113 E. 125th Ct S.
Jenks, OK 74037

Bruce Barringer
107 Business
Stillwater, OK 74078

The requested modification to this IRB protocol has been approved. Please note that the original expiration date of the protocol has not changed. The IRB office **MUST** be notified in writing when a project is complete. All approved projects are subject to monitoring by the IRB.

- The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

The reviewer(s) had these comments:

Modification to 1) add funding from Qualtrics, 2) add the 10 item Perceived Stress Scale, 3) add three questions to the approved survey and 4) subject selection to be done via Qualtrics database

Signature :



Hugh Crethar, Chair, Institutional Review Board

Monday, February 02, 2015
Date

TABLES

TABLE 1 – DARK TRIAD LITERATURE REVIEW

Authors (year) Title	Tested Constructs	Findings
Jonason, Slomski, & Partyka (2012) <i>The dark triad at work: how toxic employees get their way.</i>	15 types of manipulation divided into soft and hard tactics	The dark triad was significantly and positively correlated (r values between 0.16 and 0.64) with all manipulation tactics except team play and compromise. Manipulation tactics included charm, appearance, assertiveness, joking/kidding, favor exchange, reward, punishment treat, ingratiation, appeals to logic/reason, alliances, appeal threat, compliments, manipulation of situation or person, team play and compromise. When grouped together, the dark triad had stronger correlations with hard versus soft manipulative tactics (r= 0.64 vs. 0.43 p<0.01). (Men were also more likely to use hard vs. soft manipulation.)
Jonason, Duineveld, & Middleton (2015) <i>Pathology, pseudopathology, and the dark triad</i>	Communal versus exchange orientation; reactive versus proactive aggression; behavior dysregulation	Dark triad dimensions tested for correlations with reactive-proactive aggression, behavior dysregulation, communal, and exchange orientation measures. All measures were positively correlated with the dark triad dimensions except communal orientation. However, after controlling for shared variance, the standardized regression coefficients showed that none of the measures were significantly related across all three dimensions. (Note: Communal orientation showed significant positive link to narcissism ($\beta=0.18$) and significant negative links to Machiavellianism and psychopathy ($\beta= -0.33$ and -0.32)).
Jonason et al. (in press) <i>Valuing myself over others: the dark triad traits and moral and social values</i>	Five moral values (harm, fairness, ingroup, authority, purity) and individual versus collective values	Dark triad dimensions tested for relationships to five moral values (harm, fairness, ingroup, authority, purity) as well as individual vs collective values (broken into self-transcendence, conservation, self-enhancement, and openness to change). In study two (using SD3 measure) Machiavellianism was negatively linked to the moral values of harm ($\beta = -0.24$), fairness ($\beta = -0.25$), ingroup ($\beta = -0.33$), and authority ($\beta = -0.22$). However, it was not significantly related in study one or three (using Dirty Dozen measure) except for in study three <i>Harm</i> was significant with $\beta = -0.12$. Narcissism was significantly related to harm ($\beta = 0.16$), Ingroup ($\beta = 0.23$), authority ($\beta = 0.13$), and purity ($\beta = 0.19$), but only for study one using the Dirty Dozen measure. Psychopathy was significantly related across all three studies to harm ($\beta = -0.24, -0.14, -0.27$) and authority ($\beta = -0.20, -0.21, -0.11$) and has a significant relationship greater than $\beta = -0.18$ for all three values in at least one of the three studies.
Jones & Paulhus (2011) <i>The role of impulsivity in the dark triad of personality</i>	Functional and dysfunctional impulsivity	Psychopathy was related to dysfunctional impulsivity showing poor self-regulation ($\beta = 0.59$ p<0.01). Narcissism was related to functional impulsivity stemming from social engagement ($\beta = 0.52$ p<0.01). Machiavellianism was not significantly related to impulsivity. Slight differences were noted between genders.

Authors (year) Title	Tested Constructs	Findings
Vernon et al. (2008) <i>A behavioral genetic investigation of the dark triad and the big 5</i>	Genetic and environmental factors; big five	Authors tested relationships between the dark triad and both genetic/environmental factors and the Big Five personality dimensions in a sample of genetically identical twins (monozygotic) and genetically different twins (dizygotic). For Machiavellianism, narcissism, and psychopathy respectively, correlations with genetic factors were $r=0.31, 0.59, 0.64$; non-shared environmental factors $r=0.30, 0.41, 0.32$; shared environment factors only Machiavellianism and psychopathy $r=0.39, 0.04$. Findings also show negative correlations of all three dark triad characteristics and agreeableness ($r = -0.49, -0.37, -0.59$). Machiavellianism and psychopathy were negatively related to conscientiousness ($r = -0.32, -0.37$). Narcissism was positively related to extraversion ($r=0.36$) and Machiavellianism positively related to neuroticism ($r=0.23$). (all values significant $p<0.01$ two tailed)
Campbell et al. (2009) <i>A behavioral genetic study of the dark triad of personality and moral development</i>	Genetics and Kohlberg's six stages of moral development	Using Kohlberg's stages of moral development, Machiavellianism and psychopathy were correlated to low levels of moral development (Kohlberg's stages two and three) ($r = 0.20 p<0.01$; $r=0.14 p<0.05$ respectively). Only psychopathy was negatively correlated with higher levels of moral development (Kohlberg's stages five and six) ($r = -0.21 p<0.01$). Narcissism show no significant correlation with any level of moral development. Genetic factors accounted for some of the individual differences in lower levels of moral development, but none of the differences in higher levels of moral development.
Lee & Ashton (2005) <i>Psychopathy, Machiavellianism, and narcissism in the five-factor model and the HEXACO model of personality structure</i>	HEXACO - Specifically the four facets of honesty-humility (fairness, greed avoidance, modesty, and sincerity)	A significant portion of the correlation between the dark triad characteristics is related to the Honesty-Humility dimension of the HEXACO measure. Psychopathy has the strongest negative relationship with $r = -0.72$; Machiavellianism and narcissism are similarly related with r values of -0.57 and -0.53 respectively. Among the four honesty-humility sub-scales, psychopathy and Machiavellianism showed similar correlations with all four facets (r ranging from $-0.75 (-0.62)$ for fairness to $-0.49 (-0.31)$ for greed avoidance (Machiavellianism in parenthesis). However, narcissism was highly correlated with modesty ($r = -0.62$), followed by greed avoidance ($r = -0.48$) and only modestly correlated with fairness ($r = -0.32$) and sincerity ($r = -0.22$). Based on correlations with the Big Five factor model, reproduced correlations failed to match observed correlations between the three dark triad variables.
Rauthmann & Kolar (2013) <i>Positioning the dark triad in the interpersonal circumplex: the friendly dominant narcissist, hostile-submissive Machiavellian, and hostile-dominant psychopath?</i>	Hostile-dominant, hostile-submissive, and friendly-dominant; agency versus communion	Within the interpersonal circumplex, the dark triad is measured with agency (self-centered behavior) and communion (group-centered behavior). Multiple regression demonstrated that Machiavellians are linked to hostile-submissive tendencies, narcissists are friendly-dominant, and psychopaths are hostile-dominant.
Crysel, Crosier, Webster (2013) <i>The dark triad and risk behavior</i>	Impulsivity, sensation-seeking, and risk-taking	Dark triad characteristics found to be correlated with impulsivity, sensation-seeking, and risk-taking. Using the dirty dozen (dark triad), ImpSS scale (impulsivity/sensation-seeking), and four types of risk measures, the composite dark triad measure was correlated with impulsivity ($r = 0.29$), sensation-seeking ($r=0.34$), and two of the risk behaviors (gambling $r=0.12$; temporal discounting $r=0.13$). Individually, Machiavellianism and psychopathy only correlated with impulsivity ($r=0.24, 0.23$) and sensation seeking ($r=0.30, 0.23$). Narcissism correlated with impulsivity ($r=0.23$), sensation-seeking ($r=0.30$), gambling ($r=0.13$), probabilistic discounting ($r=0.12$) and temporal discounting ($r=0.17$).

Authors (year) Title	Tested Constructs	Findings
O'Boyle, Forsyth, Banks, & McDaniel (2012) <i>A meta-analysis of the dark triad and work behavior: a social exchange perspective</i>	Job performance (negative) and counterproductive workplace behaviors (positive)	Meta-analysis of 245 studies tested relationships between individuals' levels of dark triad characteristics, job performance, and counter productive work behaviors. Slight negative correlations were found between Machiavellianism and job performance ($r = -0.10$) and psychopathy and job performance ($r = -0.10$).
Paulhus & Williams (2002) <i>The dark triad of personality: Narcissism, Machiavellianism, and psychopathy</i>	Lower levels of verbal IQ and agreeableness (the big five)	Testing dark triad for correlations between constructs, with big five personality characteristics, and IQ. Correlations: narcissism and psychopathy $r=0.50$; narcissism and Machiavellianism $r= 0.25$; Machiavellianism and psychopathy $r=0.31$ (all significant $p<0.001$); Correlations with agreeableness were narcissism -0.36 ; Machiavellianism -0.047 ; psychopathy -0.25 (all significant $p<0.01$). Machiavellianism correlated with conscientiousness -0.34 ; narcissism correlated with extraversion 0.42 ; openness 0.38 ; psychopathy correlated with extraversion 0.34 ; conscientiousness -0.25 ; neuroticism -0.34 ; openness 0.24 ; psychopathy and Machiavellianism and psychopathy correlated with lower non-verbal to verbal IQ scores ($0.20, 0.13$)
Jones & Figueredo (2013) <i>The core of darkness: uncovering the heart of the dark triad</i>	Manipulation and callousness from social dominance orientation measure	Callousness and manipulation account for a significant amount of the overlap between the three dark triad characteristics. Manipulation plus callousness account for 79% of the unit-weighted factor scores dark triad variance ($R^2=0.79$)
Lee et al., (2013) <i>Sex, power, and money: prediction from the dark triad and honesty-humility</i>	Negative links to emotionality, conscientiousness, and agreeableness. Positive link to extraversion	After controlling for the common factor of honesty-humility, the standardized coefficients from SEM models linking each of the dark triad characteristics to the remaining HEXACO variables are very different across the three dark triad variables. Psychopathy was the only variable significantly related to emotionality ($\beta = -0.77$), and also related to conscientiousness ($\beta = -0.34$). Narcissism was positively related to extraversion ($\beta=0.72$) while Machiavellianism was negatively related to extraversion ($\beta=-0.33$). Machiavellianism was also the only variable related to agreeableness ($\beta = -0.27$). (all values significant $p<0.01$).
Furtner, Rauthmann, & Sachse (2011) <i>The self-loving self-leader: an examination of the relationship between self-leadership and the dark triad</i>	Self-control, consideration of future outcomes, and ADHD	The research tested links between the dark triad and self-control, consideration of future outcomes, and ADHD. The combined dark triad scores negatively correlated with self-control ($r = -.28$) and future consequences ($-.30$), while showing a positive correlation with ADHD (0.22). Machiavellianism was not significantly related to any of the measures. Narcissism had a weak negative correlation with only self-control ($r = -0.13$), however when shared variance was accounted for the relationship became insignificant. Psychopathy appears to account for the combined dark triad correlations, as it had strong negative correlations with self-control ($\beta = -0.48$) and future consequences ($\beta = -0.42$) and a positive correlation with ADHD ($\beta = 0.30$).
Hodson, Hogg, & MacInnis (2009) <i>The role of dark personalities (narcissism, Machiavellianism, psychopathy), big five personality factors, and ideology in explaining prejudice</i>	Social dominance and prejudice	Authors found that the dark triad was significantly and positively related to social dominance (Machiavellianism $r=0.37$, Narcissism $r=0.23$, Psychopathy $r=0.38$ all $p<0.01$). The dark triad were also all significantly and positively correlated with perceptions of immigrants as threats ($r=0.19$ for both Machiavellianism and narcissism, $r=0.20$ for psychopathy all $p<0.01$)
Veselka et al., (2012) <i>The dark triad and an expanded framework of personality</i>	SPI inventory	Using the SPI inventory, each dimension of the dark triad (Machiavellianism, narcissism, and psychopathy (r values in that order) showed similar correlations in all of the following (all $p<0.01$): Positive links to seductiveness ($r=0.32, 0.41, 0.45$), manipulativeness ($r=0.48, 0.43, 0.53$), humorousness ($r=0.15, 0.27, 0.32$), Risk taking ($r=0.20, 0.22, 0.40$), and Egotism ($r = 0.13, 0.52, 0.22$); Negative links to thriftiness ($r=-0.16, -0.22, -0.24$), integrity ($r = -0.52, -0.27, -0.59$), and femininity ($r= -0.24, -0.11, -0.43$)

TABLE 2
Study One Descriptive Statistics, Correlations, and Reliabilities^a

Variables	Mean	s.d.	DT	M	N	P	EC	EP	T	Fx	FE _d	EG _n	Ex	Age	Ed
Founder															
Dark Triad (DT)	2.48	0.27	(0.73)												
Machiavellianism (M)	2.34	0.58	.85**												
Narcissism (N)	2.97	0.31	.35**	0.11											
Psychopathy (P)	1.86	0.50	.76**	0.45**	-0.05										
Employee															
Creativity (EC)	3.19	0.78	-0.01	-0.10	0.02	0.08	(0.80)								
Performance (EP)	4.56	0.52	0.05	0.09	0.11	-0.06	0.26**	(0.90)							
Tenure [#] (T)	1867.81	2345.69	-0.01	-0.02	0.10	-0.06	0.15*	0.12							
Control															
Founder Experience (Fx)	4.16	1.90	-0.01	-0.12	0.07	0.08	0.06	0.10	0.03						
Founder Education (FE _d)	4.73	1.23	-0.07	0.02	0.06	0.21**	-0.09	0.06	0.02	-0.07					
Employee Gender (EG _n)	1.51	0.50	0.00	0.09	-0.01	-0.10	-0.14*	0.05	-0.05	-0.07	0.26**				
Employee Experience (Ex)	10.25	10.20	0.03	0.03	0.04	0.00	0.04	0.18**	0.45**	0.12	-0.01	-0.11			
Employee Age (Age)	39.99	13.59	-0.03	-0.01	0.03	-0.08	0.02	0.06	0.49**	0.04	-0.06	-0.03	0.68**		
Employee Education (Ed)	2.96	1.05	-0.01	-0.10	0.12	0.01	0.17**	0.11	-0.02	0.09	0.25**	0.13*	-0.05	-0.02	
Industry	1.12	0.33	-.14*	-0.16*	-0.05	-0.05	0.09	-0.02	0.00	0.04	0.01	0.05	-0.07	-0.02	0.13*

^a $n = 245$. Internal reliabilities (Cronbach's alpha) for the overall constructs are provided on the diagonal in parentheses.

[#] Employee tenure measured in days. Dark Triad is measured by the Short Dark Triad (SD3) measure (Jone & Paulhus, 2014)

** $p \leq 0.01$

* $p \leq 0.05$

TABLE 3
Study One - SEM Analysis Results

Independent Variables	Creativity	Performance
	β	β
Machiavellianism	-0.258	0.47**
Narcissism	-0.214	0.08
Psychopathy	0.204	-0.40*
Employee Tenure	0.183*	0.07
Moderation		
Tenure x Machiav.	0.080	0.401*
Tenure x Narcissism	-0.064	0.183*
Tenure x Psychopathy	0.015	-0.432**
Control Variables		
Founder Experience	-0.017	0.078
Founder Education	-0.148	0.011
Employee Gender	-0.108	ns
Employee Experience	0.022	0.288**
Employee Age	-0.039	-0.22*
Employee Education	0.256***	0.115
Industry	0.073	-0.005
Employee Creativity		0.304***

Model Fit Summary

Chi-square	1988.173
<i>df</i>	926.000
X^2/df	2.147
RMR	0.067
GFI	0.752
AGFI	0.698
RMSEA	0.069
low, high, pclose	(.064, 0.073, 0.000)

n=245. Standardized regression weights. Maximum Likelihood Method.
ns - not significant and excluded from model

*** $p \leq 0.001$

** $p \leq 0.01$

* $p \leq 0.05$

TABLE 4
Study Two Descriptive Statistics, Correlations, and Reliabilities^a

Variables	Mean	s.d.	DT	M	N	P	EC	EP	T	BIAS	Fx	FEd	EGn	Ex	Age	Ed
Founder																
Dark Triad (DT)	2.32	0.66														
Machiavellianism (M)	2.20	0.82	.864**	(0.75)												
Narcissism (N)	2.78	0.92	.805**	.542**	(0.815)											
Psychopathy (P)	1.99	0.73	.749**	.554**	.333**	(0.74)										
Employee																
Creativity (EC)	3.67	0.84	-0.08	-0.06	0.01	-.167**	(0.86)									
Performance (EP)	4.40	0.72	-.214**	-.207**	-0.11	-.214**	.496**	(0.90)								
Tenure [#] (T)	1032.83	831.97	-0.01	-0.04	0.04	-0.04	-0.01	-0.02								
Control																
Desirability Bias (Bias)	3.85	0.70	-.362**	-.313**	-.189**	-.398**	.208**	.235**	-0.06							
Founder Experience (FEx)	4.13	1.89	0.01	0.00	0.03	-0.02	0.02	.136*	0.02	-0.08						
Founder Education (FEd)	4.52	1.34	-0.06	-0.06	-0.01	-0.08	0.06	0.05	-0.04	-0.02	.253**					
Employee Gender (EGn)	1.53	0.50	-0.06	-0.03	0.03	-.155**	-0.10	0.02	0.00	0.07	-0.08	0.03				
Employee Experience (Ex)	8.04	7.87	-0.03	0.01	-0.05	-0.03	0.00	0.08	.280**	-0.07	.393**	0.10	-.126*			
Employee Age (Age)	38.33	11.98	-0.04	0.00	-0.03	-0.06	-0.07	-0.04	.186**	-.129*	.137*	0.04	-0.04	.507**		
Employee Education (Ed)	3.35	1.06	0.03	0.06	0.01	-0.01	.275**	.196**	0.02	0.02	.257**	.483**	0.04	.230**	.149**	
Industry (I)	1.2	0.4	0.00	-0.04	0.06	-0.03	0.00	-0.04	-0.09	0.07	-0.03	0.03	0.01	-0.07	0.04	0.08

^a $n = 300$. Internal reliabilities (Cronbach's alpha) for the overall constructs are provided on the diagonal in parentheses.

[#] Employee tenure measured in days. Dark triad is measured by the Dirty Dozen (Jonason & Webster, 2010)

** $p \leq 0.01$

* $p \leq 0.05$

TABLE 5
Study Two - SEM Regression Weights

	Employee Creativity	Employee Performance
	β	β
Dark Triad		
Machiavellianism	0.11	-0.27*
Narcissism	0.09	0.08
Psychopathy	-0.31*	0.07
Tenure	-0.03	-0.05
Tenure Interaction		
Tenure x Machiavellianism	-0.43***	-0.13
Tenure x Narcissism	0.17*	0.03
Tenure x Psychopathy	0.35***	0.01
Control Variables		
Social Desirability Bias	0.14*	0.10
Founder Experience	-0.04	0.10
Founder Education	0.08	-0.04
Employee Education	0.38***	0.03
Employee Gender	-0.19**	ns
Employee Age	-0.09	-0.04
Employee Experience	-0.08	0.07
Industry	-0.06	-0.04
Employee Creativity		0.51***

Model Fit Summary

Chi-square	775.11
<i>df</i>	372
X ² /df (p)	2.084 (0.000)
RMR	0.06
GFI	0.87
AGFI	0.81
RMSEA	0.06
low, high, pclose	(0.05, 0.07, 0.003)

n=300. Standardized regression weights. Maximum Likelihood Method.

*** $p \leq 0.001$

** $p \leq 0.01$

* $p \leq 0.05$

FIGURES

FIGURE 1

Contextual Alignment-Distance Model of the Dark Triad

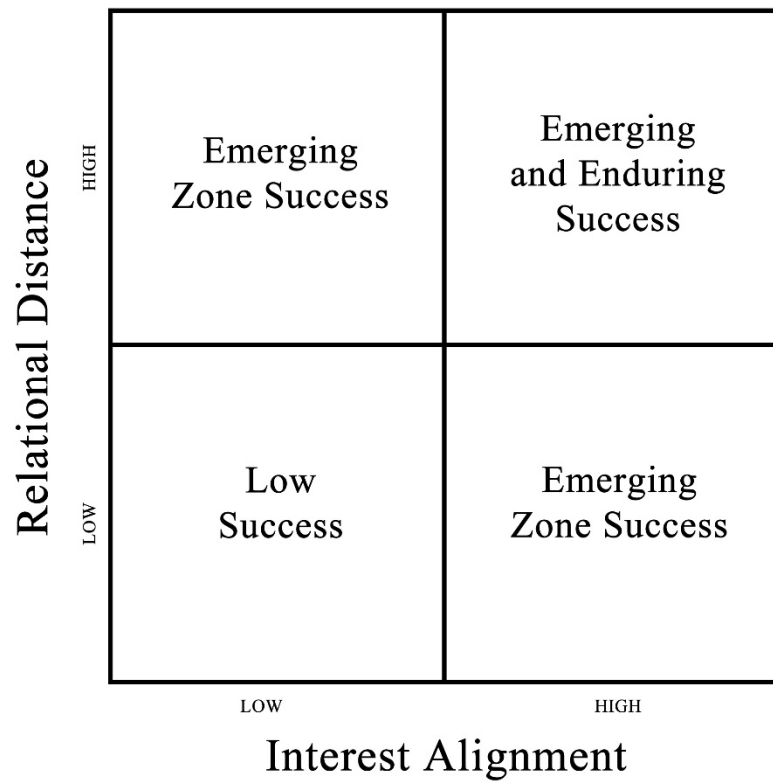


FIGURE 2
Study One – SEM Model Results

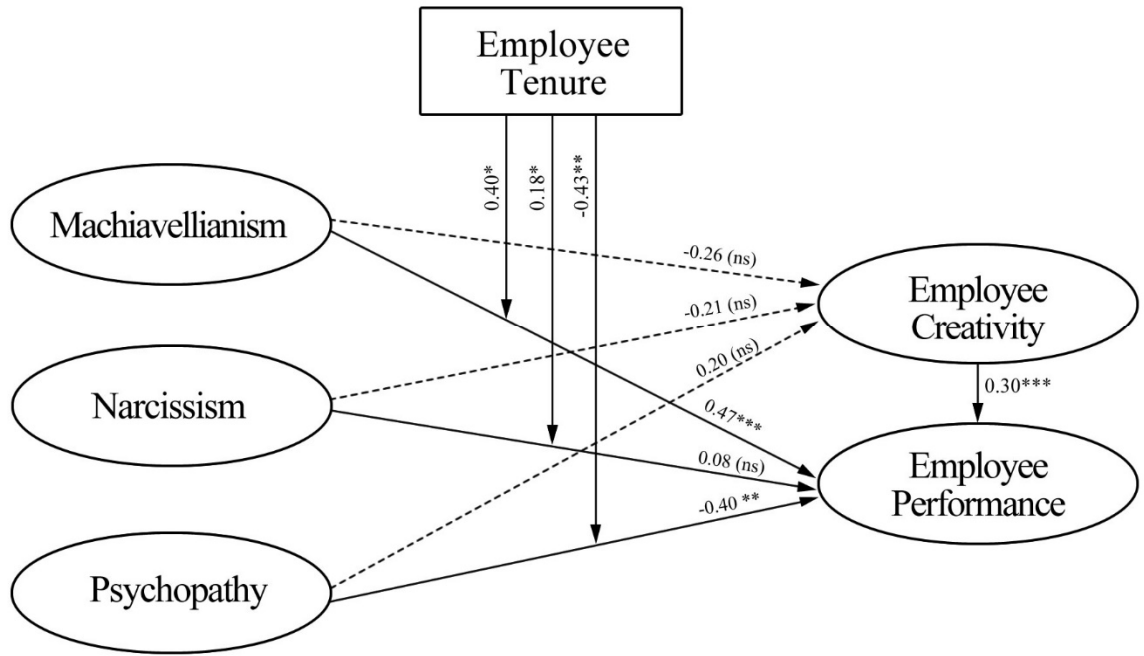


FIGURE 3
Study One - Tenure Interaction Plots

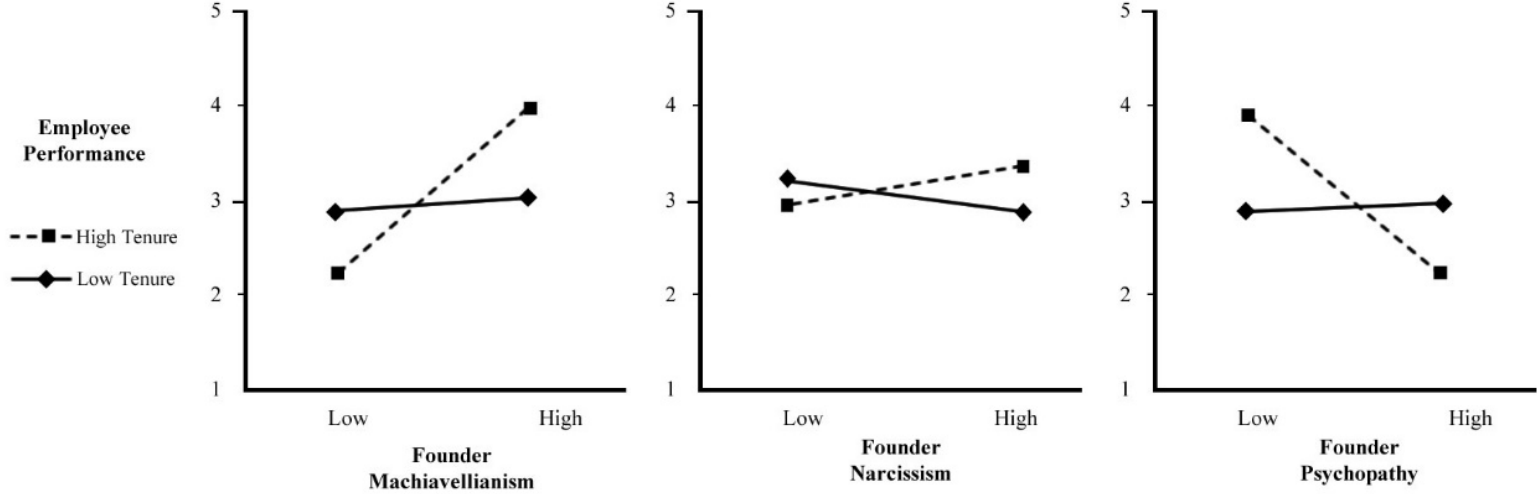


FIGURE 4
Study Two – SEM Model Results

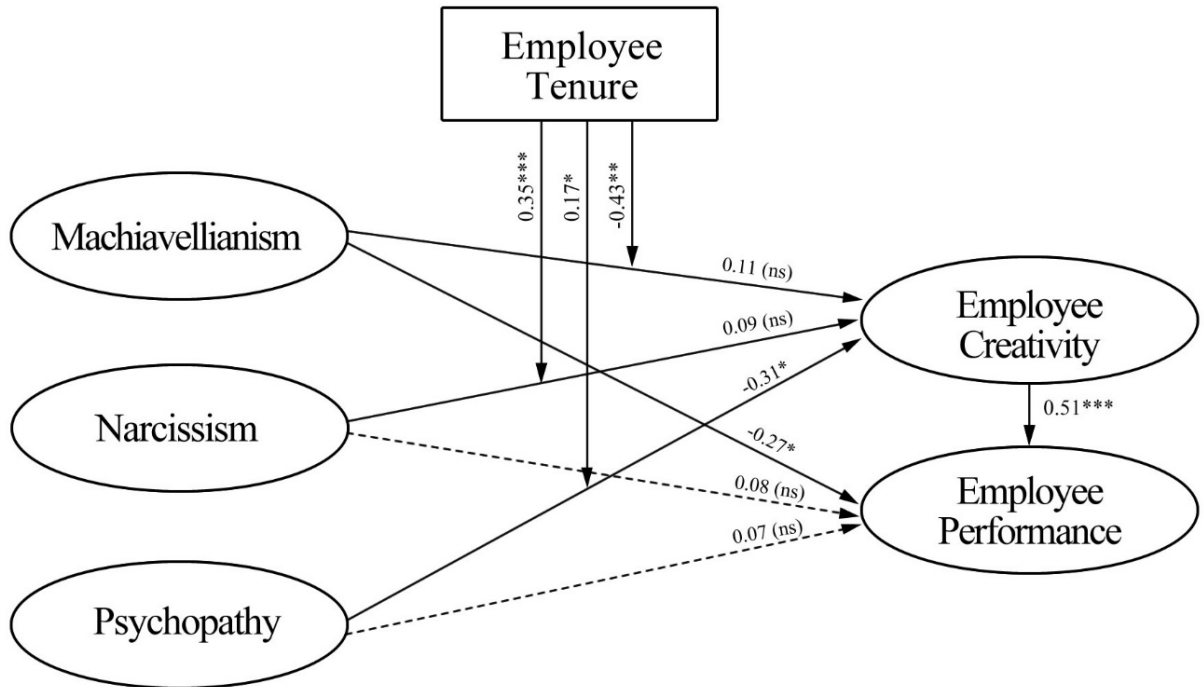
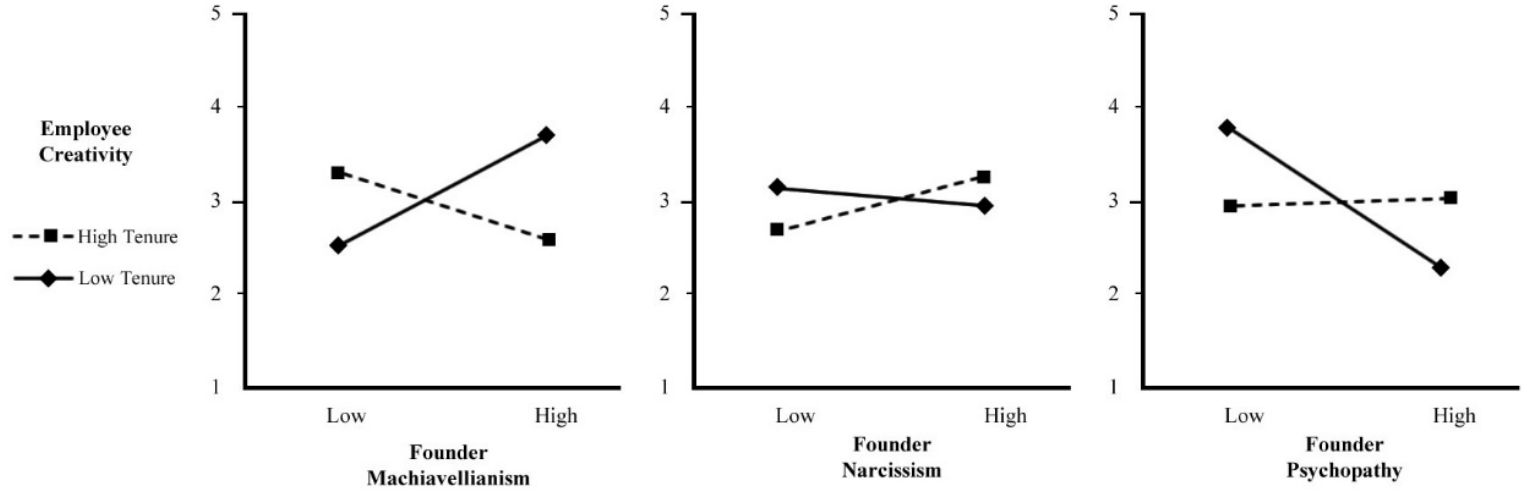


FIGURE 5
Study Two - Tenure Interaction Plots



VITA

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Candidate for the Degree of

Doctor of Philosophy

Dissertation: THE DARK TRIAD, EMPLOYEE CREATIVITY, AND PERFORMANCE IN THE NEW VENTURE CONTEXT

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PhD	Oklahoma State University Watson Graduate School of Management Concentration: Entrepreneurship	2012-2015 <i>(expected)</i>
MBA	Missouri State University	2009 Concentration: Marketing
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ACADEMIC EXPERIENCE

Tenure-Track Assistant Professor	<i>Marshall University, Huntington, WV</i>	2014-Present
Visiting Instructor	<i>Fort Hays State University, Hays, KS</i>	Spring 2014
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PROFESSIONAL EXPERIENCE

Founder and Managing Partner	<i>Quarterguard Asset Management Property inspections and management</i>	2012 – 2013
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