Follower Characteristics and Preference for Styles of Leadership Behavior

by

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ABSTRACT

The purpose of this study was to determine how the eight common personality types identified by Hogan Assessments – Rebels, Marketers, Proletarians, Congenials, Over-Achievers, Networkers, Misfits, or Preppers – differ in their patterns of preferences for the leadership styles of task-oriented, relationship-oriented, and change-oriented leadership. Data were collected using a survey published on Amazon Mechanical Turk, which consisted of forced-choice comparisons of the eight personality types and sevenpoint Likert scales measuring the preference for the leadership styles' specific behaviors. A sample of 291 participants, who were all at least 25 years of age, currently working in the U.S., proficient at reading and speaking English, and had worked for a supervisor for at least five years, was used for the study. The results showed that the patterns of preference for the three leadership styles were different depending on the personality type, $F_{(14.564)} = 1.95$, p = .020, but every personality type preferred either task-oriented or relationship-oriented leadership more than change-oriented leadership. Over-Achievers and Proletarians generally preferred overall leadership the most, while Marketers and Congenials tended to prefer it the least. Even though preferences were different across personality types, the mean differences for overall leadership were within one point, on average, and the preferences for the three leadership styles were all within two points across all eight types. The findings both provide further evidence that preference for leadership depends on follower characteristics and can help leaders to align their leadership styles to the preferences of their followers.

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CHAPTER I: LITERATURE REVIEW

Introduction

Effective leaders are widely regarded as essential assets to organizations because of their ability to influence, motivate, and enable their followers to achieve goals that support organizational success (McShane & Von Glinow, 2015). Additionally, effective leadership results in positive outcomes for followers, like increased job satisfaction, well-being, and job performance (Montano et al., 2017). For these reasons, a large amount of research has been dedicated to what comprises effective leaders, namely their characteristics and behaviors (Derue et al., 2011; Oc & Bashshur, 2013). However, it became clear that a wide range of leader traits and behaviors could be considered effective, and certain leader activities are not as effective as others in different situations (House, 1996). As a result, subsequent research has emphasized the contingent nature of leadership on various factors outside of the leaders' control, like the nature of the task (Fiedler, 1967; House, 1971, 1996), the quality of the leader-follower relationship (Dansereau et al., 1975), and follower characteristics (House, 1971, 1996).

The focus of this study is on follower characteristics, which seem to moderate the relationships between leader behaviors and follower outcomes, such as task performance and psychological well-being (Benoliel & Somech, 2014; Monzani et al., 2015; Shin & Jing, 2003). In other words, the same leader behaviors affect followers differently, depending on the followers' characteristics. A reason for this seems to be that follower characteristics dictate the type of leader they prefer, and this preference impacts the effectiveness of the leader on follower outcomes. For instance, when given a description of a charismatic leader, followers who reported a low preference for a charismatic

leadership style associated the description with negative terms like "arrogant" and "pushy", whereas followers who report a high preference associated the description with positive terms like "committed" and "empowering" (Ehrhart & Klein, 2001). Thus, followers react differently to the same leader behaviors depending on their preference for them, and forcing followers to work with a leader who employs a style they do not prefer would likely lower the followers' well-being and performance (Breevaart & De Vries, 2019). On the other hand, followers working for a leader employing a style they do prefer are likely to be more satisfied and committed to the leader and perform better under them (Ehrhart & Klein, 2001). Ultimately, a leader's effectiveness depends on the extent that they can influence their followers, but their influence extends only as far as followers are willing to let it (Thoroughgood & Sawyer, 2018). If followers actively dislike their leader's style, then there is not much a leader can do other than to change their style. When their style of leading aligns with their followers' preference, they are more likely to be effective.

Several studies have investigated the relationships between follower characteristics and their corresponding preferences for leadership styles and found significant results; however, they employ different operationalizations for follower characteristics and leadership styles (Bertsch et al., 2017; Breevaart & De Vries, 2019; Ehrhart & Klein, 2001; Moss & Ngu, 2006; Thoroughgood & Sawyer, 2018). These studies will be discussed in greater detail in a following section. The present study aims to provide more insight into the relationship between follower characteristics and their preference for leadership styles. In doing so, it also will ultimately better equip leaders to

effectively adjust their own leader behaviors to suit their followers' preferences, thereby resulting in better outcomes for the follower, the leader, and the organization.

Leadership Taxonomy

In order to determine leader effectiveness, leadership behaviors must first be organized and categorized for the sake of understanding what behaviors, in particular, lead to better or worse outcomes. For this reason, a great deal of research has been dedicated to understating how leader behaviors can be grouped into different leadership styles. Some of the first landmark studies that targeted leader behaviors isolated two broad categories of leadership behaviors, which have come to be known as task-oriented and relationship-oriented leadership (Ekvall & Arvonen, 1991). Originally, the University of Michigan Institute for Social Research studies (Likert, 1961) termed these as job-centered and employee-centered, and they were called initiating structure and consideration in the Ohio State University studies (Fleishman, 1953). Task-oriented leaders are concerned with the efficient use of resources and personnel to achieve reliability in operations, production, and the provision of services. Task-oriented behaviors comprise short term planning, clarifying follower task responsibilities and the relationships among them, coordinating followers' actions, determining the standards of task performance, and ensuring followers perform up to those standards by monitoring their operations and performance (Derue et al., 2011; Yukl et al., 2002). Relationshiporiented leaders are primarily concerned with maintaining a strong commitment to and a high level of mutual trust and cooperation with their followers. Relationship-oriented leader behaviors include supporting, developing, recognizing, consulting, and empowering followers (Yukl et al., 2002).

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While the task-relationship, two-dimensional model of leadership behavior has been widely accepted (Ekvall & Arvonen, 1991), many other leadership styles have been theorized more recently (Judge & Piccolo, 2004). For example, another two-dimensional model that has been proposed and found much support is that of transactional versus transformational leadership (Derue et al., 2011; Judge & Piccolo, 2004; Lowe et al., 1996). Transformational leadership describes a meaningful and creative leader-follower interaction that induces a vision-led change in followers (Herold et al., 2008; Kark et al., 2003; Yukl, 1999a). It comprises four facets – individualized consideration, intellectual stimulation, idealized influence (charisma), and inspirational motivation (Bass, 1985; Deinert et al., 2015). Individualized consideration involves behaviors that support followers and provide them with opportunities to learn and develop (Deinert et al., 2015; Judge & Piccolo, 2004). Intellectual stimulation behaviors lead followers to be creative and innovative problem solvers by reframing existing problems with new and different perspectives (Deinert et al., 2015; Judge & Piccolo, 2004). Inspirational motivation behaviors are often symbolic actions that evoke optimism toward a vision of the future and a feeling of meaningfulness for followers carrying out tasks (Deinert et al., 2015; Judge & Piccolo, 2004). Lastly, idealized influence, or charisma, involves role modeling behaviors by the leader, causing the follower to identify with the leader and internalize the leader's mission, vision, and values on an emotional level (Deinert et al., 2015; Judge & Piccolo, 2004).

Transactional leadership, on the other hand, is composed of contingent reward and management-by-exception behaviors (Yukl, 1999a). Contingent reward behaviors involve the leader providing rewards to followers if their performance and effort match

the criteria agreed upon with the leader (Lowe et al., 1996). Management-by-exception behaviors describe those in which the leader does not involve themselves in directing the tasks and performance of their followers as long as their goals are being met (Lowe et al., 1996). The construct of management-by-exception has been found to have little to no relationship with leader effectiveness, although, over time, it has been subdivided into active management-by-exception – a form of monitoring – and passive management-by-exception, which is also known as laissez-faire leadership (Lowe et al., 1996; Yukl, 1999a). It is, therefore, possible that active management-by-exception has a small positive relationship with leader effectiveness, and passive management-by-exception has a small negative relationship (Judge & Piccolo, 2004; Lowe et al., 1996).

This transactional-transformational model of leadership has been proven to have good construct validity (Deinert et al., 2015; Judge & Piccolo, 2004) and explains a reasonable amount of variance in leader effectiveness (Judge & Piccolo, 2004; Lowe et al., 1996), but there is disagreement about exactly how effective each style is (Judge & Piccolo, 2004; Lowe et al., 1996; Wang et al., 2011). Interestingly, Wang et al. (2011) found that for individual followers, transformational leadership actually explains no more variance in follower task performance than contingent rewards. Instead, it does a better job in improving a follower's contextual performance. Judge and Piccolo (2004) also found that contingent reward leadership outperforms transformational leadership in several criteria, and they found a strong correlation between transformational leadership and contingent reward (ρ = .80). They also note that the four sub-dimensions within transformational leadership are very highly correlated and may lack discriminant validity. Notwithstanding these discrepancies with transformational leadership theory,

transformational leadership has been shown to outperform several other proposed leadership styles, such as servant leadership, authentic leadership, and ethical leadership, which explain very little incremental variance in several key outcomes above and beyond transformational leadership (Hoch et al., 2018). For this reason, these underperforming leadership styles are not considered in the present study.

Another leadership style, known as charismatic leadership, has gained notoriety, and has long been thought to be a crucial component to transformational leadership, specifically the idealized influence and inspirational motivation components (Conger & Kanungo, 1994; Deinert et al., 2015). In fact, studies on transformational and charismatic leadership on effectiveness criteria across a range of levels of analysis revealed significant overlap between the two constructs (Deinert et al., 2015; Judge & Piccolo, 2004; Wang et al., 2011). Although they were originally treated as separate constructs, transformational and charismatic leadership have come to be studied without distinguishing between them (Conger & Kanungo, 1994; Yukl, 1999b). Both constructs generally describe leaders who inspire, motivate, and influence followers to exceed expectations, commit to a compelling vision of the future, and sacrifice self-interests for the sake of collective interests (Bass, 1985; Conger & Kanungo, 1994; Yukl, 1999b). Additionally, historical analyses of charismatic leaders reveal that they often did embody the empowering and developing behaviors of transformational leaders toward their followers (Yukl, 1999b).

Although many researchers study them as one style of leadership, it is worth mentioning the ways in which the two differ. The main distinction between them tends to be that followers of charismatic leaders are influenced because they identify with the

leader and the associated extraordinary qualities to the leader, whereas followers of transformational leaders are influenced because they identify with the vision proposed by the leader (Kark et al., 2003; Yukl, 1999b). Supporting this distinction is the finding that transformational leaders usually are not considered charismatic by their followers (Yukl, 1999a, 1999b). Moreover, the results of a meta-analysis on transformational leadership and personality also show that transformational leadership behaviors generally do not depend on the personalities of those transformational leaders (Bono & Judge, 2004). In other words, while charismatic leadership is definitionally dependent upon extraordinary personality traits of the leader, transformational leadership can be achieved without those same extraordinary traits.

Despite the large scope of both the task-relationship and transactional-transformational-charismatic models of leader behavior, these models do not include many leader behaviors crucial to making a leader effective at the individual level (Yukl, 1999a). Such behaviors as scanning and analyzing the external environment, reformulating strategies, building support for change via political activities, and reorganizing to support a new strategy are left untouched and comprise a potential third factor – change-oriented leadership – in a three-factor model of leadership which includes task, relationship, and change oriented leader behaviors (Yukl, 1999a). Change-oriented leaders are primarily concerned with implementing innovative improvements to the processes, products, or services of an organization and adapting to changes in the external environment (Yukl et al., 2002). Change-oriented leaders are also defined by their willingness to take risks, accept new ideas from others, and adapt to new situations by making quick decisions (Ekvall & Arvonen, 1991; Yukl et al., 2002). While change-

oriented leaders and transformational-charismatic leaders share similarities, the difference lies in that change-oriented leaders influence their followers to commit to the specific change initiative itself, while transformational and charismatic leaders emphasize changes within the followers themselves and influence them and motivate them to commit to distant visions of the future instead of shorter term, specific changes in the organization (Herold et al., 2008; Yukl, 1999a). Since change-oriented leadership captures many of the behaviors found in the transformational-charismatic leadership construct, as well as many behaviors not included in it, the task-relationship-change model of leader behaviors describes the broadest possible spectrum of leadership behaviors.

There is a significant amount of support for this task-relationship-change model of leadership. Not only were the three factors of task, relationship, and change leadership found to be orthogonal, but a three-factor model composed of these leadership styles has proven to be superior than any two-factor model in explaining the widest range of leader behaviors (Ekvall & Arvonen, 1991; Yukl, 1999a; Yukl et al., 2002). A possible reason for this is the fact that many of the behaviors described in the transactional-transformational-charismatic model can be subsumed within the task-relationship-change model (Derue et al., 2011; Yukl et al., 2002).

In a model proposed by Derue et al. (2011), the dimension of task-oriented leadership includes both the contingent rewards and (active) management-by-exception dimensions of transactional leadership. The relationship-oriented dimension, according to the model, includes the developing, enabling, and empowering behaviors found in the individualized consideration aspect of transformational leadership. Additionally, aspects

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of idealized influence can be included in the relationship-oriented leadership style, namely those behaviors that emphasize the interests and welfare of the group (Derue et al., 2011). Lastly, the inspirational motivation and intellectual stimulation components of transformational and charismatic leadership can be incorporated into the change-oriented leadership dimension (Derue et al., 2011). These findings are supported by a factor analysis study conducted by Yukl (1999a). Items measuring transformational and transactional leadership styles were incorporated from the Multifactor Leadership Questionnaire (MLQ) (Bass & Avolio, 1990), which has been used in the vast majority of research on the transactional-transformational model, and the Managerial Practices Survey (MPS) (Yukl & Lepsinger, 1990), which is a representative of several leadership questionnaires. Items from the Leader Behavior Description Questionnaire (LBDQ), which was originally developed for the Ohio State leadership studies, were also used to collect data on initiating structure and consideration behaviors (Tepper, 2020). Results showed that many of the assumed transformational behaviors better fit under a relationship-oriented factor and many of the positive transactional behaviors better fit under a task-oriented factor, as proposed by Derue et al. (2011) (Yukl, 1999a).

Another key aspect of Derue et al.'s (2011) model is its emphasis on using observable behaviors to describe leadership styles, instead of assumed traits or follower perspectives. Derue et al. (2011) found evidence that behaviors account for more variance in leadership effectiveness than traits and are, therefore, a more important predictor of leader effectiveness. In light of this model and the evidence in support of it, this study will measure followers' preferences for behaviors attributable to task-oriented, relationship-oriented, and change-oriented leadership. If leaders have knowledge of their

followers' preferences for these broad, distinct, and behavior-based leadership styles, then they will be more equipped to shape their own behaviors to match the style preferred by their followers, thereby increasing their overall effectiveness and their followers' overall well-being.

Situational and Contingency Theories of Leadership

There are many situational and contingency theories of leadership that focus on the effects that followers potentially have on leader effectiveness. Some go as far as to identify under what circumstances and for what types of followers certain leader behaviors are most effective.

In a landmark situational theory, known as Contingency Theory, Fiedler (1967) holds that different leadership styles are more effective under different situational conditions. Specifically, Fiedler concluded that task-oriented leaders are most effective in very favorable (high control) or very unfavorable (low control) situations (Fiedler et al., 1976). Highly unfavorable situations occur when leaders have bad relationships with their followers and are not very influential, the task is unstructured and ambiguous, and the leader's position is not inherently powerful (Fiedler et al., 1976). Highly favorable situations occur when leader have good relationships with their followers, the task is structured and unambiguous, and they have a high degree of legitimate power (Fiedler et al., 1976). Relationship-oriented leaders, on the other hand, thrive when they have moderate levels of influence, task control, and power (Fiedler et al., 1976). While Fiedler did not think that leaders could change their leadership style, he did argue that they ought to attempt to manipulate the situation, where possible, to give themselves the best chance at being effective (Fiedler, 1967; Fiedler et al., 1976). Although controversial now, this

theory was very influential in promoting the role of followers in mainstream leadership research (Jex & Britt, 2014; Oc & Bashshur, 2013).

Another early leadership theory that emphasized the role of followers in leadership outcomes is the Leader-Member Exchange theory, which originated as the Vertical Dyad Linkage theory (Dansereau et al., 1975; Graen & Uhl-Bien, 1995). This theory hinges on the notion that leaders develop different relationships and leadership styles with each of their followers (Dansereau et al., 1975). In a longitudinal study, Dansereau et al. (1975) found that leaders form specific vertical dyadic relationships with each of their followers such that the followers can either be grouped within the *in-group* or the *out-group*. Leaders were found to employ more casual influencing tactics with those in the in-group, rather than relying on their authority, and with the out-group they maintained a more formal and purely supervisory role, built on authority more than influence (Dansereau et al., 1975). Additionally, leaders tend to give those in the in-group more information and discretion to do their jobs (Jex & Britt, 2014). Initially, this was thought to be due to the leaders' perceptions of the followers' competence and job performance (Dansereau et al., 1975), but later research found that leader-member exchanges also improve when the leader and follower think they are similar to each other and like each other (Liden et al., 1993). In other words, leader perceptions of follower characteristics influenced the ways in which they interacted with and led them. Importantly, Dulebohn et al. (2012) found in a meta-analysis that when there exists a positive leader-member exchange, followers are likely to perform better on the job, carry out more Occupational Citizenship Behaviors, and report higher job satisfaction, organizational justice, and organizational commitment. Furthermore, they are less likely

to have turnover intentions and are less likely to actually turnover (Dulebohn et al., 2012). These results show that when leaders are similar to their followers and their behaviors align with what their followers want, both the follower and the organization flourish.

Situational Leadership Theory is another contingency theory, which focuses exclusively on the idea that leaders ought to adapt their leadership style – involving both task and relationship behaviors – to the performance readiness of their followers (Hersey & Blanchard, 1969). Performance readiness comprises both task ability and motivation or confidence to work on the task (Hersey & Blanchard, 1969). Despite its appeal, many of Situational Leadership Theory's basic assumptions and prescriptions are not supported (Blank et al., 1990; Vecchio, 1987). In spite of its lack of support, this theory helped to add even more emphasis on the impact of followers on leader effectiveness.

Adding to the idea that effective leadership must adapt to the situation and follower characteristics is Path-Goal Theory. The theory states that leaders must make followers' goals attractive and their paths clear in order to motivate their followers to achieve them (House & Mitchell, 1974). Put another way, leaders must strengthen the links between follower effort and goal attainment, as well as the links between follower goal attainment and rewards in order to motivate them (House, 1971). To do so, they must adapt their leadership style to be either directive, supportive, participative, or achievement oriented, depending on follower and situation characteristics, according to the original theory (House, 1971; House & Mitchell, 1974; Jex & Britt, 2014). House later reformulated his theory to include ten different styles of leading, depending on the

situation (House, 1996). For the purposes of this study, I will focus on the main four, as identified initially.

Directive leadership aims to give specific guidance and clarification to followers about what they need to do to achieve their goals (House & Mitchell, 1974). This collection of leader behaviors is most similar to task-oriented leadership. Supportive leadership aims to show care for follower needs and be supportive in order to give followers self-confidence (House & Mitchell, 1974). Supportive leadership describes behaviors included in the relationship-oriented dimension of leadership. Participative leading occurs when the leader consults the follower about work-related decisions (House & Mitchell, 1974). This type of leadership is closely related to the relationship-oriented leadership style. Lastly, achievement-oriented leadership encourages improvement, seeks excellence, and shows confidence in follower abilities (House & Mitchell, 1974). This type of leading can be expressed as coaching, goal-setting, and ensuring that development opportunities are available for subordinates (House, 1996; Jex & Britt, 2014).

Achievement-oriented leadership includes behaviors from task-, relationship-, and change-oriented leadership.

The two main characteristics of followers that determine the appropriateness of the leader's chosen style are their loci of control and perceptions of ability with respect to their tasks (House & Mitchell, 1974). Inherent to this theory is the notion that leaders should "engage in behaviors that complement [followers'] environments and abilities in a manner that compensates for deficiencies" (House, 1996, p. 348). Thus, a follower that believes their abilities are inadequate to perform their required tasks would most benefit from directive and supportive leadership, whereas a follower that believes they are very

capable would most benefit from achievement-oriented and participative leadership.

Similarly, a follower with an internal locus of control would most benefit from achievement-oriented and participative leadership, whereas a follower with an external locus of control would benefit more from directive and supportive leadership. As can be seen, Path-Goal Theory states that leaders are able to adjust their styles of leading, and they will be most effective when they do so to meet the needs of their individual followers.

Extending the ideas presented in Path-Goal Theory, a more recent line of research has specifically focused on the relationship between follower characteristics and follower preferences for different styles of leadership. The underlying assumption is that leaders who match their leading style to that which their followers prefer will be more effective. In large part, they have found statistically significant results, but the specific findings are inconsistent (Bertsch et al., 2017; Breevaart & De Vries, 2019; Ehrhart & Klein, 2001; Moss & Ngu, 2006; Thoroughgood & Sawyer, 2018). Because each of the studies examined different leadership styles and different constructs of follower characteristics, the relationships that each study found cannot be integrated to any real degree of accuracy. The specifics of these studies will be examined in greater detail in a following section.

Follower Characteristics

Before examining the results of the studies investigating the relationship between follower characteristics and their preference for leadership styles, we must first understand the prevailing models of personality and the other individual characteristics

measured in these studies. By understanding how the personality constructs relate to one another, the results of the studies can be assessed more accurately.

The vast majority of recent research in the past few decades has used either the Big 5 or Five Factor Model (FFM) of personality (Ashton & Lee, 2005). The Big 5 model and the FFM, which came about from research on grouping personality trait names and subsequent factor analyses (Costa & McCrae, 1985), describe largely similar personality factors and have been shown to circumscribe many of the previously popular personality models (Ashton & Lee, 2005; Digman, 1990). The five major personality factors are Extraversion, Agreeableness, Conscientiousness, Openness to Experience, and Neuroticism, or its inverse Emotional Stability (McCrae & John, 1992).

Each of the personality factors comprise several facets, which describe all the personality traits contained within each major factor. Extraversion involves enthusiasm and assertiveness and is measured by the scales of warmth, gregariousness, assertiveness, activity, excitement seeking, and positive emotions (DeYoung et al., 2007; McCrae & John, 1992). Agreeableness involves compassion and politeness, and it is measured by the scales of trust, straightforwardness, altruism, compliance, modesty, and tendermindedness (DeYoung et al., 2007; McCrae & John, 1992). Conscientiousness can be thought of as industriousness and orderliness, and it is measured by the scales of competence, order, dutifulness, achievement striving, self-discipline, and deliberation (DeYoung et al., 2007; McCrae & John, 1992). Neuroticism is described as having volatility and withdrawal, and it is measured on the scales of anxiety, hostility, depression, self-consciousness, impulsiveness, and vulnerability (DeYoung et al., 2007; McCrae & John, 1992). Finally, Openness to Experience relates to openness and intellect,

and its scales are fantasy, aesthetics, feelings, actions, ideas, and values (DeYoung et al., 2007; McCrae & John, 1992).

While these models have been found to subsume the personality traits found in most other popular personality inventories in the United States culture in which they were developed (O'Connor, 2002), recently a sixth factor – Honesty-Humility – has been included which has been shown add incremental validity to the model in predicting theoretically related criteria, especially outside of America (Ashton et al., 2014; Ashton & Lee, 2008). It has also garnered even more evidence for construct validity than the FFM (Ashton et al., 2014). This new model – the HEXACO model – is very similar to the FFM, except of course, that it includes the new H factor which represents traits such as sincerity, fairness, and being unassuming, as opposed to being sly, greedy, and pretentious (Ashton et al., 2014).

The only differences among the other constructs are found in Agreeableness and Emotional Stability (Ashton et al., 2014). Emotionality, in the HEXACO model, includes sentimentality – "the tendency to feel strong emotional bonds with others" – which was previously understood to be a part of Agreeableness in the FFM (Ashton et al., 2014, p. 142; Breevaart & De Vries, 2019). Emotionality also excludes hostility, which was included in the Emotional Stability dimension of the FFM (Ashton et al., 2014; Breevaart & De Vries, 2019). Agreeableness, in the HEXACO model, instead includes this trait of hostility, specifically the inverse of anger, but this trait is not included in FFM Agreeableness (Ashton et al., 2014; Breevaart & De Vries, 2019).

Many of the studies examining follower characteristics and preference for leadership styles measure the Big 5, FFM, or HEXACO traits as a way of

operationalizing follower personality traits (Bertsch et al., 2017; Breevaart & De Vries, 2019; Moss & Ngu, 2006; Thoroughgood & Sawyer, 2018). However, Ehrhart and Klein (2001) and Thoroughgood and Sawyer (2018) measured additional personality traits, as well (see Table 1). Ehrhart and Klein (2001) measured the traits of achievement orientation, risk-taking, self-esteem, and need for structure. Using a definition proposed by Biernat (1989), Ehrhart and Klein (2001) describe individuals with achievement orientation as being "persistent, impressed with status, hard-working, and independent" (Biernat, 1989, p. 70-71, as cited in Ehrhart & Klein, 2001, p. 157). Borrowing another definition, they describe risk takers as "willingly expos[ing] self to situations with uncertain outcomes" and "enjoy[ing] adventures having elements of peril" (Jackson, 1976, p. 10, as cited in Ehrhart & Klein, 2001, p. 157). Those with self-esteem are "confident in dealing with others; not easily embarrassed or influenced by others;" and show "presence in interpersonal situations" (Jackson, 1976, p. 10, as cited in Ehrhart & Klein, 2001, p. 157). Finally, Ehrhart and Klein (2001) describe an individual with a need for structure as "leading a simple, tightly organized life" who is "especially likely to establish and enjoy routines, prefer family social situations, and so on" (Neuberg & Newsom, 1993, p. 114-115, as cited in Ehrhart & Klein, 2001, p. 157).

Table 1Follower Characteristics Measured in Ehrhart and Klein (2001) and Thoroughgood and Sawyer (2018)

Ehrhart and Klein (2001)		Thoroughgood and Sawyer (2018)	
Personality traits	Work values	Personality traits	Work values
Achievement orientation	Intrinsic v. extrinsic	Authoritarianism	Autonomy
Risk-taking	Interpersonal relations	Cognitive rigidity	Teamwork
Self-esteem	Security	Rational mindedness	Competition
Need for structure	Participation	Temporal focus	Stability

In addition to the Big 5, Thoroughgood and Sawyer (2018) measured the personality traits of authoritarianism, cognitive rigidity, rational mindedness, and temporal focus (i.e., future or past focused). They describe those high on the trait of authoritarianism as stressing the importance of authority, obeying norms, and commitment to traditions (Thoroughgood & Sawyer, 2018). Those with cognitive rigidity have an intolerance for ambiguity and are less motivated to process complex information (Jost et al., 2003; Thoroughgood & Sawyer, 2018). Individuals with rational mindedness, or those with dominant rational thinking styles, as opposed to emotional, tend to process information consciously using reason and analysis, rather than automatically using emotion (Pacini & Epstein, 1999; Thoroughgood & Sawyer, 2018). Finally, individuals that are past-focused view time and events as cyclical, believing that present and future problems are solvable using past approaches (Brislin & Kim, 2003; Thoroughgood & Sawyer, 2018). On the other hand, future-focused individuals devote more attention to the future, and present-focused individuals devote more attention to the present (Thoroughgood & Sawyer, 2018).

Also measured by Ehrhart and Klein (2001) and Thoroughgood and Sawyer (2018) are a number of work values which are also pertinent to follower characteristics (see Table 1). For instance, Ehrhart and Klein (2001) measured the work values of intrinsic and extrinsic motivation, interpersonal relations, security, and participation. Using the definition put forward by Loscocco (1989), Ehrhart and Klein (2001) describe an individual with an intrinsic work value as "valu[ing] responsibility, initiative, and challenge at work" (Loscocco, 1989, as cited in Ehrhart & Klein, 2001, p. 157). On the other hand, an individual with extrinsic work value "values the quality of pay, benefits, and hours at work" (Loscocco, 1989, as cited in Ehrhart & Klein, 2001, p. 157). Having an interpersonal work value means that the individual "values the quality of relationships with co-workers and management" (Manhardt, 1972, as cited in Ehrhart & Klein, 2001, p. 157). Having a security work value means that the individual "values job stability and security at work" (Beutell & Brenner, 1986, as cited in Ehrhart & Klein, 2001, p. 157). Lastly, having a participation work value means that the individual "values having influence and working for mutual benefit at work" (Dickson, 1983, as cited in Ehrhart & Klein, 2001, p. 157).

Thoroughgood and Sawyer (2018) measured the work values of autonomy, teamwork, competition, and stability. They measured these work values using scales developed by Berings et al. (2004). Autonomy relates to "personal space, liberty, and self-determination" (Berings et al., 2004, p. 356), and an example item is used by Thoroughgood and Sawyer (2018) is "It is important . . . that I am able to work independently most of the time" (Thoroughgood & Sawyer, 2018, p. 188). Teamwork relates to the preference to work on a team and share in team spirit (Berings et al., 2004).

An example item for the teamwork work value is "It is important . . . that I be able to work in a team on a regular basis" (Thoroughgood & Sawyer, 2018, p. 188). The competition work value stresses "attention to individual achievement and competition" (Berings et al., 2004, p. 356), and one item used to measure it is "It is important . . . that my contributions are clearly marked as my own" (Thoroughgood & Sawyer, 2018, p. 188). Lastly, the work value of stability relates to preference for "continuity in organizations" (Berings et al., 2004, p. 356), and an example item is "It is important . . . for things to be changed only when strictly required" (Thoroughgood & Sawyer, 2018, p. 188).

One way to combine a large number of personality traits and work values, as seen in the research on follower characteristics and preference for leadership styles, is to use personality profiles. The advantage of using personality profiles in a work setting is that they describe the whole person using a large number of personality traits and work values, rather than just one or two, and they also give leaders an easier way of thinking about their followers (Loepp, 2020). Hogan Assessments, which uses personality assessments to understand and predict organizational performance, used data they collected from 332,935 individuals to identify the eight most common personality profiles, or types, in the working population (Loepp, 2020). These profiles, which have been replicated all over the world, were developed using the results from three of Hogan's own personality assessments, namely the Hogan Personality Inventory (HPI), the Hogan Development Survey (HDS), and the Motives, Values, Preferences Inventory (MVPI) (Loepp, 2020).

The HPI is based on the FFM and measures personality traits that describe how individuals behave and interact normally (i.e., bright-side personality) (Hogan Assessments, 2020b). The seven primary scales for the HPI measure adjustment, ambition, sociability, interpersonal sensitivity, prudence, inquisitiveness, and learning approach (Hogan Assessments, 2020b). Its six occupational scales measure service orientation, stress tolerance, reliability, clerical potential, sales potential, and managerial potential (Hogan Assessments, 2020b).

Unlike the HPI, the HDS measures personalities traits not capture by the FFM (Hogan Assessments, 2020a). These traits make up the dark side of personality and surface most often in times of strain (Hogan Assessments, 2020a). The eleven scales that comprise the HDS determine whether individuals are excitable, skeptical, cautious, reserved, leisurely, bold, mischievous, colorful, imaginative, diligent, and dutiful (Hogan Assessments, 2020a). Extreme scores on any of these could indicate a potential weakness in the workplace (Hogan Assessments, 2020a).

Lastly, the MVPI, which attempts to evaluate "the core goals, values, drivers, and interests that determine what [individuals] desire and strive to attain," consists of ten primary scales (Hogan Assessments, 2020c). They are recognition, power, hedonism, altruism, affiliation, tradition, security, commerce, aesthetics, and science (Hogan Assessments, 2020c).

Using data from the HPI, HDS, and MVPI, Hogan found that eight clusters of the traits consistently appeared when the analyses were replicated on different samples across the world (Loepp, 2020). They named these eight most common clusters – or personality

profiles – Rebels, Marketers, Proletarians, Congenials, Over-Achievers, Networkers, Misfits, and Preppers (Loepp, 2020).

Rebels tend to be ambitious, seeking luxury, fame, and power (Loepp, 2020). They also tend to have a strong desire to change the status quo, while being reactive, passionate, energetic, volatile, and rule-breaking (Sherman, 2020h).

Marketers are also driven and ambitious, but they are much more interested in competing; thus, they are confident, bright, and rely on good social skills to charm others to buy into their vision (Loepp, 2020; Sherman, 2020b). Marketers can also be overly confident, comfortable with risks, and lack straightforwardness in their communications if it means advancing their strategy (Sherman, 2020b).

Proletarians are much more interested in a stable, ordinary lifestyle in which they can work hard but still have time for the things they enjoy outside of work (Loepp, 2020; Sherman, 2020g). They tend to be reserved, careful, flexible, and respectful, but lacking in high work ambitions (Loepp, 2020; Sherman, 2020g).

Congenials also tend not to be particularly driven or ambitious (Sherman, 2020a). They are steady under pressure, friendly, optimistic, agreeable, and rule-abiding (Loepp, 2020; Sherman, 2020a). While they are often introverted, they also like to connect with others through cooperation rather than competition, sometimes at the expense of productivity (Sherman, 2020a).

Over-Achievers are hard-working rule followers with high standards, who are bright, disciplined, calm, and resilient (Loepp, 2020; Sherman, 2020e). Despite their high performance, they tend to stay in individual contributor roles, due to the fact that they

believe that a job well-done ought to be the only thing that advances one's career, even though they are interested in career success (Loepp, 2020; Sherman, 2020e).

Networkers are also hardworking and ambitious, but they use their sociability, heightened social skills, connectedness, and charm to move up the career ladder, despite being overly dramatic and manipulative at times (Loepp, 2020; Sherman, 2020d). They also are willing to break some rules, take risks in order to achieve their goals, let errors slip by in their work, and not always treat people fairly and without favoritism (Loepp, 2020; Sherman, 2020d).

Misfits prefer to work by themselves, as opposed to in teams, but often have the right knowledge and experience to be effective without good people skills (Loepp, 2020; Sherman, 2020c). They have a strong desire for security and stability, and can be emotionally volatile, quiet, negative, and socially reactive (Loepp, 2020; Sherman, 2020c).

Lastly, Preppers can be described as defensive pessimists, since they are driven by a concern for failure and insecurity, leading them to desire stability and predictability (Loepp, 2020; Sherman, 2020f). Thus, they tend to be conscientious and prepared for the worst, without thinking much about long-term opportunities or ambitions (Loepp, 2020; Sherman, 2020f). Like Misfits, though not as extreme, they are introverted and prefer not to work in groups (Loepp, 2020; Sherman, 2020f).

Using the eight personality profiles identified by Hogan allows insight into the vast majority of the personality traits and work values that have been studied with regard to their relationships with followers' preferences for leadership styles. This method of

categorizing followers would also allow leaders to more easily identify them, understand them, and adjust their leadership styles to best fit them.

Follower Characteristics and Preference for Leadership Style

Ehrhardt and Klein (2001) attempted to identify the follower characteristics that most differentiated followers who prefer charismatic leader from those that prefer task-oriented or relationship-oriented leaders. Notably, they found that about half of all participants indicated that they preferred the relationship-oriented leadership style (Ehrhart & Klein, 2001). Of the nine follower characteristics they studied, only risk-taking did not have any statistically significant relationships with preferences for any of the leadership styles (Ehrhart & Klein, 2001). There were three relationships, in particular, which emerged as the strongest and most useful in differentiating between followers who prefer either charismatic, task-oriented, or relationship-oriented leadership styles (Ehrhart & Klein, 2001). These relationships are between the participation work value and preference for charismatic leadership, extrinsic rewards work value and preference for relationship-oriented leadership, and security work value and task-oriented work value (Ehrhart & Klein, 2001).

In a study of nursing employees, Moss and Ngu (2006) examined the relationships between followers' scores on the FFM and the extent that they prefer transformational, transactional, and laissez-faire leadership styles. They found that followers high in Extraversion and Conscientiousness prefer transformational leaders, and those high in Neuroticism prefer laissez-faire leadership (Moss & Ngu, 2006). Those high in Agreeableness were found not to prefer transactional leaders or laissez-faire leadership (Moss & Ngu, 2006).

In a similar study, Bertsch et al. (2017) examined the relationships between followers' scores on the Big 5 and the extent that they prefer autocratic, participative, or laissez-faire leadership behaviors. They found a statistically significant positive relationship between Extraversion and preference for participative leadership, and they found a statistically significant negative relationship between Openness and autocratic leadership (Bertsch et al., 2017). In addition to these two relationships, they also found evidence for two more nearly statistically significant relationships – both Agreeableness and Openness had a positive relationship with preference for participative leadership (Bertsch et al., 2017).

Thoroughgood and Sawyer (2018) attempted to identify which follower profiles were most likely to prefer each of the three leadership styles studied – charismatic, ideological, and pragmatic leadership. They define charismatic leadership as future-focused, unconventional, and empowering; ideological leadership as preserving tradition, stability, and conformity; and pragmatic leadership as rational, adaptive, and clarifying of tasks and roles (Thoroughgood & Sawyer, 2018). As discussed previously, they included in their follower profiles the Big 5, additional personality traits, and work values (Thoroughgood & Sawyer, 2018). Unlike the previously discussed studies, this one asked participants to simply choose which of the three leadership styles they preferred the most and indicate the extent they thought they were similar, instead of simply indicating the extent that they prefer each of them (Thoroughgood & Sawyer, 2018). They found that those that preferred charismatic leaders were more people- and team-oriented, emotionally stable, future focused, and less rationally minded; and those that preferred pragmatic leaders were less extraverted, agreeable, and team-oriented, and more focused

on rationality, autonomy, and competition (Thoroughgood & Sawyer, 2018).

Interestingly, participants scoring somewhere in between the scores of these two profiles tended to prefer ideological leaders (Thoroughgood & Sawyer, 2018).

The most recent iteration of this type of research was conducted by Breevaart and De Vries (2019). They examined the relationships between followers' scores on the HEXACO model of personality and their preference for charismatic, relationship-oriented, and task-oriented leadership styles. Interestingly, they asked participants to indicate the extent that they preferred each leadership style, and they had participants choose which of the three they would prefer to work for (Breevaart & De Vries, 2019). They found that followers high in Extraversion and Openness to Experience preferred charismatic leadership, and those low in Openness to Experience preferred task-oriented leadership (Breevaart & De Vries, 2019). They also found that followers high in Emotionality prefer both relationship-oriented leaders, who can be expected to provide support in times of emotional distress, and task-oriented leaders, who can be expected to reduce risks by outlining exactly what is expected of their followers (Breevaart & De Vries, 2019).

As can be seen, the research on this topic spans many different leadership styles and many different follower characteristics. Each study found different relationships, and they are not easily organized into a convincing pattern. In light of this, the present study aims to explore these relationships using empirically tested personality clusters, which include the vast majority of the characteristics included in the research discussed above. Additionally, implementing the broad task-relationship-change taxonomy of leadership behavior will better differentiate between the categories of followers, since this

leadership model encompasses the greatest amount of leadership behaviors while also maintaining orthogonality.

Research Question

How do the eight common personality types identified by Hogan Assessments differ in their patterns of preferences for the leadership styles of task-oriented, relationship-oriented, and change-oriented leadership?

CHAPTER II: METHOD

Participants

Participants were recruited from the Amazon-owned Mechanical Turk (MTurk) service, which Amazon describes as an online "crowdsourcing marketplace" (Amazon Mechanical Turk, Inc., 2020). Of the 585 participants who started the survey, data from 291 participants were ultimately used. Those participants whose data were not used were removed for not providing a completion code in MTurk or for not meeting the quality control standards of the study, which will be explained in greater detail below. The sample whose data were used included 182 participants (62.5%) who identified as male, 108 (37.1%) who identified as female, and one participant who identified as queer. The average age of the participants in the sample was 40.05 years (SD = 10.70), ranging from 25 to 83 years. Of the sample, 77.7% of the participants were White, 9.3% were Black or African American, 5.5% were Asian, 2.4% were Hispanic or Latino, 0.7% were American Indian or Native American, 0.3% were Middle Eastern or North African, and 4% identified themselves as having more than one ethnicity (percentages do not equal 100% due to rounding). When asked in which region of the U.S. they worked, 37.8% reported working in the South, 22.3% in the Northeast, 20.3% in West, and 19.6% in the Midwest. Individual contributors comprised 45.7% of the sample, entry-level supervisors comprised 19.2%, middle managers comprised 32%, and executives comprised 3.1%. When asked for their current job family, 17.5% said that their job was classified as Manager & Executive, 17.2% of the participants responded with Professionals, 14.8% responded with Sales, 13.7% responded with Technical & Specialist, 11.7% responded with Administrative & Clerical, 10.0% responded with Service & Support, 4.5%

responded with Operations & Trades, 4.1% responded with Customer Support, 0.3% responded with Military, and 6.2% responded with Other. Participants reported having worked for an average of 17.95 years (SD = 11.45) overall, 6.88 years (SD = 4.86) in their current job, and 13.55 years (SD = 9.13) for a supervisor. They also reported working for an average of 5.51 different supervisors (SD = 4.04).

Measures

Follower Characteristics

For this study, a new measure was created from the eight most common personality types found by Hogan Assessments to assess the characteristics of the participants. Descriptions of each of the eight personality types, taken from a Hogan Assessments blog post (Loepp, 2020), were presented without the associated label for each personality type and were reworded so as to make the participant the referent (see Appendix A for the comparisons between the original and revised descriptions and Appendix B for measure presented to participants).

In order to identify the eight common personality types, Hogan Assessments used archived data from millions of people from around the world, 332,935 of which completed all three of Hogan's core assessments – the HPI, HDS, and MVPI (Sherman, 2019). Of this sample, 23.6% of the people indicated they were female, 41.1% indicated they were male, and 35.3% did not indicate their sex (Sherman, 2019). After a series of cluster analyses, they found that the mean proportion of maximum possible fit to the clusters was .78 (SD = 0.05) and that only 5.2% of the cases were below .70 (Sherman, 2019). In estimating the test-retest reliability (n = 2,235, $M_{interval} = 270$ days, SD = 218), they found that 53.4% got the same profile (Sherman, 2019). When individuals did

change profiles, Hogan researchers found that they did so predictably, that is toward profiles that are psychologically similar to their initial profile (Sherman, 2019). In assessing their validities, Hogan researchers found that Congenials, Over-Achievers, and Networkers had the highest overall job performance, while Misfits and Rebels had the lowest (Sherman, 2019). These results match what would be expected from individuals with these personality types. Additionally, they found that Rebels and Networkers were over-represented in a sample (N = 269) of entrepreneurs, and Congenials and Over-Achievers were under-represented (Sherman, 2019). Again, these results match what would be expected from individuals with these personality types. Overall, the study by researchers at Hogan Assessments has demonstrated that the eight personality types are relatively stable and valid predictors of relevant work behaviors and attributes.

For the present study, a series of 28 forced-choice comparisons between two descriptions of the eight personality types were presented in random order to the participants, such that each personality type was compared to all seven of the other types. Additionally, in each comparison, the side (left or right) that the personality styles appeared on was randomized to eliminate any systematic bias that might occur due to reading direction or anchoring bias. For each comparison, participants were asked to choose the personality type that better describes who they are at work. Participants were then classified as the personality type that they chose most frequently. Originally, the participants who produced a two-way tie for the most frequently chosen personality type were planned to be included in the analyses. Those participants would have been classified as the type chosen when the two tied personality types were compared against each other. However, it was ultimately decided that there were enough participants who

chose just one personality type most frequently to only include them in the analysis. Only including participants who clearly identified with just one personality type also increases the reliability of the findings of this study, since these participants are more likely to be more accurate representations of a member of their personality type. Data from participants who produced more than a two-way tie were also excluded from the analyses.

Preference for Leadership Style

To measure participants' preferences for the leadership styles of task-oriented, relation-oriented, and change-oriented leadership, a measure was adapted from Hierarchical Taxonomy of Leader Behavior (Yukl et al., 2002). Yukl and his colleagues identified and organized twelve different behaviors into the dimensions of task-oriented, relation-oriented, and change-oriented leadership. Those behaviors are Clarifying Roles, Monitoring Operations, Short-Term Planning, Consulting, Supporting, Recognizing, Developing, Empowering, Envisioning Change, Taking Risks for Change, Encouraging Innovative Thinking, and External Monitoring. They conducted a confirmatory factor analysis which showed that each of these behaviors was associated with one of the three different leadership styles. They also found that adding an additional Developing behavior to task-oriented leadership created the model with the best overall fit (Yukl et al., 2002). Consistent with these findings, the definition for Developing was divided into two separate items for the present study, isolating the parts of the definition that pertained to task-oriented leadership and relation-oriented leadership. Therefore, the thirteen-item measure used in this study comprised three subscales for task-, relation-, and changeoriented leadership styles. The subscale for task-oriented leadership style had four items

(α = .79), the subscale for relationship-oriented leadership had five items (α = .81), and the subscale for change-oriented leadership styles had four items (α = .74) (see Appendix C for a list of all the items and their corresponding leadership style). These subscale reliability estimates are similar to, yet slightly lower than those found by Yukl et al. (2002), which were mostly greater than .80 with the lowest being .77 when they tested each subscale on two different samples.

Each item directly describes one of the behaviors defined by Yukl et al. (2002; Table 5). The Developing item in the task-oriented leadership subscale had a corrected item-total correlation of .58, and the Cronbach's α for the subscale would decrease to .75 if the item were removed. Similarly, the Developing item in the relationship-oriented leadership subscale had a corrected item-total correlation of .62, and the Cronbach's α for the subscale would decrease to .77 if the item were removed.

The items were presented in random order so as not to reveal the groupings of behaviors to the participants (see Appendix D for the measure presented to participants). The measure asked participants to indicate the extent that they preferred each behavior in their ideal leader. Their responses were recorded on a seven-point Likert scale ($1 = To \ an$ extremely small extent, $2 = To \ a \ very \ small$ extent, $3 = To \ a \ small \ extent$, $4 = To \ a$ moderate extent, $5 = To \ a \ large \ extent$, $6 = To \ a \ very \ large \ extent$, $7 = To \ an \ extremely$ large extent). Each participant's responses to the behaviors in each leader behavior subscale were then averaged, creating a composite preference score for each leader behavioral style.

Quality Controls and Validity Check

Two items aimed at evaluating participant attentiveness ("Please mark *To a small extent* for this item." "Please mark *To a very large extent* for this item.") were placed randomly throughout the leadership style preference measure. Participants had to correctly answer both questions for their data to be included in subsequent analyses. Fifty-five participants incorrectly answered at least one of the items measuring attentiveness and were excluded from further analyses.

Two final items asked participants a) whether they felt that their data should be included in the analyses for the study and b) if they responded "No," they were asked "Why?" (see Appendix E). All participants indicated that their data should be included in the analyses. Participants were also told that their data would be removed if their total survey response time was not at least four minutes. Sixty-seven total participants failed to meet this standard, and their data were removed from subsequent analyses.

Pilot Testing

For pilot testing purposes, five graduate students and two faculty volunteers from a post-graduate Industrial/Organizational Psychology program took the survey and provided feedback on their experience. Based on their feedback, minor corrections to the wording of particular items, instructions, and survey flow were made. Additionally, their response times were used to estimate how long it would take participants to complete the survey. This estimated response time formed the basis for participant compensation.

Procedure

Participants were presented with a survey created using Qualtrics and hosted by MTurk, to which they were able to respond at their convenience. Before completing the

survey, participants were told the amount that they would be compensated (\$2.75) and given a description of the task, an estimated time for completion (20 minutes), and the requirements needed for survey eligibility (see Appendix F). The eligibility requirements were that they must be at least 25 years of age, be proficient in reading and speaking English, have at least five years of experience working for a supervisor, and be currently working in the United States. Additional requirements within MTurk were that the participants have above a 97% HIT approval rate, have completed at least 1,000 HITs, and be located within the United States. These requirements were instituted in an effort to reduce the number of participants who might be untruthful about their eligibility and who might not demonstrate sufficient effort in their survey responses.

Once they clicked on the link to access the survey, they were presented with a reCAPTCHA verification to screen for bots, which continuously presents different tasks that are easy for humans and difficult for bots until one is successfully passed. This was immediately followed by an informed consent form. After completing the consent questions, participants were then presented with the screening questions listed above. Participants were required to give consent and respond with sufficient answers to the screening questions in order to proceed to the rest of the survey and be compensated. The two measures included in the survey were counterbalanced and the comparisons in the Follower Characteristics measure were presented in random order to reduce order effects. The leader behaviors presented in the Preference for Leadership Style measure were grouped by leadership style to facilitate the participants' ability to discriminate between the leadership styles, but the order of the leadership styles and the items within each leadership style scale were randomized to reduce order effects (Yukl et al., 2002). After

completing the measures, as well as the two quality control items, participants were asked to respond to several demographic questions (see Appendix G), followed by items asking if their data should be used in the analyses for the study and, if not, why (as previously mention; see Appendix E). The demographic questions and data inclusion validity check question were always presented at the end of the survey for every participant. Finally, participants were presented with the debriefing (see Appendix H). For participants' data to be included in the analyses they must have answered both of the quality control items correctly and affirmed that their data should be included in the analyses. A total of 68 items comprised the full survey. The survey took participants an average of 15.47 minutes (SD = 12.83) to complete.

CHAPTER III: RESULTS

Quality Control

In addition to removing participants who did not correctly answer all quality control items and whose response time was less than four minutes, participants were also removed if their answers to the demographic questions were not consistent with the screening requirements of the study. Specifically, there were seven participants who indicated that they were not at least 25 years old and 60 participants who indicated that they had fewer than 5 years of experience working for a supervisor. Lastly, there was a total of 45 participants who had more than a two-way tie for the most chosen personality type. Additionally, of those who were not screened out by the other quality control measures, there were 54 participants (15.7%) who had a two-way tie for the most chosen personality type. Only the participants who chose one personality type the most frequently were included in analyses. Ultimately, analyses were conducted using data from 291 participants.

Descriptive Statistics

Table 2 shows the frequencies and percentages of each of the eight personality types. As can be seen, participants are not evenly distributed across the personality types.

 Table 2

 Percentages and Frequencies of Personality Types

Personality Type	Percentage	Frequency
Rebels	4.5%	13
Marketers	12.0%	35
Proletarians	39.2%	114
Congenials	8.6%	25
Over-Achievers	24.1%	70
Networkers	3.1%	9
Misfits	3.1%	9
Preppers	5.5%	16

As can be seen in Table 3, the percentages for each personality type found in the present study differ from those found by Hogan Assessments. In Hogan's sample, the most common personality type is Marketers, followed by Congenials, Over-Achievers, Proletarians, and Networkers (Loepp, 2020). In the current sample, the most common type is Proletarians by a large margin, followed by Over-Achievers, and Marketers. Proletarians have the largest difference between the two samples. Hogan also found in a sample of MTurk workers (N = 369) that Congenials and Over-Achievers were underrepresented, with Congenials comprising 3.0% and Over-Achievers comprising 2.7% of the sample (Sherman, 2019). They also found that Misfits and Preppers were over-represented in the MTurk sample, with Misfits comprising 33.9% and Preppers comprising 21.6% of the sample (Sherman, 2019).

Table 3Comparison of the Personality Types' Percentages Between the Current Sample and Hogan Assessments' Sample

Personality Type	Percentage		
	Current Sample	Hogan Sample	
Proletarians	39.2%	13.7%	
Over-Achievers	24.1%	16.6%	
Marketers	12.0%	18.2%	
Congenials	8.6%	17.2%	
Preppers	5.5%	6.5%	
Rebels	4.5%	8.0%	
Networkers	3.1%	12.8%	
Misfits	3.1%	6.9%	

Note. From (Loepp, 2020).

The differences between the current sample and those found by Hogan can potentially be explained by the screening efforts implemented for this study. The MTurk workers were required to have more than a 97% HIT approval rate on at least 1,000 HITs, be working in the United States, be at least 25 years of age, be proficient at reading and speaking English, and have at least five years of experience working for a supervisor. Additionally, participants were screened out if they failed either of the quality control items and if they did not spend at least four minutes responding to the survey. Lastly, only participants with one clear personality type were included in the analyses. Any of these factors, or a combination of them, could have contributed to the differences in the personality type distributions between the current sample and Hogan's sample.

Table 4 shows the leader behavior items ranked by overall mean preference. The four change-oriented leadership items were preferred the least among the behaviors. The relationship-oriented items are preferred slightly more than the task-oriented items, but

the task-oriented leader behavior of Clarifying roles was preferred the most out of all the leader behaviors.

Table 4 *Means and Standard Deviations of the Leader Behavior Items*

Leader Behaviors	M	SD
Task: Clarifying roles	5.31	1.352
Relationship: Consulting	5.27	1.482
Task: Developing	5.21	1.424
Relationship: Supporting	5.21	1.596
Relationship: Developing	5.18	1.432
Relationship: Recognizing	5.12	1.501
Task: Short-term planning	5.02	1.355
Relationship: Empowering	4.95	1.338
Task: Monitoring operations	4.82	1.336
Change: External monitoring	4.82	1.425
Change: Envisioning change	4.79	1.306
Change: Encouraging innovative thinking	4.31	1.424
Change: Taking risks for change	4.11	1.414

Note: N = 291.

Table 5 shows the means, standard deviations, reliabilities, and intercorrelations for the task-oriented, relationship-oriented, and change-oriented leadership subscales.

The distributions for each of these subscales meet the assumption of normality.

Table 5 *Means, Standard Deviations, Reliabilities, and Correlations Among Task-oriented, Relationship-oriented, and Change-oriented Leadership*

Variable	M	SD	1.	2.	3.
1. Task-oriented	5.09	1.06	(.79)		
2. Relationship-oriented	5.15	1.11	.63**	(.81)	
3. Change-oriented	4.51	1.03	.60**	.55**	(.74)

Note. Each subscale's Cronbach's α is in parentheses along the diagonal.

**p < .01, (2-tailed).

In general, while participants slightly preferred relationship-oriented leadership (M = 5.15, SD = 1.11) slightly more than task-oriented leadership (M = 5.09, SD = 1.06), a paired samples t-test showed that this difference was not statistically significant, $t_{289} = .96$, p = .340. However, this slightly greater preference for relationship-oriented leadership is consistent with the findings of Breevaart and De Vries (2019). Change-oriented leadership (M = 4.51, SD = 1.03), on the other hand, was statistically significantly different from both relationship-oriented leadership $(t_{290} = 10.75, p < .001)$ and task-oriented leadership $(t_{289} = 10.79, p < .001)$. Despite these differences, all three styles of leadership were rated as being preferred at least to a moderate extent, and they were all rated within one point of each other on a seven-point Likert scale.

The three styles of leadership were also all moderately correlated, and the correlation between task-oriented and relationship-oriented leadership (r = .63, p < .01) is higher that found by Breevaart and De Vries (2019) (r = .38, p < .01). To investigate these correlations further, a maximum likelihood factor analysis was conducted for all of the items measuring preference for leader behaviors with oblique rotation (promax). The Kaiser-Meyer-Olkin measure of sampling adequacy was .91, thus verifying the adequacy

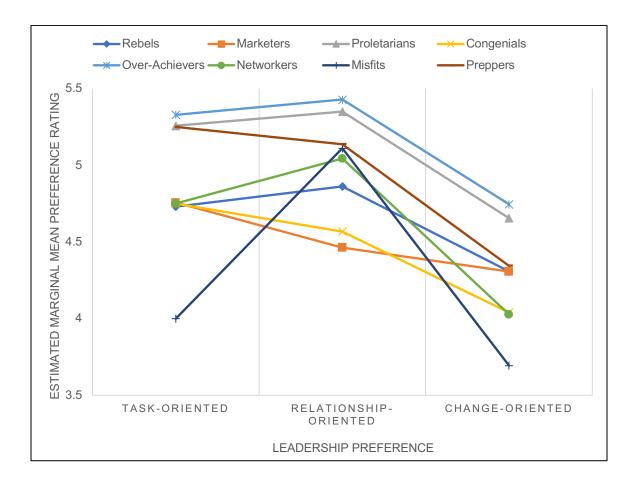
of the sample for a factor analysis. Three factors were extracted, all with initial eigenvalues greater than one. Factor 1 comprised the five relationship-oriented leadership items with factor loadings ranging from .29 to .79. It explained 42.35% of the variance. Factor 2 comprised the four task-oriented leadership items, as well as two items from the relationship-oriented leadership subscale – namely Developing and Recognizing – which accounted for the two lowest factor loadings. Factor 2's loadings ranged from .32 to .919, it accounted for an additional 9.87% of the variance. Factor 3 only comprised the four change-oriented leadership items, and its loading ranged from .351 to .803. It accounted for an additional 8.01% of the variance. These results support the three-factor model of leadership found by Yukl et al. (2002).

Research Question

In order to test whether the eight personality types have different patterns of preferences for task-oriented, relationship-oriented, and change-oriented leadership, a mixed model MANOVA was conducted with the eight personality types as the 'between factor' and the three leadership subscales acting as repeated measures of a leadership factor. Figure 1 displays the profile plots that resulted from the analysis of each personality type and their preference for each of the three leadership styles.

Figure 1

Profile Plots for Each Personality Type's Preferences for Leadership Styles



For the overall test, the assumption of sphericity could be assumed, and the assumption of homogeneity of variance could be assumed for all but the change-oriented leadership subscale. The overall interaction effect between personality type and preference for leadership is statistically significant, meaning that the patterns of preferences for the three leadership styles depends on the personality type, $F_{(14, 564)} = 1.95$, p = .020. In other words, the extent that people with each personality type prefer each leadership style differently is different across personality styles. Simple contrasts revealed that the differences between preference for task-oriented leadership and

relationship-oriented leadership is statistically significantly different depending on personality type, $F_{(7,282)} = 2.89$, p = .006, as are the differences between preference for relationship-oriented and change-oriented leadership, $F_{(7,282)} = 2.31$, p = .026. The difference between preference for task-oriented and change-oriented leadership is similar for everyone, regardless of personality type.

Within-subjects Effects

Eight repeated measures ANOVAs were conducted to determine if there were differences in preference for the three leadership styles for each personality type. Rebels do not have statistically significant differences in their preferences for the three leadership styles. Marketers (n = 35) prefer task-oriented leadership (M = 4.76, SD =0.19) more than change-oriented leadership (M = 4.31, SD = 0.14) (p = .015). Proletarians (n = 114) prefer both task-oriented leadership (M = 5.26, SD = 0.09) (p < 0.09) .001) and relationship-oriented leadership (M = 5.35, SD = 0.10) (p < .001) more than change-oriented leadership (M = 4.66, SD = 0.10). Congenials (n = 25) prefer both taskoriented leadership (M = 4.75, SD = 0.24) (p < .001) and relationship-oriented leadership (M = 4.57, SD = 0.27) (p = .014) more than change-oriented leadership (M = 4.04, SD = .014)0.27). Over-Achievers (n = 70) also prefer both task-oriented leadership (M = 5.33, SD =(0.11) (p < .001) and relationship-oriented leadership (M = 5.43, SD = 0.12) (p < .001) more than change-oriented leadership (M = 4.75, SD = 0.09). Networkers (n = 9) prefer relationship-oriented leadership (M = 5.04, SD = 0.42) more than change-oriented leadership (M = 4.03, SD = 0.33) (p = .004). Misfits (n = 9) prefer relationship-oriented leadership (M = 5.11, SD = 0.36) more than both task-oriented leadership (M = 4.00, SD= 0.42) (p = .006) and change-oriented leadership (M = 3.69, SD = 0.38) (p = .008).

Finally, Preppers prefer both task-oriented leadership (M = 5.25, SD = 0.20) (p = .002) and relationship-oriented leadership (M = 5.14, SD = 0.28) (p = .042) more than change-oriented leadership (M = 4.34, SD = 0.27). See Table 6 for a full list of the personality types' mean preferences for the three leadership styles.

 Table 6

 M and SE of Personality Type Preference for Overall Leadership and Leadership Style

Personality Type	Overall Leadership	Leadership Style		
		Task	Relationship	Change
Rebels	4.63 (0.24)	4.73 (0.37)	4.86 (0.40)	4.31 (0.40)
Marketers	4.51 (0.15)	4.76 (0.19)	4.46 (0.16)	4.31 (0.14)
Proletarians	5.09 (0.08)	5.26 (0.09)	5.35 (0.10)	4.66 (0.10)
Congenials	4.45 (0.18)	4.75 (0.24)	4.57 (0.27)	4.04 (0.27)
Over-Achievers	5.17 (0.11)	5.33 (0.11)	5.43 (0.12)	4.75 (0.09)
Networkers	4.61 (0.29)	4.75 (0.55)	5.04 (0.42)	4.03 (0.33)
Misfits	4.27 (0.29)	4.00 (0.42)	5.11 (0.36)	3.69 (0.38)
Preppers	4.91 (0.22)	5.25 (0.20)	5.14 (0.28)	4.34 (0.27)

Note. M = Mean; SE = Standard error. SEs are presented in parentheses.

Consistent with these findings is the statistically significant main effect for leadership, which shows that on average people prefer task-oriented, relationship-oriented, and change-oriented leadership differently, $F_{(2, 564)} = 46.23$, p < .001. As revealed by the paired samples t-tests mentioned earlier, people tend to prefer task-oriented and relationship-oriented leadership to about the same extent, but they have different levels of preference for change-oriented leadership compared to both task-oriented and relationship-oriented leadership.

Between-subjects Effects on Preference for Overall Leadership

A test of between-subject effects revealed that there are differences between personality types in how much they prefer all leadership behaviors, $F_{(7,282)} = 4.58$, p < .001. Because of the unequal sample sizes and the fact that the population variances of the personality types are not known to be equal, the Games-Howell post hoc procedure was used, which is powerful and accurate when there are unequal sample sizes (Field, 2013). These post hoc tests revealed two statistically significant differences between personality types on overall leadership, both involving Marketers. Both Proletarians (M = 5.09, SE = 0.08) (p = .008) and Over-Achievers (M = 5.17, SE = 0.11) (p = .003) have a higher preference for overall leadership than Marketers (M = 4.51, SE = 0.15). Using Hochberg's GT2 post hoc test, which was also designed for unequal sample sizes but is less reliable when population variances are different (Field, 2013), two additional mean differences were found to be statistically significant. Proletarians (p = .027) and Over-Achievers (p = .015) also prefer overall leadership more than Congenials (M = 4.45, SE = 0.18).

Between-subjects Effects on Preference for Leadership Styles

Three ANOVAs were conducted to determine if the personality types preferred task-oriented leadership differently, relationship-oriented leadership differently, and change-oriented leadership differently. The omnibus test for preference for task-oriented leadership was significant ($F_{(7,282)} = 3.72$, p = .001), and equal variance could be assumed between the personality types. Games-Howell post hoc comparisons were conducted once again, but none of the mean differences were found to be statistically significant. Hochberg's GT2 post hoc test revealed that two mean differences were found

to be statistically significant. Both Proletarians (M = 5.26, SE = 0.10) (p = .014) and Over-Achievers (M = 5.33, SE = 0.12) (p = .009) have a higher preference for task-oriented leadership than Misfits (M = 4.00, SE = 0.34).

The omnibus test for preference for relationship-oriented leadership was significant ($F_{(7,283)} = 4.58$, p < .001), and equal variance could be assumed between the personality types. The Games-Howell post hoc comparisons revealed that both Proletarians (M = 5.35, SE = 0.10) (p < .001) and Over-Achievers (M = 5.43, SE = 0.13) (p < .001) have a higher preference for relationship-oriented leadership than Marketers (M = 4.46, SE = 0.18). Additionally, Hochberg's GT2 post hoc comparisons revealed that Proletarians (p = .027) and Over-Achievers (p = .015) also prefer relationship-oriented leadership more than Congenials (M = 4.57, SE = 0.21).

Equal variances could not be assumed for change-oriented leadership, so a Welch's F-test was conducted and was statistically significant, $F_{(7,283)} = 3.24$, p = .003. However, neither Games-Howell nor Hochberg's GT2 post hoc tests resulted in statistically significant mean differences between personality types' preferences for change-oriented leadership.

CHAPTER IV: DISCUSSION

Main Findings

The purpose of the present study was to investigate how preferences for taskoriented, relationship-oriented, and change-oriented leadership are different for followers
with different personality characteristics, namely the eight common personality types
found by Hogan Assessments (Loepp, 2020). Before investigating the nature of these
differences, it was first determined that there is, in fact, an interaction effect between
personality type and preference for each of the three leadership styles. In other words,
there are differences in the profiles of the personality types.

Leadership Preferences Within Personality Types

When examining the profiles of each personality type, there are a mixture of preference patterns, but four of the eight types preferred both task-oriented and relationship-oriented leadership more than change-oriented leadership. These types are Proletarians, Congenials, Over-Achievers, and Preppers. Networkers and Misfits also prefer relationship-oriented leadership more than change-oriented leadership, and Misfits also had a preference for relationship-oriented leadership over task-oriented leadership. Marketers actually preferred task-oriented leadership more than relationship-oriented, but this difference was not statistically significant. Their mean preference ratings for relationship-oriented and change-oriented leadership were relatively equally. Rebels are the only personality type that preferred all three leadership styles to about the same extent; however, an examination of their profile plot reveals a pattern similar to other types – a higher preference for task-oriented and relationship-oriented leadership than

change-oriented leadership, as well a slightly greater preference for relationship-oriented leadership above task-oriented leadership.

These patterns of preference make sense, given the various characteristics that comprise each personality type. For instance, Proletarians are interested in stability, and both Congenials and Over-Achievers are seen as solid employees, thus benefitting from the status quo. Congenials, too, are rule-abiding at work. Taken together, these personality types have understandable reasons to not prefer change-oriented leadership as much. Preppers are "motivated by fear with a strong desire for stability" (Loepp, 2020). They, too, have little reason to prefer change-oriented leadership more than task-oriented or relationship-oriented leadership. Misfits are similarly motivated by fear and a desire for stability and prefer change-oriented leadership even less than Preppers. Misfits also prefer relationship-oriented leadership much more than task-oriented leadership, relative to the other types. This is likely driven by their emotional volatility and problems building close relationships. Misfits may have insight into their particular needs in the workplace and, thus, seek out leaders who provide for them sufficient consideration, support, empowerment, and a participative role in decisions that affect them.

Somewhat surprisingly, Networkers also preferred change-oriented leadership less than the other two styles. At first glance, this seems incompatible with their rule-breaking and risk-taking personalities. However, Networkers may view the personal risk taking behaviors of change-oriented leaders as limiting their ability to "be famous and liked by others" (Loepp, 2020). Additionally, change-oriented leaders' emphasis on the organizational unit might be somewhat incompatible with Networkers' seemingly

individualistic personalities. On the one hand, these findings could be due to random error, given the relatively low sample size of Networkers (n = 9).

Lastly, Rebels also had a relatively small sample size (n = 13), but their lack of any real differences in their preferences for the three leadership styles might be due to their interest in having power, their distrust in others, and their rule-breaking tendencies. They may see leaders as people to be leery of or obstacles to be overcome, regardless of the leader's styles. This might be the reason that they seem to prefer all three styles of leader to about the same extent. However, their level of preference for leadership across all three styles is about average, compared to the other personality types.

Overall Leadership Preference Between Personality Types

As stated earlier, both Proletarians and Over-Achievers are hardworking, and research has found that they are successful employees under normal workplace conditions (Sherman, 2019). In the current research, they both prefer overall leadership (i.e., the combination of task-oriented, relationship-oriented, and change-oriented leader behaviors) more than the other personality types, and the difference between their mean preferences and those of Marketers and Congenials were found to be statistically significantly. This is likely true because both Over-Achievers and Proletarians recognize that they thrive under normal leadership conditions. Marketers, on the other hand, are very ambitious, competitive, and sometimes over-confident. This may contribute to a perception of leaders by Marketers as being overly forgiving of others' mistakes and unforgiving of theirs when their overconfidence gets them in trouble. An additional possibility is that Marketers perceive overall leader behaviors as hindering their ability to compete and take chances. Congenials' lower preference for overall leadership might

stem from their lower engagement with their work and jobs. While they perform their job duties well enough to receive good performance ratings, they might see no reason to do much beyond that. Thus, there is no desire for a leader to empower them or push them beyond their normal responsibilities.

Specific Leadership Preferences Between Personality Types

Just as there are differences among the personality types in the level of preference for overall leadership, they also have different levels of preference for each individual leadership style. Misfits clearly have the lowest preference for task-oriented leadership, possibly due to the fear that their performance will be evaluated by their leader and the increased expectations that their leader may place on them. This lower preference for task-oriented leadership was shown to be significantly lower than that of both Over-Achievers and Proletarians who, again, are hardworking employees who successfully get the job done. While the other differences in preference were not statistically significant, examining the profile plots reveals that Preppers also prefer task-oriented leadership about as much as Over-Achievers and Proletarians. Unlike Misfits who are also motivated by fear and a desire for stability, Preppers are usually dependable and are always prepared for the worst. Thus, they might prefer task-oriented leadership because their dependability can protect them from poor performance evaluations, and taskoriented behaviors involve meticulous preparation and planning. Networkers, Rebels, Congenials, and Marketers can also be seen to all prefer task-oriented leadership to about the same extent, which is less than that of Over-Achievers, Proletarians, and Preppers but more than Misfits.

Regarding relationship-oriented leadership, both Proletarians and Over-Achievers, once again, prefer it the highest of the other types, and the prefer it significantly more than Marketers and Congenials, who both prefer it the lowest. As mentioned earlier, Marketers may feel that they do not need the support and consideration of relationship-oriented leaders and that these behaviors are unfair when directed toward other followers. Congenials, on the other hand, may not want to be empowered or consulted due to their low motivation and career interests.

While there were no statistically significant differences in preference for changeoriented leadership among the personality types, an examination of the profile plots
reveals that Over-Achievers and Proletarians again prefer it the most, and Misfits prefer it
the least, likely because of their strong desire for stability. Preppers, who also have a
strong desire for stability, actually have the third highest preference for change-oriented
leadership. They probably find the external monitoring behaviors of change-oriented
leaders appealing, since this allows the leaders to identify and plan for environmental
threats. The preference ratings of Rebels, Marketers, Congenials, and Networkers fall
within those of Preppers and Misfits. More research is needed to determine whether these
apparent mean differences are valid or due to random error.

Marketers, Proletarians, Congenials, and Over-Achievers each had sample sizes of at least 25 participants, which explains why the differences among these types tended to be statistically significant. The sample sizes of the other personality types, on the other hand, were all less than or equal to 16, often causing the differences among them and the other types to lack statistical significance. Therefore, any interpretations stemming from

the profiles of these personality types must be made cautiously, and additional research is needed to validate these findings.

Practical Implications

The present study provides evidence that follower characteristics in the form of Hogan's eight most common personality types can explain differences in followers' levels of preference for task-oriented, relationship-oriented, and change-oriented leadership. If leaders can assess how their followers are categorized using these personality types, then they can better shape their style of leading to match the preferences of their followers. In doing so, leaders might increase their followers' satisfaction with leadership and potentially improve the unit's performance, given that a follower's preference for a particular leadership style indicates their willingness to be influenced by a leader acting out those preferred behaviors.

Across all personality types, people generally prefer relationship-oriented leadership more than the other two styles. While this is consistent with prior research (Breevaart & De Vries, 2019), the difference found in the current research between preference for relationship-oriented and task-oriented leadership is small. More noticeable is the lower overall preference for change-oriented leadership. Leaders can use this information to emphasize their task-oriented and relationship-oriented behaviors for their followers, knowing that those behaviors are preferred over change-oriented behaviors. Simultaneously, because change-oriented leadership styles are still important for effective leadership and successful work units (Yukl et al., 2019), leaders might consider only enacting these behaviors when they are necessary. External monitoring behaviors will likely need to be continuously enacted to know when the other change-

oriented behaviors are needed. Overall, though, change-oriented leader behaviors are generally still preferred by people to a moderate extent, so they certainly should not be entirely abandoned.

These findings can also inform leaders that their followers do, in fact, have different preferences for leadership styles depending on their personality type. Over-Achievers and Proletarians have similar patterns of preference. They both have a high preference for overall leadership, and they prefer relationship-oriented leadership marginally more than task-oriented and significantly more than change-oriented leadership. However, the mean difference between the preference ratings for these two styles is only slightly more than half a point on the seven-point Likert scale. Therefore, these personality types' different preferences for the leadership styles should be understood to be only slight. In fact, this is true for all of the personality types except for Misfits, whose preferences for relationship-oriented leadership are over a full point more than both task-oriented and relationship-oriented leadership.

Preppers have a similar level of preference for overall leadership to both Over-Achievers and Proletarians. Their patterns of preference are similar, as well, except that Preppers prefer task-oriented leadership slightly more relationship-oriented leadership, unlike Over-Achievers and Proletarians. They also prefer change-oriented leadership slightly less than Over-Achievers and Proletarians do. In general, this means that leaders can enact similar leader behaviors when dealing with Over-Achievers, Proletarians, and Preppers.

Networkers and Rebels also have similar patterns of preference, both preferring relationship-oriented leadership more than task-oriented and change-oriented leadership,

so leaders can lead them in similar ways. Marketers and Congenials also have similar patterns of preference to each other, both having a lower preference for overall leadership and a slightly higher preference for task-oriented leadership than the other two styles.

Thus, leaders can lead followers of these two types similarly.

Misfits stand alone as the personality type with the lowest preference for overall leadership, and an unusually high preference for relationship-oriented leadership compared to their preferences for both task-oriented and change-oriented leadership, relative to the other personality types. For leaders who have Misfits as followers, this means that they can potentially use relationship-oriented behaviors as a way to gain their trust and slowly introduce the other leader behaviors from the styles that Misfits prefer less. Doing so might help these workers develop beyond their perceived limitations.

While workplaces often consist of strong situations, which pressure leaders to enact certain leadership styles, leaders can more freely attempt to enact the styles that their followers prefer when the situation is weak. In the long run, this might serve to increase followers' satisfaction with overall leadership and make them more willing to be led by different leadership styles.

Theoretical Implications

The findings of the present study support the main conclusions of several previous studies that followers' preferences for different leadership styles depend on their characteristics, like personality traits and work values (Bertsch et al., 2017; Breevaart & De Vries, 2019; Ehrhart & Klein, 2001; Moss & Ngu, 2006; Thoroughgood & Sawyer, 2018). Moreover, these findings can serve as a potential explanation for the effectiveness of contingent leadership styles. According to contingency theories of leadership, leaders

are more effective when they adjust their behaviors to meet the needs of their followers. This evidence that different followers have preferences for different leadership styles might partially explain the mechanism by which contingent leadership is effective. When leaders adjust their behaviors to meet the needs or preferences of their followers, their followers might be more willing to be led, thus increasing the effectiveness of the leader, follower, and work unit. This research also broadens the scope of prior research on follower preferences by examining the three meta-categories of leadership proposed and confirmed by Yukl (2002). Examining the leadership styles of this three-factor model has revealed insight into preferences for leader behaviors common to most workplaces and acts as a standard against which future research on the subject can be compared.

Furthermore, these findings show that generally people prefer a combination of task-oriented and relationship-oriented leadership over change-oriented leadership. While change-oriented leadership is certainly effective and can be a very useful set of behaviors for leaders to enact, it is not necessarily preferable in all situations. The participants of this study are assumed to be working under normal conditions (i.e., not in a highly changing workplace environment), so it is consistent with the theories of situational leadership that most participants preferred change-oriented leadership less than task-oriented and relationship oriented leadership, which have been shown in a meta-analysis to be related to both follower satisfaction and positive leadership outcomes across situations (Judge et al., 2004). There is still an open question as to whether people in a workplace undergoing change would prefer change-oriented leadership more than the other two.

Lastly, this study provides evidence of validity for the eight common personality types identified by Hogan Assessments. Because people in each of the different personality types have been shown to have different patterns of preference for the three leadership styles and levels of preference for overall leadership, we can be more confident that the eight personality types are, in fact, discrete personality profiles that represent different types of workers. Additionally, since most of the personality styles were shown to have different levels of preference for each of the three leadership styles and since these preferences are consistent with what would be expected of each type, there is evidence that the descriptions of the personality types are valid descriptors of the personality profiles.

Limitations

This study is not without its limitations. The Follower Characteristics measure was created for this study, and its reliability and validity were not measured before conducting this study. While the descriptions of the personality types were created by experts from Hogan Assessments, the use of the paired comparison method to assess people's personality type is new to this study. While the reliability of this measure is unknown, 84% of the participants included in this study (i.e., those with either a two-way tie or a single most frequently chosen personality type) did choose just one personality type more frequently than any other personality type. This indicates that the measure does result in a person having a single personality type somewhat reliably, although questions about its validity still remain.

There is also the possibility that the measure introduced a social desirability bias into the sample, thus creating systematic error in the distribution of personality types. The

two types with the highest sample size were Proletarians and Over-Achievers, both of which are described as being hardworking and good employees, in general, and were over-represented compared to Hogan's sample. These positive descriptions may have been chosen by people who are actually other personality types in order to conform to what is socially desirable. Networkers, on the other hand, had one of the lowest sample sizes and are under-represented compared to Hogan's sample. They are described as rule-breakers who are impractical and overly dramatic. These attributes may have been regarded as socially undesirable by participants, which may have artificially lowered the number of Networkers in the sample.

While the three-factor taxonomy of leadership behaviors has been rigorously investigated, the specific Preference for Leadership Style measure used in this study is new. Instead of using the full list of items to measure each behavior in the leadership styles, the definitions of the leader behaviors were used as items. This may have caused the measure to have lower construct validity. There is also the potential for common method variance to have introduced error into the results. The three subscales were all highly correlated with each other, which may have been statistical artifacts due to common method variance.

Another limitation of this study are the small sample sizes of some of the personality types and the unequal sample sizes across personality types. The low sample sizes likely interjected random error into the leadership subscales, and this along with the unequal sample sizes reduced the overall power of the study.

Directions of Future Research

The present study provides evidence that follower characteristics moderate followers' preferences for leadership styles; however, further research is needed to confirm these findings. Ideally, future studies will implement the full suite of Hogan's assessments to determine participants' personality types more accurately. Additionally, more precise items could be used to gauge participants' preferences for the three leadership styles. Implementing these more rigorous measures will produce findings with more confidence in their validity. Additionally, further analyses could be conducted to analyze the extent that each behavioral item contributes to the preference for each style. Potentially, certain behaviors are more important to certain personality types.

The extent that a leader, who is enacting behaviors that their followers prefer, actually leads to greater leader and work unit effectiveness is still largely unknown.

Future studies could implement a longitudinal design to first measure follower preferences, then measure the leader's and work unit's effectiveness after the leader behaves according to the follower preferences. This type of research is needed to increase the practical value of research on the relationship between follower characteristics and preference for leadership styles.

More research is also needed to test the extent that the findings of the present study are generalizable. To make sure that the findings generalize to the general working population, studies could be performed at real-world workplaces using both U.S. samples and international samples. Studies could also be conducted to for people in workplaces in states of change. This would help determine whether the overall levels of preference for the three leadership styles are situationally dependent. Change-oriented leadership might

be more preferable to the other two styles when followers feel like it is needed. Lastly, future studies could test these personality types' preferences on different leadership styles (e.g., charismatic, laissez-faire, and autocratic). Doing so would expand both the number of leadership styles known to be preferred by the personality types and the number of behaviors that leaders can be confident that their followers prefer.

Conclusion

The present study's findings provide evidence that followers have different preferences for task-oriented, relationship-oriented, and change-oriented leadership depending on whether they are Rebels, Marketers, Proletarians, Congenials, Over-Achievers, Networkers, Misfits, or Preppers, as described by Hogan Assessments (Loepp, 2020). While the preferences for overall leadership were within one point, on average, on a seven-point Likert scale, and the preferences for the three leadership styles were all within two points, the eight personality types do, in fact, have different patterns of preference across the leadership styles. They also have different levels of preference for overall leadership. Over-Achievers and Proletarians generally prefer overall leadership the most, while Marketers and Congenials tend to prefer it the least. Across all personality types, change-oriented leadership is preferred less than task-oriented and relationship-oriented leadership.

Using the findings of this study, leaders will be able to quickly assess the personality types of their followers and, thus, better equipped to adapt their own style of leading to align with the preferences of their followers. This alignment is likely to increase followers' satisfaction with leadership and potentially increase overall leadership effectiveness.

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APPENDICES

APPENDIX A: COMPARISONS BETWEEN ORIGINAL AND REVISED PERSONALITY TYPE DESCRIPTIONS 1

Personality Type	Original Description	Revised description presented to participants
Rebels	Rebels tend to be interested in being famous, wealthy, having power, and living a luxurious life. They are also seen by others as sociable and curious in daily behavior, but can also be emotional, distrustful of others, and rule-breaking.	You tend to be interested in being famous, wealthy, having power, and living a luxurious life. You are also seen by others as sociable and curious in daily behavior, but can also be emotional, distrustful of others, and rule-breaking.
Marketers	Marketers are highly motivated to compete, win, push for results, and make money. At their best they are bright, sociable, and ambitious at work. However, they also tend to take big chances and are overconfident in their abilities.	You are highly motivated to compete, win, push for results, and make money. At your best you are bright, sociable, and ambitious at work. However, you also tend to take big chances and are overconfident in your abilities.
Proletarians	Proletarians are interested in stability and simplistic lifestyle. Others consider them to be hardworking, reserved, and careful. They generally make solid employees and prefer to work without being bothered.	You are interested in stability and simplistic lifestyle. Others consider you to be hardworking, reserved, and careful. You generally are a solid employee and prefer to work without being bothered.
Congenials	Congenials are viewed by others as lacking motivational and career interests. They tend to be introverted, but also relaxed, friendly, polite, and rule-abiding at work. Owing to their friendly nature, these individuals regularly receive high performance ratings from their supervisors.	You are viewed by others as lacking motivational and career interests. You tend to be introverted, but also relaxed, friendly, polite, and rule-abiding at work. Owing to your friendly nature, you regularly receive high performance ratings from your supervisors.
Over- Achievers	Over-achievers are interested in career success, but they do insist on playing fair. They are hardworking, bright, and resilient to stress. While our data suggest that these individuals are well-suited for leadership positions, they tend to be stuck in individual contributor roles, largely due to the fact that they refuse to play politics.	You are interested in career success, but you insist on playing fair. You are hardworking, bright, and resilient to stress. While you are well-suited for leadership positions, you tend to be stuck in individual contributor roles, largely due to the fact that you refuse to play politics.
Networkers	Networkers tend to be interested in fame and being liked by others. They are sociable, cool-headed, and bright in daily behavior. That said, they are also known to break the rules, take risks, be overly dramatic, and often times impractical.	You tend to be interested in fame and being liked by others. You are sociable, cool-headed, and bright in daily behavior. That said, you are also known to break the rules, take risks, be overly dramatic, and often times impractical.

¹ The original descriptions of the personality types can be found at https://www.hoganassessments.com/blog/8-common-personality-types/

Misfits

Preppers

Misfits are highly motivated by fear with a strong desire for stability and to enjoy life. They also tend to be emotionally volatile and have difficulties building close relationships due to excessive reclusiveness.

Preppers are motivated by fear with a strong desire for stability. What makes them different than Misfits is that they are

dependable when they can keep their emotions in check. This group is introverted and always prepared for the worst.

You are highly motivated by fear with a strong desire for stability and to enjoy life. You also tend to be emotionally volatile and have difficulties building close relationships due to excessive reclusiveness.

You are motivated by fear with a strong desire for stability. You are dependable when you can keep your emotions in check. You are introverted and always prepared for the worst.

APPENDIX B: FOLLOWER CHARACTERISTICS MEASURE²

Personality Type

Instructions: Personality types, or profiles, are composed of a number of both positive and negative personality traits. No personality type is better than any other; they are just a way of explaining the differences in people. The following questions will ask you to compare 8 different personality types, two at a time, so that each personality type is paired with every other personality type exactly once. There are a total of **28 questions** in this section.

Keep in mind that more than one personality type might resemble you and none might describe you well.

For each pair of personality types, please click the one that BETTER describes WHO YOU ARE AT WORK, even if neither describes you well.

Stem: Please click the personality type that BETTER describes WHO YOU ARE AT WORK.

- 1. You tend to be interested in being famous, wealthy, having power, and living a luxurious life. You are also seen by others as sociable and curious in daily behavior, but can also be emotional, distrustful of others, and rule-breaking.
- 2. You are highly motivated to compete, win, push for results, and make money. At your best you are bright, sociable, and ambitious at work. However, you also tend to take big chances and are overconfident in your abilities.
- 3. You are interested in stability and a simplistic lifestyle. Others consider you to be hardworking, reserved, and careful. You generally are a solid employee and prefer to work without being bothered.
- 4. You are viewed by others as lacking motivational and career interests. You tend to be introverted, but also relaxed, friendly, polite, and rule-abiding at work. Owing to your friendly nature, you regularly receive high performance ratings from your supervisors.
- 5. You are interested in career success, but you insist on playing fair. You are hardworking, bright, and resilient to stress. While you are well-suited for leadership positions, you tend to be stuck in individual contributor roles, largely due to the fact that you refuse to play politics.
- 6. You tend to be interested in fame and being liked by others. You are sociable, coolheaded, and bright in daily behavior. That said, you are also known to break the rules, take risks, be overly dramatic, and often times impractical.
- 7. You are highly motivated by fear with a strong desire for stability and to enjoy life. You also tend to be emotionally volatile and have difficulties building close relationships due to excessive reclusiveness.
- 8. You are motivated by fear with a strong desire for stability. You are dependable when you can keep your emotions in check. You are introverted and always prepared for the worst.

² Note to researchers: The descriptions were presented to participants in randomized pairs on separate survey pages, such that each description was paired with every other description exactly once.

APPENDIX C: LEADER BEHAVIOR TAXONOMY³

Leadership Style	Leadership Behavior	Behavior Definition
	Clarifying roles	Assigning tasks and explaining job responsibilities, task objectives, and performance expectations
	Monitoring operations	Checking on the progress and quality of the work, and evaluating individual and unit performance
Task	Short-term planning	Determining how to use personnel and resources to accomplish a task efficiently, and determining how to schedule and coordinate unit activities efficiently
	Developing	Helping people learn how to improve their skills
	Developing	Providing advice and coaching, providing opportunities for growth and development
	Consulting	Checking with people before making decisions that affect them, encouraging participation in decision making, and using the ideas and suggestions of others
Relationship	Supporting	Acting considerate, showing sympathy and support when someone is upset or anxious, and providing encouragement and support when there is a difficult, stressful task
	Recognizing	Providing praise and recognition for effective performance, significant achievements, special contributions, and performance improvements
	Empowering	Allowing substantial responsibility and discretion in work activities, and trusting people to solve problems and make decisions without getting prior approval
	Envisioning change	Presenting an appealing description of desirable outcomes that can be achieved by the unit, describing a proposed change with great enthusiasm and conviction
Change	Taking risks for change	Taking personal risks and making sacrifices to encourage and promote desirable change in the organization
6*	Encouraging innovative thinking	Challenging people to question their assumptions about the work and consider better ways to do it
	External monitoring	Analyzing information about events, trends, and changes in the external environment to identify threats and opportunities for the organizational unit

³ Adapted from (Yukl et al., 2002).

APPENDIX D: PREFERENCE FOR LEADERSHIP STYLE MEASURE⁴

Leadership Preference

Instructions: You will be presented with three (3) sets of several statements, which reflect different behaviors that a leader can perform. You will be asked to indicate the extent that you prefer each behavior in your **ideal** leader. Your response options will be: 1 = To an extremely small extent, 2 = To a very small extent, 3 = To a small extent, 4 = To a moderate extent, 5 = To a large extent, 6 = To a very large extent, 7 = To an extremely large extent.

Once you have indicated your preference for each behavior, the next behavior in the set will automatically appear. This will continue until you have reached the last behavior within a set. You are free to use the small arrows next to each behavior to navigate within each set. Once you have responded to every behavior within a set, you must click the larger blue arrow at the bottom to advance to the next set of behaviors.

Stem: To what extent do you prefer your ideal leader to:

- 1. Assign tasks and explain job responsibilities, task objectives, and performance expectations
- 2. Check on the progress and quality of the work, and evaluate individual and unit performance
- 3. Determine how to use personnel and resources to accomplish a task efficiently, and determine how to schedule and coordinate unit activities efficiently
- 4. Help people learn how to improve their skills
- 1. Provide advice and coaching, and provide opportunities for growth and development
- 2. Check with people before making decisions that affect them, encourage participation in decision making, and use the ideas and suggestions of others
- 3. Act considerately, show sympathy and support when someone is upset or anxious, and provide encouragement and support when there is a difficult, stressful task
- 4. Provide praise and recognition for effective performance, significant achievements, special contributions, and performance improvements
- 5. Allow substantial responsibility and discretion in work activities, and trust people to solve problems and make decisions without getting prior approval
- 1. Present an appealing description of desirable outcomes that can be achieved by the unit, and describe a proposed change with great enthusiasm and conviction
- 2. Take personal risks and make sacrifices to encourage and promote desirable change in the organization
- 3. Challenge people to question their assumptions about the work and consider better ways to do it
- 4. Analyze information about events, trends, and changes in the external environment to identify threats and opportunities for the organizational unit

⁴ Note to researchers: The items within each sub-scale were presented on the same page of the survey in random order. The three sub-scales were also presented in random order.

APPENDIX E: QUALITY CONTROL ITEMS AND VALIDITY CHECK ITEMS

- 1. For validity purposes, please mark *To a small extent* for this item.
- 2. For validity purposes, please mark *To a very large extent* for this item.
- 3. Is there any reason why we should NOT use your data? Your answer to this question will NOT affect your compensation. (My data should be included in your analyses/My data should NOT be included in your analyses)
- 4. Why should we NOT include your data in our analyses?
 - I wasn't really paying attention
 - I just clicked randomly
 - I didn't understand the task/questions
 - I didn't really know what I was doing
 - I just skimmed through the questions
 - Other

APPENDIX F: SURVEY DESCRIPTION ON MTURK

This anonymous study is attempting to better understand the relationship between people's personalities at work and their preferences for the behavioral styles of their leaders. We expect this survey to take you around 20 minutes to complete. There are a total of 64 questions, and your answers to every question are completely anonymous. You will be compensated with \$2.75 for completing the survey.

In order to participate this survey, you must be at least 25 years of age, you must be proficient in reading and speaking English, you must be currently working in the United States, and you must have at least five years of experience working for a supervisor (Note: This time may span multiple supervisors). Duplicate attempts will not be compensated.

Select the link below to complete the survey. At the end of the survey, you will receive a code to paste into the box below to receive credit for taking our survey.

Make sure to leave this window open as you complete the survey. When you are finished, you will return to this page to paste the code into the box.

Thank you for your participation!

APPENDIX G: DEMOGRAPHIC QUESTIONS

- 1. What is your age in years? (fill in blank)
- 2. Please indicate your gender. (Male, female, other, prefer not to say)
- 3. What is your ethnicity? Select all that apply. (White, Hispanic or Latino, Black or African American, Native American or American Indian, Asian, Native Hawaiian or Other Pacific Islander, Middle Eastern or North African, Other, Prefer not to say)
- 4. In which region of the U.S. do you work? (Midwest, Northeast, South, West, Puerto Rico or other U.S. territories, Other [please specify], None)
- 5. How many total years have you been employed? (fill in blank)
- 6. How many years of experience do you have working for a supervisor? (Note: This time may span multiple supervisors.) (fill in blank)
- 7. How many different supervisors have you worked for in the past? (fill in blank)
- 8. How many years have you worked in your current job? (fill in blank)
- 9. In what Job Family do you currently work? (Select the one that best describes your work: Administrative & Clerical, Customer Support, Manager & Executive, Military, Operations & Trades, Professionals, Sales, Service & Support, Student, Technical & Specialist, Other)
- 10. In what Job Level do you currently work? (Select the one that best describes your work: Individual Contributor, Entry-level Supervisor, Middle Manager, Executive)

APPENDIX H: DEBRIEFING

Thank you for your participation in this survey.

The goal of this study is to better understand the relationship between people's personalities at work and their preferences for the behavioral styles of their leaders. In the survey, you were asked to choose between pairs of eight different personality profiles 28 times. The profile you chose most frequently was assumed to be the one that describes you best when you are at work. These personality profiles were developed by Hogan Assessments. More details about them can be found at https://www.hoganassessments.com/blog/8-common-personality-types/.

You were also asked to indicate your level of preference for 13 different leader behaviors, which are grouped into three broad leadership styles – task-oriented leadership, relationship-oriented leadership, and change-oriented leadership.

The data we collect from this survey will be used to determine whether employees with certain personality profiles tend to prefer leaders with certain leadership styles.

Ultimately, knowing this could contribute to improvements in leader-employee relationships.

If you have any questions about this study, please contact us at gbs2j@mtmail.mtsu.edu (primary investigator) or rick.moffett@mtsu.edu (faculty advisor).

APPENDIX I: MTSU IRB APPROVAL LETTER

IRB

INSTITUTIONAL REVIEW BOARD

Office of Research Compliance, 010A Sam Ingram Building, 2269 Middle Tennessee Blvd Murfreesboro, TN 37129 FWA: 00005331/IRB Regn.. 0003571



IRBN007 - EXEMPTION DETERMINATION NOTICE

Wednesday, June 09, 2021

Protocol Title Follower Characteristics and Preference for Leadership Styles of

Behavior 21-1201 2q

Protocol ID **21-1201 2q**

Principal Investigator Greg Silverman (Student)

Faculty Advisor Rick Moffett
Co-Investigators Michael Hein

Investigator Email(s) gbs2j@mtmail.mtsu.edu; rick.moffett@mtsu.edu

Department/Affiliation Psychology

Dear Investigator(s),

The above identified research proposal has been reviewed by the MTSU Institutional Review Board (IRB) through the **EXEMPT** review mechanism under 45 CFR 46.101(b)(2) within the research category **(2)** *Educational Tests, surveys, interviews or observations of public behavior* (*Qualtrics Survey*). A summary of the IRB action and other particulars of this protocol are shown below:

IRB Action	EXEMPT from further IRB Review	
Exempt from further continuing review but other oversight re		ght requirements apply
Date of Expiration	6/30/2022 Date of Approval: 6/9/21	Recent Amendment: NONE
Sample Size	FIVE HUNDRED (500)	
Participant Pool	Healthy adults (18 or older) - US worker proficient in English recruited through Amazon Mechanical Turk	
Exceptions	Online consent followed by internet-based survey (Qualtrics links on file).	using Qualtrics is permitted
Type of Interaction	Non-interventional or Data Analysis Virtual/Remote/Online Interview/survey □ In person or physical– Mandatory COVID-19 N	//////////////////////////////////////
Mandatory Restrictions	 All restrictions for exemption apply. The participants must be 18 years or older. Mandatory ACTIVE informed consent. Iden names, addresses, voice/video data, must not NOT approved for in-person data collection. 	tifiable information including, be obtained.
Approved IRB Templates	IRB Templates: Informed Consent Non-MTSU Templates: Recruitment Script	
Research Inducement	\$2.75 - Documentation not required	
Comments	NONE	

IRBN007 (Ver: 2.0; Rev: 08/14/2020)

FWA: 00005331

IRB Registration. 0003571

Institutional Review Board, MTSU

FWA: 00005331

IRB Registration. 0003571

Summary of the Post-approval Requirements: The PI and FA must read and abide by the post-approval conditions (Refer "Quick Links" in the bottom):

- Final Report: The Faculty Advisor (FA) is responsible for submitting a final report to close-out this protocol
 before 6/30/2022; if more time is needed to complete the data collection, the FA must request an extension
 by email. REMINDERS WILL NOT BE SENT. Failure to close-out (or request extension) may result in
 penalties including cancellation of the data collected using this protocol or withholding student diploma.
- Protocol Amendments: IRB approval must be obtained for all types of amendments, such as:
 - Addition/removal of subject population and sample size.
 - Change in investigators.
 - Changes to the research sites appropriate permission letter(s) from may be needed.
 - Alternation to funding.
 - Amendments must be clearly described in an addendum request form submitted by the FA.
 - The proposed change must be consistent with the approved protocol and they must comply with exemption requirements.
- Reporting Adverse Events: Research-related injuries to the participants and other events, such as, deviations & misconduct, must be reported within 48 hours of such events to compliance@mtsu.edu.
- Research Participant Compensation: Compensation for research participation must be awarded as
 proposed in Chapter 6 of the Exempt protocol. The documentation of the monetary compensation must
 Appendix J and MUST NOT include protocol details when reporting to the MTSU Business Office.
- COVID-19: Regardless whether this study poses a threat to the participants or not, refer to the COVID-19
 Management section for important information for the FA.

COVID-19 Management:

The FA must enforce social distancing guidelines and other practices to avoid viral exposure to the participants and other workers when physical contact with the subjects is made during the study.

- The study must be stopped if a participant or an investigator should test positive for COVID-19 within 14 days
 of the research interaction. This must be reported to the IRB as an "adverse event."
- The FA must enforce the MTSU's "Return-to-work" questionnaire found in Pipeline must be filled and signed by the investigators on the day of the research interaction prior to physical contact.
- PPE must be worn if the participant would be within 6 feet from the each other or with an investigator.
- · Physical surfaces that will come in contact with the participants must be sanitized between use
- FA's Responsibility: The FA is given the administrative authority to make emergency changes to protect
 the wellbeing of the participants and student researchers during the COVID-19 pandemic. However, the FA
 must notify the IRB after such changes have been made. The IRB will audit the changes at a later date and
 the PI will be instructed to carryout remedial measures if needed.

Post-approval Protocol Amendments:

The current MTSU IRB policies allow the investigators to implement minor and significant amendments that would not result in the cancellation of the protocol's eligibility for exemption. Only THREE procedural amendments will be entertained per year (changes like addition/removal of research personnel are not restricted by this rule).

be circulation per year (changes into additional circulation percention are not rectified		tod by time rate).	
Date	Amendment(s)	IRB Comments	ĺ
NONE	NONE.	NONE	١

Post-approval IRB Actions:

The following actions are done subsequent to the approval of this protocol on request by the PI or on recommendation by the IRB or by both.

Date	IRB Action(s)	IRB Comments
NONE	NONE.	NONE

Mandatory Data Storage Requirement:

All research-related records (signed consent forms, investigator training and etc.) must be retained by the PI or the faculty advisor (if the PI is a student) at the secure location mentioned in the protocol application. The data must be stored for at least three (3) years after the study is closed. Additionally, the Tennessee IRBN007 – Exemption Notice (Stu)

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Institutional Review Board, MTSU

FWA: 00005331

IRB Registration. 0003571

State data retention requirement may apply (refer "Quick Links" below for policy 129). Subsequently, the data may be destroyed in a manner that maintains confidentiality and anonymity of the research subjects. The IRB reserves the right to modify/update the approval criteria or change/cancel the terms listed in this notice. Be advised that IRB also reserves the right to inspect or audit your records if needed.

Sincerely,

Institutional Review Board Middle Tennessee State University

Quick Links:

- Post-approval Responsibilities: http://www.mtsu.edu/irb/FAQ/PostApprovalResponsibilities.php
- Exemption Procedures: https://mtsu.edu/irb/ExemptPaperWork.php
- MTSU Policy 129: Records retention & Disposal: https://www.mtsu.edu/policies/general/129.php

IRBN007 - Exemption Notice (Stu)

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APPENDIX J: PERMISSION TO USE PERSOABLITY TYPE DESCRIPTIONS FROM

HOGAN ASSESSMENTS

From: Michael Boudreaux mboudreaux@hoganassessments.com @

Subject: RE: [EXTERNAL] possible thesis research using the Hogan 8 Common Personality Types

Date: October 16, 2020 at 11:51 AM

To: Rick Moffett Rick.Moffett@mtsu.edu

Cc: Gregory Silverman gbs2j@mtmail.mtsu.edu, Cody Warren cwarren@hoganassessments.com

Hi Rick,

Thank you for reaching out. My name is Michael Boudreaux and I work on the Data Science team here at Hogan. I handle request for academic collaborations with my colleague, Cody Warren, who is copied to this message. We are absolutely fine with Greg using the descriptions of the 8 personality profiles in his thesis research.

I have attached to this email a PowerPoint presentation that provides more detail about each of the 8 personality types. If you have any questions about the information presented in these slides, please don't hesitate to reach out. However, you might also want to contact our Chief Science Officer who conducted the research, Ryne Sherman. He can be reached at rsherman@hoganassessments.com.

Please keep us informed about Greg's findings. Good luck Greg!

All the best, Michael Boudreaux, PhD

From: Rick Moffett <Rick.Moffett@mtsu.edu> Sent: Thursday, October 15, 2020 12:13 PM

To: academicresearch <academicresearch@hoganassessments.com>

Cc: Gregory Silverman <gbs2j@mtmail.mtsu.edu>

Subject: possible thesis research using the Hogan 8 Common Personality Types

Greetings,

Greg Silverman is a second-year graduate student in the Industrial-Organizational Psychology Master's Program at Middle Tennessee State University; I am his thesis advisor. Greg is considering conducting his thesis on the relationship between the personality type of followers and their corresponding preferences for leadership behaviors from a leader. He is currently developing his thesis proposal to present to his committee.

More specifically, he is interested in looking at the 8 common personality types Hogan has identified and their relationship with the preferred leadership factors of task-oriented, relationship-oriented, and change-oriented leadership behaviors. He hopes to provide more insight into the relationship between follower characteristics and their preference for specific leadership behavioral styles from a leader.

The results of this research have potential theoretical implications as to which is more dominant between the similarity and needs-fulfillment theories and under what circumstances they operate. Additionally, the results have potential applied implications in helping better equip leaders to effectively adjust their own leader behaviors to suit their followers' preferences, thereby resulting in better outcomes

for the follower, the leader, and the organization.

The student would like participants to use the descriptions of the 8 common personality types in a forced choice format to have them identify their personality type. Then, participants would provide ratings on various leadership behaviors (task-oriented, relationship-oriented, and change-oriented behaviors) they prefer in a leader.

Although he is in the early stages of developing his proposal, we thought it would be prudent to share his ideas with you and to see if it would be possible to adapt Hogan's 8 common personality types as described in your blog articles describing these styles. Note: He is not planning to request using any data from Hogan, just the descriptions of the personality styles.

Any help or suggestions you might provide about next steps would be appreciated.

Sincerely,

Rick Moffett

Richard G. Moffett III, Ph.D.

Professor, Department of Psychology

Associate Director, Center for Organizational
and Human Resource Effectiveness - COHRE

Middle Tennessee State University

Jones Hall 324

MTSU Box 87

Murfreesboro, TN 37132 Office: 615.898.2686



Common Person Profile...lic.pptx