

ABSTRACT

Title of Thesis: ADDRESSING FOLLOWER MOTIVATION
WITHIN THE KELLEY TYPOLOGY OF
FOLLOWERSHIP USING SIGNIFICANCE
QUEST THEORY

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This thesis sought to build upon the Kelley typology of followership by examining the motivational factors that affect follower behavior in follower-leader interactions that the original theory did not explore. The motivational mechanism I argued accounted for differences in follower behavior was Significance Quest theory. This thesis examined whether the interaction between the activation of an individual's significance quest and the closeness to a network perceived as valuable to them would influence follower behavior. Additional factors, such as narratives valued by the network and regulatory focus orientation, are also explored. Partial support was found for two hypotheses. Implications and future directions of these findings are discussed.

ADDRESSING FOLLOWER MOTIVATION WITHIN THE KELLEY
TYPOLOGY OF FOLLOWERSHIP USING SIGNIFICANCE QUEST THEORY

by

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Chapter 1: Introduction

There has been a great deal of research attention focused on leadership. This is understandably so, considering the potential impact that different leader styles, attitudes, and relationships with employees can have on an organization. While the early research focused solely on the leader, this changed in the 1970s with the introduction of Vertical Dyadic Leadership (VDL) theory (Dansereau, Graen, & Haga, 1975) and its subsequent revision known as Leader-Member Exchange (Graen & Uhl-Bien, 1995) or LMX theory. Both VDL and LMX emphasized that leadership really was a dyadic relationship. It is based on interactions between the leader, on one end of the relationship, and the follower(s), on the other end. Clearly, as leadership author John Maxwell said, “He who thinks he leads, but has no followers, is only taking a walk. If you can’t influence others, they won’t follow you.” Thus, a person who thinks they are a leader but who is actually leading no one, is not a leader.

However, even though VDL and LMX conceptualized leadership as a dyadic relationship, this research still focused on the leader side of this dyadic relationship. Far fewer articles have examined the other half—the followers. Recently, however, there is a growing body of research focusing on these followers. Specifically, the majority of existing research that has taken a followership perspective has examined the types of followers that exist within an organization, and the impact that their followership orientation has had on said organization.

While much work on followership has focused on classifying different followership orientations, little research has been conducted about what these differences in followership behaviors. A person’s behavior is classified as

followership behavior when the role of follower is activated. Follower roles are activated in dyadic relationships in which there is an imbalanced influence pattern. Specifically, the follower role is activated when one person has less influence on the other person in a dyadic relationship.

Leaders within organizations, if asked, could likely provide numerous examples of employees who started off great, but whose performance tapered overtime. Conversely, there are also examples of initially struggling employees who worked hard to change and began to excel. In this thesis, I argue that there is a motivational mechanism at play that underlies these changes in followership behaviors. The concept of factors impacting follower motivation is not in and of itself novel. However, as is often seen in followership literature, the majority of these studies have focused on how leader-related variables, such as leader level (Basford et al., 2012), leader emotional displays (Van Kleef et al., 2009), leader behavior (Harrell, 2008), and transformational leadership styles (Zhu & Aktar, 2013) impact follower motivation. Research is lacking on what impacts the motivation of the follower themselves at an individual level, rather than in response to a leader. Herein lies the issue central to this thesis. This thesis seeks to understand the potential individual motivational mechanisms that influence the behaviors that followers display within the workplace.

Not All Followers are Alike

Several typologies have been proposed (e.g., Zalesnik, 1965; Kelley, 1988; Chaleff, 1995; Kellerman, 2008) to explain follower behavior. Of these different typologies, a commonly used one is the Kelley follower typology (Kelley, 1988). At

the time of writing this, Kelley's book, *The Power of Followership*, that describes his typology has been cited a total of 1,554 times. The next followership theory with the second greatest number of citations is Kellerman's (2008) book, *Followership: How Followers are Creating Change and Changing Leaders*, with a much lower total of 1,002 citations. For this reason, as well as the motivational force motivational aspect that is hinted at but is otherwise unspecified, Kelley's theory will be the followership theory of focus within this thesis.

While Kelley's theory of followership is useful for categorizing existing follower behaviors, it has been criticized. Even Kelley seems to have recognized a deficiency in his categorization theory of followers. Specifically, despite proposing a typology of follower behavior, Kelley's theory obliquely suggests in his writing that followers can shift their position in the typology. His theory of followership touches on the concept of follower motivation, albeit in a very broad way. He states that followers have different motivations, and these motivations influence the type of followership that a person would manifest. In addition, in his writings, Kelley peripherally suggests that motivation may shift over time. For example, he describes that "alienated followers" could be formerly exemplary followers who became disillusioned and alienated over time. This clearly indicates that Kelley believed that the motivational factors influencing followership are changeable over time. Unfortunately, this dynamic motivational aspect is purposely fully developed in Kelley's work. Kelley states that followers derive their motivations from different means, for example, some through ambition. Though he explicitly states that:

“...understanding motivations and perceptions is not enough, however. Since followers with different motivations can perform equally well, I examined the behavior that leads to effective and less effective following among people committed to the organization and came up with two underlying behavioral dimensions that help to explain the difference” (Kelley, 1988).

As this quote indicates, Kelley purposefully ignores the role of motivation, and instead focuses on specific behaviors of followers. However, considering the role motivation has on *why* people engage in certain kinds of behavior, I believe motivation warrants further examination. As Kelley’s original theory was not clear about the role of motivational mechanisms in his derivations of follower categories, this thesis will build his original theory by making up for this lack of specificity.

In this thesis, I argue that Significance Quest Theory (SQT) (Kruglanski et al., 2013) could be one of the motivational mechanisms underlying followership behavior. This theory, which originates in terrorist and extremism literature, is fundamentally used to explain why individuals show commitment to a cause. In this thesis, I argue that more “exemplary” followership behaviors are the result of commitment to an organization or leader when a motivational need (e.g., the need for significance) is activated.

The application of SQT in my thesis has benefits for not only the followership literature, but also the broader SQT literature. First, application of SQT builds upon Kelley’s (1988) followership typology work. Within his typology, Kelley divided individuals into five types of followers along two underlying dimensions. This thesis broadened Kelley’s typology by focusing on the two underlying dimensions rather

than the original five categories. While descriptive typologies, such as Kelley's, are useful for categorizing behaviors and while the idea of sorting individuals into neat, tidy categories may seem pleasing, there are downsides to a categorization theory of followers. Namely, human behavior, in general, does not fit neatly into one category. Rather, human behavior is often influenced by different factors such as environmental context or individual factors such as motivation. Thus, it is unlikely that anyone's followership behavior can be effectively conceptualized neatly as fitting into one category. As discussed above, even Kelley's original writing suggested that the likelihood of a person remaining the same type of follower over time is very small. By treating behavior as something that can be rigidly categorized, as is the case with typologies such as Kelley's, one stands the risk of pigeonholing individuals into the category that they are originally assigned, and this categorization may make it difficult for others to perceive them as moving beyond that category. A passive follower may be "typecast" by the organization or leader as always being a passive follower, even if their behavior reflects otherwise.

Second, focusing on the two dimensions, active vs passive engagement and critical vs uncritical thought, that underlie this typology allows for greater fluidity of follower behavior. Depending on contextual circumstances people can shift along these dimensions when viewed in this manner. This is a more realistic conceptualization of behaviors than more rigid, descriptive categorizations. While individuals may tend towards certain behaviors, it is not likely that they are always the same type of follower on a day-to-day basis. By placing greater emphasis on these dimensions of followership behavior, interventions may be developed that move

people along the continuum from alienated toward committed followership and this movement would be beneficial both for the organization as well as the followers themselves. Thus, the present study builds upon Kelley's theory by addressing the motivational piece that Kelley's original research hinted at but did not examine. By addressing motivation, a fuller picture of followership through the lens of a well-known followership theory can be attained, providing important theoretical implications to the followership literature realm. Practically, this could inform organizations on the motivational mechanisms they could employ within their workplace for the purpose of positively influencing follower behavior.

Third, this study will build upon the SQT literature. SQT has, until this point, often been used to explain terrorism and extremism behaviors (Kruglanski et al., 2013, 2014; Molinario et al., 2020), however, recent research has stated its applicability towards all realms of psychological experience (Kruglanski et al., 2022) This thesis extends SQT to the organizational domain. This extension of this theory outside of its original venues has important theoretical implications for SQT research. I will begin my discussion of this study and justify my hypotheses by first reviewing the followership literature.

Chapter 2: Literature Review

Followership

Northouse (2019, p. 295) broadly defined followership as “a process whereby an individual or individuals accept the influence of others to accomplish a common goal”. This definition is fundamentally broad. Utilizing this definition, a workplace can be divided into two groups, leaders and followers. For example, the head of a department can probably be thought of as the leader, and the members of their department can probably be thought of as followers. While this definition paints a black and white picture of leadership and followership, in reality, the distinction between leader and follower is not without gradations. An individual can maintain a leadership role within certain contexts, while still maintaining a followership role within others. For example, the CEO of an organization is, by definition, a leader; however, they also have to answer to a Board of Directors which places them in a follower position. Thus, Northouse’s strict definition of followers is really, at best, a simplification of a more complex construct. Further, Northouse’s focus on formal leader-follower relationships needs to be expanded to include informal leader-follower relationships. Leader-follower interactions that occur formally could emerge organically, such as what happens within teams when one team member claims the leadership role of the team.

As Northouse (2019) discusses, the term “follower” has been traditionally thought of in a pejorative manner. The follower stereotype may be thought of as someone who mindlessly goes along with whatever the person in the leadership position tells them without question. This negative perception largely has to do with

the perception of the term “follower” as synonymous with the term “subordinate” (Hershey & Blanshard, 1982), as well as the aggrandized view of leadership that has developed. Meindl et al. (1985) in their seminal article, “The Romance of Leadership” discussed the larger-than-life status that the role of the leader has developed. Leadership and the possession of a leadership role is the desired outcome, and thus, followership on the other side of the coin, is undesired.

However, this view of followership is inaccurate. Especially in light of the fact that even those in leadership positions still occasionally enact the follower role in certain circumstances, as shown in the CEO example above. Additionally, this pejorative interpretation fails to consider the positive potential of the follower. While there are negative examples of followership, one that immediately comes to mind is the Nazi soldiers unquestioningly following Hitler’s orders, there are also positive examples as well. Kelley (1992) gives the example of followers during the Civil Rights Movement. While there was most certainly leadership guiding this movement, the followers who engaged in marches and boycotts were the ones who fundamentally helped to generate the success of the movement.

Due to the dyadic nature of this relationship, leadership and followership are fundamentally linked. Heller and van Till (1982) argue that leadership and followership are best seen as roles in relation to each other. This underscores the importance of followership research. Much attention has been paid to the leader partner of the dyadic relationship (Hanges et al., 2021), but without research providing further examination of the thoughts, motivations, and behaviors of followers, there is a gap within the knowledge of this relationship.

Due to the linked nature between leadership and followership, many leadership theories incorporate leader responses to followers and follower reactions that further entwine these two fields of research. Thus, I will next review the relevant leadership theories to fully examine the path of followership research.

Leadership Research: Focus on the Leader

Early leadership research placed a great deal of focus on unchangeable traits of a leader -- either you were born a leader, or you were not. These traits varied across theories and empirical studies, but some consistently emerge such as, intelligence, sociability, confidence, masculinity, and dominance (Stogdill, 1948; Mann, 1959; Stogdill, 1974; Lord, DeVader, & Alliger, 1986; Kirkpatrick & Locke, 1991). If you did not have these traits, your leadership potential was limited and therefore, you were a follower. Followership research at this time viewed followers as the “inferior” subordinates who needed to be closely managed by the “superior” leader to be successful (Taylor, 1911; Uhl-Bien, Riggio, Lowe, & Carsten, 2014).

Additionally, early situational models of leadership, like Fiedler’s Contingency theory (Fiedler, 1965), argued that the effectiveness of a leadership style was contingent on organizational context. These models basically argued that effective leader behavior varied as a function of organizational context. Contextual factors included time constraints, task structure, as well as follower characteristics. Therefore, to increase leader effectiveness, a leader has to change their style to best suit the context in which they are operating (Blanchard et al., 2013; Hershey & Blanchard, 1982). In other words, situational leadership theories incorporate followers as part of the organizational context that leaders adjust to. Consistent with

situational leadership models, I argue in this thesis that followers can also adjust their behavior as a function of various contextual factors.

One of the first leadership theories that explicitly pulled followers out of the organizational context was Vertical Dyadic Linkage (VDL) theory and its subsequent modification known as Leader-Member Exchange Theory (LMX) (Graen & Uhl-Bien, 1995). Both VDL and LMX differ from earlier leadership theories in that leadership is conceptualized as the relationship between dyadic partners, such as leaders and followers. VDL (Dansereau, Graen, & Haga, 1975) conceptualized the basic unit of leader-follower relationships as the vertical dyad. These dyads could be classified as either an in-group dyad or an out-group dyad. In-group dyads are characterized by expanded roles for followers in which they had responsibilities beyond their predefined job duties. In contrast, out-group dyads are characterized by defined job roles. When the leader and follower worked well together and got along well, the follower became a member of the leader's in-group and benefitted from the positives of such status. If the leader and follower had difficulties, the follower became a member of the leader's out-group and the leader-follower relationship was more formal and/or transactional. LMX built upon VDL by examining how the quality of these relationships affected leaders, followers, and organizational outcomes. According to LMX, leader-follower relationships in in-groups are characterized by trust, respect, and liking. Leader-follower relationships in out-groups, on the other hand, are characterized by more close supervision due to a lack of trust, respect, and liking (Graen & Uhl-Bien, 1995). Clearly, in-group and out-group relationships differ in terms of the quality.

LMX differs from other leadership theories in a number of ways. First, it highlights followers as an essential component of the leadership relationship. While prior theories either ignored or conceptualized followers as part of the context that leaders have to react to, LMX removes leadership from a property of an individual to a phenomena that arises at the dyadic level. Second, LMX conceptualizes leadership as a dynamic process that evolves and changes over time. For example, LMX discusses how the follower's relationship with the leader changes over time from a role taker to a role maker, to role routinization (Ye et al., 2021). Finally, LMX differs from prior leadership theories in that the reciprocal nature of the leader-follower relationship is recognized. That is, LMX suggests that followers can influence their leaders. However, it should be noted that even though the leader-follower relationship is viewed as reciprocal, it is important to note that LMX literature remains leader-centric. That is, its main focus remains on the leader.

While LMX was leader-centric, it did spur some researchers to develop a follower-centric perspective. That is, these researchers developed the follower side of the LMX relationship. Indeed, Bjugstad et al.'s (2006) integrated model of followership is the first model to attempt to apply a situational context to a role-based followership theory. Specifically, Bjugstad et al. (2006) integrated a popular follower-centric theory (i.e., Kelley's (1992) model) and a popular leader-centric theory (i.e., Hershey and Blanchard's (1982) model). In the next section, I discuss various followership theories and focus on follower theories, such as Kelley's (1988) role-based followership perspective.

Role-Based Followership

Several researchers have recently attempted to categorize the burgeoning literature on followership (e.g., Bjugstad et al, 2006; Crossman & Crossman, 2011). Uhl-Bien et al (2014) differentiation of follower-centric theories is particularly useful. Specifically, Uhl-Bien et al categorized follower theories into either constructionist theories or role-based theories. Constructionist theories focus on the mutual influence that leaders and followers have on each other through a give-and-take process. These theories argue that the interactions that occur during this give-and-take process influence organizational outcomes. While constructionist theories focus on the interactions between the leader and the follower, role-based followership takes a more follower-centric approach.

According to Uhl-Bien et al's (2014), role-based followership theories are derived from Katz and Kahn's (1978) organizational role theory. Role-based theories view followership as a role enacted by individuals through a rank or position placed upon them either formally or informally (Uhl-Bien et al., 2014). According to Katz and Kahn (1978), a role is a requirement imposed via an organizational system on an individual by expectations placed on said individual. It is these roles that link individuals to other individuals within an organization. Conceptualizing followership as a role is fairly consistent with the prior unfavorable stereotype of followers (e.g., unthinking individuals who obey the orders of superiors), the role-based approach actually "reverses the lens" in terms of followership (Shamir, 2007). In other words, the role-based approach highlights the impact of followers on the leader and organization outcomes, rather than just the impact of the leader on followers. The

role-based approach identifies different attributes or characteristics, behavior, or outcomes of followers that lead to various outcomes. This approach states that the follower's characteristics impact their behavior. Further, it is follower behavior and the leader's perceptions of their behavior that creates particular outcomes (Uhl-Bien et al., 2014). Role-based theories recognize the autonomous role of the follower beyond the leader. I took a role-based perspective in the development of my thesis.

Role-Based Followership Theories

Examples of role-based followership theories range from Zaleznik's (1965) follower typology model to Kellerman's (2008) typology and Chaleff (2009) typology. These theories differ in the types of followers conceptualized as well as the distinguishing dimensions by which these follower types differ. For example, Zaleznik (1965) separated his follower categories by two dimensions: active/passive behavior dimension and dominant/submissive behaviors dimension. Chaleff (2009) also used two dimensions to differentiate his follower types. His dimensions were how supportive the follower is of the leader and how much challenge they provide to the leader. Kellerman's (2008) typology came from a political scientist perspective and differentiated follower types on one dimension, namely level of follower engagement. Finally, Kelley's (1992) model differentiated various follower types in terms of an active/passive dimension and an independent critical/dependent uncritical thinker.

In summary, researchers have proposed numerous role-based followership theories and each of these theories have conceptualized followership differently. These theories have identified different explanations for follower behavior. These

explanations ranged from followers' level of engagement (Kellerman, 2008), their courage (Chaleff, 2009), or the situational context they are placed in (Bjugstad et al., 2006). While each of these theories have moved the followership research forward, they are all similar in that they have not touched upon the underlying motivational factors causing the followers to act in the way they do. Only Kelley's (1988) typology of followership hinted that some unspecified motivational force could change the type of follower a person is. Kelley's model, therefore, is the starting point for my thesis and the search for these motivational factors. I explain Kelley's model in the following section.

The Kelley Typology of Followership

As stated above, the Kelley followership typology is not only the most frequently referenced follower typology but it is the only one that suggested that motivational forces could cause follower behavior to evolve over time. Robert Kelley (1992) developed his typology as a means of understanding the type of followers and the impact they have upon their leaders and their organizations. Thus, the role of followers is equally as important as the role of leaders in Kelley's typology.

Within this typology, the focus was not solely placed on the behaviors of the followers but also the motivations that underlie the behaviors themselves. A good follower is able to display the four qualities: 1) self-management (e.g., independent thought, independence), 2) a commitment to the organization and its goals, 3) a desire to continuously build skills and competencies within one's job area, and 4) credibility, ethics, and courageousness (Kelley, 1988; 2008). The best follower is one who also is motivated to take an active role in the organization and who is unafraid to speak up

and be critical of the leader when necessary, for the good of the organization. These two components are the central two dimensions that account for the different categories of followers: (a) active vs. passive and (b) independent/critical thought vs. dependent/uncritical thought.

Active vs. Passive.

Kelley (1988; 2008) used active vs. passive engagement as one of his key dimensions in his typology. Kelley describes a follower who displays active engagement as a person who takes initiative, assumes ownership of a task/project, actively participates in work, is a self-starter, and an individual who goes above and beyond. Oppositely, followers who display passive engagement are passive, lazy, needing prodding, requiring constant supervision, and dodging responsibility. Kelley (1988) noted, however, that these characterizations really reflect followers that are on the far end of the passive/active dimension. Typical followers are closer in the middle of this dimension, meaning that while they do engage in some level of autonomous initiative, they also tend to do as they are told after being instructed to do so.

Independent, Critical Thought vs. Dependent, Uncritical Thought.

This second dimension of Kelley's theory refers to the extent to which an individual is willing to form their own unique thoughts regarding a matter regardless of what others think. It also reflects a willingness to express those thoughts to others (e.g., the leader or the wider organization) even when those thoughts are potentially risky and critical of others. Independent and critical thoughts may be expressed either in the form of curiosity, being unafraid to suggest new ideas, to think "out of the box", or by expressing criticism with instructions or plans that one does not agree

with. Kelley (1992) indicates that these kinds of followers would be expected to give constructive criticism, follow their own decisions, and suggest innovative/ creative ideas. At the other end of the dimension, the dependent, uncritical thinking followers would be expected to express their voice less often and would probably repeat ideas that others have expressed. Kelley described these followers as having to be told what to do and as not thinking.

Multiple different outcome variables have been examined in relation to Kelley's typology, including creativity and innovative behaviors (Jausi et al., 2008) and personality characteristics (Mushonga & Torrance, 2008). However, one important component of Kelley's model that has yet to be examined is the idea of followers changing their behavior and the role of motivation to initiate these changes. This gap in the literature has been noted in reviews of the followership literature (Uhl-Bien et al., 2014; Northouse, 2019) as well as by Kelley (1992) himself. Kelley (1992) even suggested that differences in motivation as well as individual differences are key differences between leaders and followers. This appears to underscore the importance of an assessment of motivational mechanisms in regard to followership, however, this examination has yet to be formally conducted.

This thesis seeks to resolve some of this ambiguity by examining the role of an aspect of the follower that has yet to be examined in any followership research, the motivations of the follower. Kelley's model was chosen as the followership theory of focus in this thesis, not only due to its widely known and heavily cited status, but because it is the only followership theory that suggests follower behavioral change and points to motivation as the underlying process accounting for this change.

Unfortunately, Kelley never specified what these motivational factors are. To address this, I proposed that significance quest theory (SQT) might prove useful to identify these possible factors. In particular, SQT highlights follower's need for significance and their regulatory focus as two potential motivational factors.

Significance Quest Theory

Significance Quest Theory (SQT), also referred to as the 3N Model, is a conceptual framework that has been applied to explain why individuals in terrorist organizations, or other extremist groups, radicalize (Kruglanski et al., 2013, 2014, 2019). This model consists of three components, or the 3N's: need (for significance), narrative, and network. According to this theory, it is through the inner workings of these three elements that individuals are motivated to engage in radical behaviors for a cause or group. These three elements are discussed in greater detail below:

Need for Significance

Human beings have a fundamental need to feel that they are important within the context of their world. This need is referred to as a need for significance. This need is more formally defined as “a fundamental desire to matter, to merit respect, and to be someone” (Kruglanski et al., 2013). When something occurs that stimulates this desire for significance, the individual's quest for significance is activated. In the application of SQT to terrorism, Kruglanski et al. (2019) discusses that the quest for significance does not immediately induce behaviors towards in favor of extreme causes, but rather it must first be activated. The quest for significance can be activated

in one of three ways: through the loss of significance, the fear of the loss of significance, or through the potential for significance gain.

Significance can be lost on either an individual level or a social level. Kruglanski et al. (2013; 2014; 2019) describes the activation of the quest for significance in this manner as relating to the psychological construct of deprivation. Individually-based significance loss occurs when something happens to the individual that causes them to be humiliated or some other event occurs that threatens their sense of meaning. When individuals are deprived of what gives them a sense of meaning, this quest is activated. For example, if someone suffers a humiliation (e.g., loss of a job or relationship) that they perceive is due to actions by out-group members, the person's negative narrative of the out-group becomes salient. Individually-based significance loss can also occur as the result of unstable conditions living environments. These environments can be within their social environment or personal lives, or within the political, economic, or otherwise overall conditions in which they live. This instability provokes a sense of what is described by Durkheim (1983) as anomie. Durkheim (1983) describes anomie as a feeling of the dissolution of the standards in which the individual lives. These feelings initiate this sense of significance loss and activate the significance quest (Kruglanski et al., 2019). Significance loss can also occur socially as well as individually. This is when the loss is not felt due a specific instance in the individual's life, but rather is felt when a humiliation occurs to the in-group to which they belong, or something occurs that disparages the values of that in-group.

The activation of the significance quest can also be activated not only through an actual loss, but also through the perception of the potential for a loss of significance. The fear of losing significance is enough to activate the significance quest. The example given here within the radicalization literature are the kamikaze fighter pilots of World War II (Kruglanski et al., 2019). These individuals did not have a desire to die, but the threat of the significance loss that would result if they failed their mission activated a quest for significance. This desire for significance then prompted them to kill themselves in pursuit of their cause.

Lastly, the significance quest can be activated not through a loss of any kind, but instead by the perceived potential for significance gain. If the individual perceives a situation as being able to provide them a meaningful opportunity to gain significance, then their significance quest will be activated. This example has been used to explain motivations behind terrorists who gained widespread notoriety (Sprinzak, 2001), such as Osama Bin Laden. While this aids in the understanding of why terrorists commit atrocities, the same general principle can be used from an organizational standpoint to explain more commonplace behaviors such as why ambitious individuals might strive to go “above and beyond” in their workplace.

Prior constructs have been defined that touch on similar elements as the need for significance. Search for meaning in life (Steger et al., 2006) and need for achievement (Lowell, 1952) all touch on similar feelings of a desire to feel important in one’s world. Self-esteem is a related construct. Self-esteem refers to one’s internal evaluation of their own self-concept, or the sum of their own inferences about themselves (Baumeister, 1997). Thus, need for significance is similar to self-esteem

in that they both are judgements of perceived meaning or value of the individual to themselves. A unique element of the need for significance is its inherent social element. While self-esteem is self-focused, it is one's own perception of value, the need for significance is socially conveyed. Significance is granted to an individual by being important to a group that they derive meaning from. This could be through the individual being an epistemic authority on a topic that the group finds meaningful, or from the individual having some other valued attribute to the group. Due to this socially conveyed nature, need for significance is a distinct need. This social nature also presents a potential need to study in an organizational context as organizations have their own group dynamics and cultures. The social dynamics present within organizations indicates that these may be places where the need for significance may be activated but also fulfilled. When this need is activated, fulfilling this need serves as a goal. This leads individuals to the means in which they use to fulfill this goal, the narrative.

Narrative

Upon activation of the need for significance, SQT indicates that the second N (i.e., narrative) is initiated. The narrative is an ideological story, or a cultural meaning making schema, that the individual develops that suggests the means to obtain the significance that they seek. This ideology provides the individual with the story, or the means, to achieve this goal of significance (Kruglanski et al., 2013). An individual may adopt a compelling narrative for how to achieve their goal, particularly if this goal has been validated by those they consider to be an authority (Kruglanski et al., 2005). Thus, if an authority figure or leader the individual respects

or values advocates for a certain narrative, such as through a vision statement, the individual will be more likely to adopt said narrative. As narratives provide the means for goal achievement, resulting behavior an individual engages in to achieve these goals is influenced by these narratives. To provide an example from the radicalization literature, individuals will not be motivated to engage in violent behavior on the path to attaining their goal unless they have a narrative that states that these violent actions allow them to do so.

Network

Lastly, once a narrative is developed, SQT indicates that the individual will seek out a network that affirms the ideological narrative that they have developed. Individuals seek out a group in which they share beliefs and values with for assistance in how to achieve the significance they are questing for (Kruglanski et al., 2009). This is known as collectivistic shift, or transference of an individual's identity to a social identity as a member of the valued group. As the individual's identity shifts to become more that of the group or network identity, the needs and values of that group grow in importance. What fulfills the group's needs and values becomes increasingly likely to fulfill their own feelings of significance. In radicalization literature, this explains why people engage in extreme behavior that favors these radical organizations in pursuit of their own significance quest. However, it can also explain why someone who highly identifies with their organization or leader would engage in behaviors that favor their organization/leader to fulfill their own personal sense of significance. Within a leader-follower relationship, the leader is in a position of influence and therefore the leader's in-group serves as the network/group and the

leader and the leader's vision serves as the voice of the network. Thus, the ideals and values that the leader espouses and places value upon become the espoused values and indicates the desirable attributes that a "good" follower should display to enact the values desired by the group.

Chapter 3: Extension of SQT to Kelley's Followership Model

Currently, SQT has been primarily used within terrorism and other extremism literature. However, recent research has stated that it can be applied to all realms of psychological experience (Kruglanski et al., 2022). I argue that one realm where this theory can, and should, be applied is within Organizational Psychology. SQT could explain behaviors within a workplace context, which this thesis intended to do for followership behaviors. According to Kruglanski et al (2019), the need for significance is a universal need that is applicable across contexts (e.g., workplaces), not just terrorist or radicalized organizations. The idea of internal value being derived from the work that one does is not new. Indeed, Hackman and Oldham's (1975) job characteristics model states if the characteristics of a job feel important and vary, the employee will derive greater meaning from their job and subsequently exert greater effort in their job.

Research backs these claims. Studies have found positive correlations between job satisfaction and life satisfaction (Bialowolski & Weziak-Bialowska, 2021). Additionally, research has also shown the spillover effect of job satisfaction into other areas of life satisfaction including affect at home and marital satisfaction (Ilies, Wilson, & Wagner, 2009). When people enjoy and derive a personal sense of fulfillment from the work they do, this satisfaction spills over into other areas of their life.

Thus, one can see how SQT could be utilized to explain changes in followership behavior. Dependent variables used within SQT research have included variables such as willingness to self-sacrifice (Hasbrouck, 2020; Molinario et al.,

2020) and extremism (Webber et al., 2018). This is because through the process of the 3N model, individuals become extremely committed to a cause and thus willing to engage in radicalized behavior for said cause. While this applies to extreme examples, this model fundamentally reflects more general processes by which individuals may become committed to an organization, group, or individual (Kruglanski et al., 2022). Thus, these same principles might be applicable to non-extreme examples of committed behavior, such as increased followership behaviors. Extending SQT to Kelley's (1988) typology suggests that the need for significance should be positively related to the two broader Kelley dimensions. When one is striving for significance, they are likely to be actively engaged and have independent/critical thought than be passively engaged and have dependent/uncritical thought. The highly committed individual is likely to engage in more "ideal" follower behaviors. Therefore, I hypothesize that an individual's significance quest will be activated when they are motivated to behave in ways that would grant them the significance that they seek. This means that activation of the significance quest is a related, but distinct, concept from motivation. It is not that significance quest activation is the same as motivation, but rather that the need for significance being activated serves as the catalyst to kickstart this motivation and lead to the following proposed motivated follower behaviors. This leads to the following hypotheses:

Hypothesis 1: Quest for significance will be positively related to followership behaviors. More specifically:

Hypothesis 1a: Participants whose quest for significance has been activated will be more actively engaged than participants whose quest for significance has not been activated.

Hypothesis 1b: Participants whose quest for significance has been activated will have greater levels of critical thought than participants whose quest for significance has not been activated.

While I expect the above relationship to exist when the need for significance is activated, it should be noted I am not suggesting that followers for whom the quest for significance is not activated will be terrible followers. Followers who are chronically questing for significance may be particularly “ideal” followers. This could be the case with highly ambitious followers. However, the lack of significance quest activation, does not, but certainly can mean, less motivated followership behavior¹.

Additionally, the follower’s network, either through the organization, or as the organization’s proxy, through the leader, will provide them the significance that they desire. Due to the aforementioned collectivistic shift, as the individual’s identity fuses with that of the organization or leader, the organization/leader’s values become

¹ There is room for other needs to be responsible for influencing how followers act. For example, the need for significance is socially conveyed, but there are also more internal needs that one may feel, such as self-esteem. One’s desire to be a good follower may be rooted in one’s own sense of self-worth determined by internal perceptions of one’s self, not the desire for worth that is granted to one by their status within a group that they value. The need for achievement as well as the goal orientation of the individual also pose potential pathways to followership behaviors beyond the quest for significance. Ultimately, I recognize that there is more than one path to being a good follower, but that the path via need for significance is one that warrants additional examination.

increasingly important to the individual. The values of the organization are socially conveyed to the follower by the values the organization enacts in its policies and procedures, as well as the espoused values that are disseminated by organizational members who are perceived as valuable to the organization, like the follower's leader. This is similar to the way culture and climate can disseminate what are considered to be socially acceptable norms within an organizational context. Thus, the individual should be motivated to show greater commitment to fulfill these increasingly important values. This enhanced motivation should translate into more active follower behaviors and greater critical thought. If the individual behaves in a manner that is deemed beneficial to their network (the organization or leader), they should likely feel they can obtain the significance that they desire. This leads to the following hypotheses:

Hypothesis 2: The connection to a network will moderate the quest for significance-follower behavior relationship. More specifically:

Hypothesis 2a: The quest for significance-active engagement relationship will be stronger when participants have a stronger sense of connection to an important network.

Hypothesis 2b: The quest for significance-critical thought relationship will be stronger when participants have a stronger sense of connection to an important network.

Finally, according to SQT, we need to consider the role of narrative to account for follower behavior. As discussed above, the narrative provides the means for how to obtain significance. However, these means may vary depending on the

organizational context. Followers' behavior can only provide the means to obtain significance if this behavior is believed to have value to their important network. If the follower believes that a behavior results in an outcome unvalued by their important network, then the possibility that the behavior will regain significance is unlikely. When the values of the organization imply to the follower that their behaviors could grant them the significance they seek, that leads to a shift in followership behavior. Thus, it is expected that there will not only be a relationship between how much an individual perceives their organization to value active engagement and critical thought on the extent that they display these behaviors, but that these values will impact the activation of the significance quest. This leads to the following hypotheses:

Hypothesis 3: The extent to which participants believe active engagement and critical thought is valued by their network will be positively related to active engagement and critical thought.

Hypothesis 4: The extent to which participants believe active engagement and critical thought is valued by their network will moderate the quest for significance – active engagement relationship and the quest for significance - critical thought relationship. More specifically:

Hypothesis 4a: The quest for significance-active engagement relationship will be stronger when participants believe their network values active engagement.

Hypothesis 4b: The quest for significance-critical thought relationship will be stronger when participants believe their network values critical thought.

Finally, while quest for significance activation has been effectively manipulated in prior research, it is possible that the effectiveness of this manipulation may be moderated by participants' regulatory focus. Higgins (1998) described regulatory focus as the mental framework that focuses individuals attention on particular aspects of a situation. People can either be promotion-oriented or prevention-oriented. Promotion-oriented individuals are gain-focused in that they are influenced by the presence or absence of a positive outcome. Conversely, prevention-oriented individuals are loss-focused. That is, they are influenced by the presence or absence of a negative outcome. It is possible that regulatory focus orientation could have an effect on active engagement and critical thought when the quest for significance is activated. Promotion-oriented individuals may see the positive impact of voicing critical thought and may believe the positive value of critical thought outweighs any potential downside to voicing critical thoughts. Further, promotion-oriented individuals may also see active engagement from a gain perspective as well. On the other hand, prevention-oriented individuals may be more likely to weigh the costs of critical thought and active engagement to see if such behaviors would prevent the loss of significance. Thus, my following hypothesis was:

Hypothesis 5: The regulatory focus of participants moderates the effectiveness of the quest for significance-active engagement and the quest for significance-critical thought relationships. More precisely, the effect of the

quest-for significance manipulation will be stronger with prevention-oriented participants than with promotion-oriented individuals.

Chapter 4: Methodology

Research Design

The research design of this study was a 2x3 completely randomized factorial design. I manipulated two levels of Significance Quest (i.e., significance loss vs. control) and three levels of Social Identity (i.e., identity-priming, distinctiveness-priming, or control). Participants were randomly assigned to conditions.

Participants

Multiple methods were used to recruit participants from the University of Maryland campus. Specifically, participants were recruited by using the UMD Department of Psychology SONA paid pool, the UMD Department of Psychology SONA extra credit pool, paper advertisements, announcements professors posted to their classes via the Elms course system, and through in-class requests to participate in the study. Participants were compensated for their participation with either \$10.00 cash or 1 SONA credit.

A total of 283 people filled out the initial prescreen survey. Recruitment for this study started in November 2021 and went until May 2022. The original target sample size for this study was 145 participants. A power analyses conducted through the G*Power program (2020) indicated that a total of 145 participants would have been needed to find an interaction with a minimally detectable effect size of 0.25 with 75% power. Unfortunately, I was unable to meet my sample size goal at the end of my recruitment period. Due to this, my committee agreed that my thesis could proceed

with a reduced sample size of 76. Based on this sample size, a minimally detectable effect size of 0.34 could be found with 75% power.

Participant Demographics

Participants had a mean age of 21.29 (SD=4.78, min=18, max=52). In terms of race, 32.9% of participants identified as white, 31.6% as Asian, 11.8% as black, 7.8% as mixed race, 6.6% as Hispanic, Latino, or Spanish, 5.3% as middle eastern, and 3.9% either indicated that their race was not listed or choose not to provide this information. Approximately 87% of the sample stated that they had experience with a leader of some kind. In terms of gender identity, 68% identified as female, 25% as male, 4% identified as non-binary or genderfluid, and 2% did not identify their gender identity. In terms of sexual orientation, 74% identified as straight/heterosexual, 12% as bisexual, 5% preferred not to say, 4% chose not to answer, 3% identified as gay or lesbian, and 2% chose an unlisted identification (i.e., asexual or queer). The majority of the sample identified as being either moderate or liberal. In regard to economic issues, 40% of the participants identified as liberal, 34% as moderate, 13% as conservative, and 12% as very liberal. In regard to orientation toward social issues, 34% of participants identified as liberal, 30% as moderate, 36% as very liberal, and 9.5% as conservative. With regard to socioeconomic status, 44.7% identified as working class, 32.9% as upper middle class, 15.8% as working class, 3.9% as upper class, 1.3% as lower class, and 1.3% did not report their socioeconomic status. Finally, 88% of the sample were undergraduate students and 22% were graduate students. No participants reported having a class with the individual presented as the leader in the stimulus video.

Procedure

Participants were asked to complete a pre-screen before arriving at the lab. The prescreen questionnaire included a regulatory orientation measure and demographic information. In order to be eligible for the study, participants had to be 18 years of age or older. Finally, participants provided contact information on the prescreen that the researcher used to contact participants to schedule a time to participate in the main study.

Upon arrival at the lab, participants were greeted by the experimenter who thanked them for coming in to volunteer for the PSYCaress Initiative. Participants were seated in front of a computer and the experimenter read the cover story to participants. Specifically, the cover story indicated that participants volunteer for the PSYCaress Initiative. They were told that this initiative received permission to recruit volunteers through the UMD Department of Psychology SONA pool due to the time sensitivity of the initiative. They were told that their main task was to write letters that will be disseminated to the UMD students. However, in order to gain permission to recruit volunteers from the SONA pool, the initiative had to include some research related aspects. Thus, participants were told they would have to complete a preliminary research task before they could work on the initiative's letter writing task. This cover story provided an explanation for the prescreen questions. Of course, the real reason for the so-called research task is that it was used to deliver the study manipulations in a realistic fashion. The cover story script is contained in Appendix A.

After reading the cover story, the experimenter told the participants that the preliminary “research” task involved completing a writing prompt and answering questions having to do with memory recall. A consent form was then given to the participant and after consent was obtained, the participants began the Significance Loss and the Network manipulations. Participants completed a distractor task after completing the significance quest manipulation as was done in the study where this manipulation was first used (Hasbrouck, 2020). After both manipulations were completed, participants completed a short manipulation check survey which included a social identity measure and an identity fusion (Swann et al., 2009) measures as well as several items regarding the values they believed were important to the university. Participants were told to get the experimenter when they had completed this preliminary “research” section.

After participants finished the preliminary “research” task, the experimenter told participants that they will be writing letters to distribute useful information to students in a more meaningful, personal format. Participants were told that handwritten letters increase the probability that letter recipients will do the requested action. After hearing this information, another consent form was then given to the participant to review. Consent was obtained at multiple points during the study to maintain the believability of the deception. Participants were told this second consent form was a formality to maintain eligibility within the SONA system.

Next, participants watched a brief 1.5-minute video. The video showed the supposed leader of the PSYCares Initiative who gave more information about the initiative and described the volunteer task (see Appendix B for leader video script).

The leader shown on the video was advocating the benefit to the university by their participation.

After watching the video, participants were given a script that they were asked to copy onto a 4x6 inch postcard (see Appendix C for letter script and postcard). To enhance the believability of the study even more, the postcards had a “PSYCaress Initiative” logo on the front. They were told that the letters would be distributed to students and to try to write letters both as quickly and as legibly as possible.

Participants were not told the amount of time that they would have to write letters to avoid feeling of time pressure and to allow a more accurate assessment of participant active engagement. Rather, participants were told the experimenter would keep track of time and would let them know when the time was almost complete so that participant would have sufficient time to complete a final survey. In actuality, all participants were given 25 minutes to write their letters.

Once 25 minutes had passed, the experimenter told the participants that the time remaining was limited and that they would need to stop then and complete the final survey. Participants were told not to worry if they were in the middle of a card when time was called.

The last task that participants completed was a survey where they were asked to give feedback on the task and as well as feedback regarding how to improve the PSYCaress Initiative. This survey included the open-ended measures of critical thinking. Finally, participants were thoroughly debriefed about the nature of the study and compensated for their time.

Manipulations

Significance Quest – Significance Loss/Control

I adopted the manipulation used by Hasbrouck (2020) that was found to successfully manipulate an individual's need for significance via incentivization and deprivation. Hasbrouck had three conditions in his manipulation (i.e., significance loss, significant gain, control). I only used his significance loss and control conditions.

My significance manipulation was delivered as part of the preliminary “research” task and consisted of two conditions (i.e., significance loss vs a control condition). The manipulation consisted of participants writing a short paragraph in response to the following question in the significance loss condition:

“To learn more about how people recall past information, we’d like you to write about a personal experience you have had. Specifically, we would like you to think back to a situation in which you felt humiliated and ashamed because (you felt like) people were laughing at you. While recalling, please provide a detailed description of how you felt during this situation, who was involved, and what happened to make you feel that way.

If you have never experienced a situation like this, please think about a similar situation that someone you care about deeply, like a child, spouse, or a family member, may have gone through. While describing the situation and what occurred, try to “walk in the shoes” of this individual, and describe how you think he/she would have felt. What happened? Who was involved? How did it make you feel?”

In the control condition, participants were asked:

“To learn more about how people recall past information, we’d like you to write about a personal experience you have had. Specifically, we would like you to think back to the last time you watched television. While recalling, please provide a detailed description of what you watched, the characters in the show, and how the show made you feel. Please provide a detailed description of what you watched and how you felt while watching the show.”

Network Manipulation – Identity-Prime/Distinctiveness-Prime/Control

I used the Social Identity manipulation used by McLeish & Oxoby (2011) to manipulate feelings of closeness to the participant’s network, in this case the University of Maryland. Wording of the manipulation was altered slightly to make sense within the context of this study (i.e., a UMD student population). There were three conditions in these manipulations (i.e., identity-prime, distinctiveness-prime, control). In the identity-prime condition, participants were asked:

“Now we would like you to write about the ways in which you feel that you are similar to other University of Maryland students. What are some things that you share with other University of Maryland students?”

In the distinctiveness-prime condition, participants were asked:

“Now we would like you to write about the ways that you differ from other University of Maryland students. What makes you different from other University of Maryland students?”

In the control condition, participants were asked:

“Imagine you are giving instructions to a visitor visiting the University of Maryland campus who has never been to the campus before. Please provide them detailed instructions regarding how to get from the Stamp Student Union to McKeldin library.”

Manipulation Check Measures

Significance Quest Measure

Need for significance was measured using a nine-item, unpublished Quest for Significance measure (Molinario, unpublished; Appendix D). Sample items included “I wish I could be more respected” and “I have a strong need to be appreciated by other people”. This measure displayed high reliability ($\alpha = 0.92$). It was included to assess that the personal significance manipulation functioned as expected by the experimenter.

Network Manipulation Checks

I used two manipulation checks to measure the effectiveness of the network manipulation. I used an identity fusion measure and a social identity measure. The one-item identity fusion measure (Swann et al., 2009) has been successfully used in prior literature while the social identity measure consists of five-items and allows for great variation in participant response.

Identity Fusion Measure.

Identity fusion was measured by Swann et al.’s (2009) single-item measure. Participants were asked to indicate how close they felt to the university. This measure was a five-point Likert measure in which the responses were anchored by showing

pictures of overlapping circles (See Figure 1). For the low end of this measure (i.e., 1), there was no overlap between the circles whereas for the high end (i.e., 5), the circles completely overlapped each other.

Social Identity Measure.

I created a six-item measure of social identity (see Appendix E). Sample items included “the people I know and interact with at the University of Maryland are important to me” and “I feel integrated with the University of Maryland community”. This measure displayed an acceptable level of reliability ($\alpha = 0.83$).

Narrative Items

The effectiveness of the narrative manipulation was assessed using a five-item values measure that I developed (see Appendix F). Within this measure, one item asked participants “the University of Maryland values individuals sharing their thoughts and opinions about university leadership, even if those opinions are critical”, to assess how much they felt the university valued critical thought. Another item asked participants “the University of Maryland values individuals being actively engaged around campus” to assess how much they felt the university valued active engagement. The other three items served as distractors that asked about unrelated university values that made sense within the context of the study. The two items were treated separately each as single item-measures as each item assessed a different construct (active engagement and critical thought).

Independent Measures

Regulatory Focus Measure

I used Higgins et al.'s (2001) 11-item measure of an individual's regulatory focus (see Appendix G). This measure had seven reverse coded items. Sample items included “not being careful enough has gotten me into trouble at times” and “I feel like I have made progress toward being successful in my life”. Predominant regulatory focus was calculated by subtracting the score on prevention-oriented items from the score on promotion oriented items. A positive score indicated a promotion-oriented predominance and a negative score indicated a prevention oriented predominance. The absolute value of the score indicated the strength of the predominance. Both promotion ($\alpha = 0.73$) and prevention ($\alpha = 0.79$) subscales displayed adequate reliability. I recognize the well documented psychometric issues that occur with the use of difference scores in psychological measurement (Cronbach, 1958; Edwards, 2001; Johns, 1981). However, this was the scoring protocol used in Higgins et al.'s (2001) original conceptualization of the measure. Therefore, I chose to use a difference score so that my results would fit the existing nomological network for this measure.

Dependent Measures

Behavior Indicators

Behavioral Active Engagement Measure.

The letter writing task participants completed is a modification of an envelope stuffing task that has been previously used effectively in leadership research (i.e.,

Antonakis et al., 2014). The decision was made to have participants write letters rather than stuff envelopes as writing letters is a more effortful task, and thus a better measure of productive output. All participants were given 25 minutes to write as many letters as they could. They were not informed that they had 25 minutes, rather they were told that the experimenter would be keeping an eye on the time and would let them know when it was complete. Once the time was up, participants were asked to stop writing their cards and hand them to the experimenter. It was important that participants did not finish the card they were writing so that the amount they had written was only within that 25 minute time period as word count was a variable of interest.

The overall output participants generated during the task (e.g., how many words total across all postcards they wrote) served as an indicator of their level along their active engagement on the task. Those who were more motivated to be actively engaged were expected to complete writing a greater number of words compared to more passively engaged participants. Originally, the experimenter expected to count the number of letters written overall. However, a brief pilot study ($n=4$) showed that word count had far more variability than overall letter count. The letter script is presented in Appendix C.

Behavioral Critical Thought Measure.

Participants were asked to provide open-ended feedback to following questions at the end of the letter writing task:

“Please tell us what you thought about the letter writing campaign you participated in today. Was there anything you liked or disliked about the task? Do you

believe that the task could be improved upon? If so, how do you think the task could be improved upon?"

This feedback was used to measure the extent that the participants displayed independent, critical thinking and was qualitatively assessed via ratings assigned by content coders. Random assignment of conditions accounted for participants who were naturally more critical of tasks. Participant responses were coded by a research team. The wording for the questions the research team answered can be found in Appendix H.

Self-Report Measures

Active Engagement Measure.

I developed a five-item active engagement measure (Appendix I). Sample items included "I felt actively engaged while writing letters" and "I put a great deal of effort into writing letters". The EFA showed that these items loaded on a single factor and the measure displayed acceptable level of reliability ($\alpha = 0.84$).

Critical Thought Measure.

I developed a five-item critical thinking measure (see Appendix J). Sample items included "I thought of more efficient ways to accomplish writing letters" and "I can see ways in which the letter writing volunteer task I did today could be improved upon". The EFA showed that four items loaded onto a single factor and one item did not load and therefore was dropped. The scale had an adequate level of reliability ($\alpha = 0.84$) with one item dropped.

Covariates

Year of School

I used year in school to covary any differences in participants' initial perceived identity with the university. It is possible that Seniors, who have been at the university longer, may feel a greater connection to the university than more junior students. I controlled for year in school to remove a-priori differences in participants' sense of connection with the university to reduce noise as well as clarify the effect of my manipulation.

Handwriting Legibility

The measured readability of the letters participants wrote on postcards was assessed to covary out legibility from the total number of words written during the time period. It is possible that the total number of words written could be a contaminated measure of participant effort. Specifically, participants who wrote the same number of words could have exerted different levels of effort if one wrote illegibly and the other was careful to write legibly. The legibility of the cards was rated by the same coding team that did the critical thought ratings. I created a 5-point behaviorally anchored rating scale in which examples of illegible, moderately legible, and highly readable samples were provided at the 1, 3, and 5 points on the scale (see Figure 2). The final handwriting legibility scores for each participant were used to control for the number of words written to ensure that the behavioral indicator was an accurate representation of active engagement.

Chapter 5: Results

Psychometric Assessment of Variables

Due to the sample size available for my analyses, I could not run confirmatory factors analyses (CFA). Therefore, I examined the factor structure of all my measures using a maximum likelihood exploratory factor analysis (EFA). I examined each measure separately. If the EFA indicated that a scale had more than one factor, I used varimax rotation to aid my interpretation of these factors. To test the appropriateness of conducting an EFA, I ran the Kaiser-Olkin-Meyer (KOM) criterion for each measure. The KOM criterion for all my measures ranged from 0.75-0.87, well above the recommended value of 0.50 (Kaiser & Rice, 1974). Thus, the KOM criterion indicated that EFAs were appropriate for all of my measures.

All measures, except the regulatory focus measure, had only a single factor. As expected, the regulatory focus measure loaded onto two factors corresponding to promotion-oriented and prevention-oriented dimensions. Only one item had a factor loading of less than 0.40. This item was from the five-item self-report critical thought measure. Therefore, my self-report critical thought measure consisted of four items.

Rater Agreement on Critical Thought Feedback

Participants provided qualitative comments regarding how to improve the PSYCares Initiative. Three raters used a 6-item measure to evaluate the level of critical thought exhibited in participants' written feedback (see Appendix H). This rating process followed an iterative approach to ensure that the rating process had acceptable levels of reliability. Specifically, the raters were initially provided with a

small number of feedback responses and the raters were asked to rate each feedback response using the six-item critical thought measure. In approximately one week, the raters met with the researchers to identify and discuss any substantial discrepancies in their coding. A substantial rating discrepancies was defined as any rating differences of two or more points on each item. All substantial discrepancies were discussed and resolved by either clarifying the coding scheme for an item or agreeing how to interpret the item in the future. After resolving and proposing solutions to substantial discrepancies, raters were given another small portion of the data to code. The examination and discussion of substantial discrepancies occurred only one more time because the generalizability analysis indicated that sufficient agreement was reached (i.e., ICC2k = 0.88). The raters proceeded to rating the remaining feedback and I conducted another generalizability analysis once I had all the ratings. Surprisingly, the level of interrater agreement (ICC2k) dropped to 0.78.

After coding was completed, it was determined upon further assessment that two of the six question items (items one and three) appeared to really belong to a separate construct of how much the participants appeared to like the task/initiative rather than how much critical thought was displayed. An EFA conducted on the six items confirmed this to be the case. A new generalizability analysis was conducted that examined what the generalizability coefficient was with three raters and four items. Unfortunately, this analysis found a lower than acceptable generalizability coefficient of 0.59 with four items. However, I decided to remove the two items analysis so that the items the critical thought feedback ratings were based upon were

truly tapping into the critical thought construct. Thus, all critical thought ratings were based upon scores from the remaining four items.

Rater Agreement on Handwriting Legibility

The same three raters also evaluated the legibility of the participants' handwriting on the main letter writing task. A behaviorally anchored rating scale was developed and used to aid the raters in assessing handwriting legibility (see Figure 2). Once again, an iterative process was followed in which a small portion of participant letters were rated. After one week, the raters returned and any substantial discrepancies (i.e., rating differences of two points or more) were identified and discussed. Only one clarification session was needed before sufficient agreement among the raters was achieved (i.e., ICC2k =0.90). Completed letter coding displayed acceptable interrater agreement (i.e., ICC2k =0.82).

Manipulation Checks

A series of one-way ANOVA analyses were conducted to ensure that the study manipulations were operating as predicted.

Significance Quest

The first one-way ANOVA examined the effect of the significance quest condition type (i.e., significance loss/control) on the quest for significance manipulation check measure. Unfortunately, the results indicated that the significance question manipulation did not work ($F(1,74)=0.60, p=0.44, \eta_p^2 < 0.001$). While not statistically significant, the direction of the significance quest manipulation check was in the expected direction. Specifically, the mean of participants in the significance

loss condition ($M=4.97$, $SD=1.07$) was higher than the mean of participants in the control condition ($M=4.76$, $SD=1.24$). Thus, it appears that manipulation was working but I did not have a sufficient sample size to demonstrate it statistically.

Network

As discussed in the method section, I used two measures as the manipulation check of social identity which served as the network manipulation. Specifically, I used the social identity measure that I developed as well as the identity fusion measure (Swann et al., 2009). Correlation analyses showed that these two measures were significantly related to each other, $r(74)=0.68$, $p<0.001$. To test the effectiveness of the manipulation, I conducted a one-way ANOVA that examined the effect of the social identity manipulation condition type (i.e., similarity-prime/distinctiveness-prime/ control) on the social identity manipulation check measure. Results show that there was not a significant main effect of network manipulation on the social identity manipulation check measure, $F(2,73)=0.06$, $p=0.95$, $\eta_p^2<0.001$. A one-way ANOVA examined the effect of the social identity manipulation condition type (i.e., similarity-prime /distinctiveness-prime/ control) on the identity fusion manipulation check measure. Results show that there was not a significant main effect of network manipulation on the identity fusion manipulation check measure, $F(7,73)=0.11$, $p=0.89$, $\eta_p^2 < 0.001$. This indicates that the network manipulation did not work as intended.

Descriptive Statistics of Study Variables

Means and standard deviations of the significance quest manipulation are presented in Table 1 and the means and standard deviations of the social identity manipulation are presented in Table 2. Correlations of active engagement and critical thought values, regulatory focus, and all dependent variables are presented in Table 3. Correlation analyses were conducted between the two items that assessed the narrative component of this study. These items asked participants to indicate the extent that they felt their network (the university within this study) valued students being actively engaged and displaying critical thought. Results show that believing the network (i.e., the university) valued critical thought was positively related to believing the network valued active engagement, $r(74)=0.56, p<0.001$. In addition, the more participants believed that the network valued critical thought, the more that their feedback contained critical thought, $r(74)=0.25, p=0.03$, and the more participants self-reported themselves as actively engaged, $r(74)=0.43, p<0.001$. The more participants believed that the network valued active engagement, the more their feedback contained critical thought, $r(74)=0.24, p=0.04$, and the more they self-reported as being actively engaged, $r(74)=0.30, p=0.01$. Participants who wrote more words (i.e., behavioral active engagement) were more likely to self-report themselves as providing critical thought, $r(74)=0.27, p=0.02$. Lastly, the behavioral critical thought measure was positively correlated with self-reported critical thought, $r(74)=0.36, p=0.00$.

Tests of Hypotheses

Hypothesis 1

Hypothesis one (H1) stated that the quest for significance would be positively related to followership behaviors. More specifically, it was hypothesized that the quest for significance would be positively related to active follower behaviors (H1a) and critical thought (H1b). These hypotheses were tested by conducting a series of one-way ANCOVAs to assess if the quest for significance manipulation had an effect on participants' active engagement (i.e., letter word count and self-reported active engagement) and critical thought (i.e., critical thought feedback ratings and self-reported critical thought). I controlled for handwriting legibility and year in school in these analyses. Results did not support hypotheses H1a or H1b (see Table 4). There were no significant main effects of letter word count controlling for year of school and handwriting legibility, $F(1,73)=2.75, p=0.101, \eta^2=0.04$, self-reported active engagement controlling for year of school, $F(1,72)=0.50, p=0.48, \eta^2 < 0.001$, critical thought feedback ratings controlling for year of school, $F(1,72)=3.00, p=0.088, \eta^2=0.04$, or self-reported critical thought controlling for year of school, $F(1,72)=1.07, p=0.304, \eta^2=0.01$.

Hypothesis 2

Hypothesis two (H2) stated that the individual's network would moderate the relationship between the quest for significance and followership behaviors. More specifically, it was hypothesized that the relationship between the quest for significance and active follower behaviors would be stronger as participants'

connection to the network increased (H2a). The same moderation pattern was expected for the relationship between the quest for significance and critical thought (H2b). These hypotheses were tested by conducting two-way ANCOVA analyses² that assessed if there was an interaction between significance quest condition (significance loss and control) and network condition (similarity-priming, difference-priming, and control) on followership behaviors while controlling for handwriting legibility and year in school. Results did not support hypotheses H2a or H2b (see Table 5). There were no significant interactions between the significance quest manipulation and the network manipulation on letter word count controlling for handwriting legibility and year in school, $F(2,67)=0.60, p=0.55, \eta_p^2=0.02$, self-reported active engagement controlling for year of school, $F(2,68)=0.09, p=0.91, \eta_p^2 < 0.001$, critical thought feedback ratings controlling for year of school, $F(2,68)=3.00, p=0.06, \eta_p^2=0.08$, or self-reported critical thought controlling for year of school, $F(2,68)=0.82, p=0.44, \eta_p^2=0.02$.

Hypothesis 3

Hypothesis three (H3) stated that the extent to which participants believed that their network values active engagement and critical thought should be positively related to participants actual active engagement and critical thought. I tested this hypothesis using Pearson's correlation analyses between the narrative active engagement and critical thought items and the four dependent variables. Results partially supported this hypothesis. There was a significant positive correlation

² As data collection ended early, this study has an unbalanced design across conditions. Due to this, Type-III sums of squares were used when running all ANOVA analyses testing for an interaction.

between the extent to which participants believed the university valued active engagement and self-reported active behavior, $r(74)=0.30, p=0.01$, as well as a positive correlation between the extent to which participants believed the university valued critical thought and behavioral critical thought, $r(74)=0.25, p=0.03$. However, there were no significant relationships between the belief that the university values active engagement and the behavioral active engagement (i.e., letter word count) measure, $r(74)=-0.02, p=0.88$, or between the belief that the university values critical thought and self-reported critical thought, $r(74)=-0.09, p=0.43$. These findings partially support hypothesis three.

Hypothesis 4

Hypothesis four (H4) stated that the extent to which an individual's belief that active engagement and critical thought is valued by the university would moderate the relationship between the significance quest manipulation and followership behaviors. More specifically, it was hypothesized that the relationship between significance quest and active engagement would be stronger when participants believed that the university valued active engagement (H4a). Additionally, the relationship between quest for significance and critical thought would be stronger when participants believed that the university valued critical thought (H4b). These hypotheses were tested by conducting two-way ANCOVA analyses that assessed if there was an interaction between significance quest condition and active engagement/critical thought narrative items on followership behaviors. Results did not support hypotheses H4a or H4b (see Table 6). There were no significant interactions between significance quest and the active engagement narrative item on letter word count when controlling

for handwriting and year in school, $F(1,70)=0.001$, $p=0.98$, $\eta_p^2 < 0.001$ and self-reported active engagement when controlling for year in school, $F(1,70)=1.33$, $p=0.25$, $\eta_p^2=0.02$. Similarly, there were no significant interactions between significance quest and the critical thought narrative item on critical thought feedback ratings when controlling for year in school, $F(1,70)=0.81$, $p=0.37$, $\eta_p^2=0.01$, as well as self-reported critical thought when controlling for year in school, $F(1,70)=3.62$, $p=0.06$, $\eta_p^2=0.05$.

Hypothesis 5

Hypothesis five (H5) stated that an individual's regulatory focus orientation would moderate the relationship between the significance quest manipulation and followership behavior. More specifically, I expected predominantly prevention-oriented individuals to have more sensitive to the significance quest manipulation than predominantly promotion-oriented individuals. This hypothesis was tested by conducting linear regression analyses that assessed if there was an interaction between significance quest condition and regulatory focus orientation on followership behaviors.

There was a significant interaction between significance quest condition and regulatory focus orientation in predicting self-reported critical thought, $b=-0.64$, $t=-2.04$, $p=0.045$. The interaction effect was plotted in Figure 3. There was a positive regulatory focus-critical thought relationship in the control condition and a negative relationship in the significance loss condition, however, neither were statistically significant. The significant interaction indicates that these two slopes significantly differed from each other. Negative values of the regulatory focus measure indicate the

participant is predominantly prevention focused whereas positive values on this measure indicate more promotion focused. To interpret this interaction, I split the continuous regulatory measure into three parts. Prevention focused (one standard deviation below the mean), undifferentiated (at the mean), and promotion focused (one standard deviation above the mean). Analyses indicated that there was no significant difference between the significance loss and control conditions for either undifferentiated participants, $b=0.29$, $t=1.10$, $p=0.28$, or promotion-oriented participants, $b=-0.26$, $t=-0.67$, $p=0.51$. Results found that prevention-oriented participants in the significance loss condition had a significant negative relationship between self-reported critical thought, $b=-0.82$, $t=-2.27$, $p=0.03$. Prevention-oriented individuals in the significance loss condition displayed greater self-reported critical thought than those in the control condition. These findings partially support H5.

Post-Hoc Analyses

Effect of Experimenter

There were multiple experimenters involved in running this study. As such, there was the possibility that differences in experimenter behavior could have affected results. This was explored by performing four one-way ANOVA analyses examining the effects of the experimenter on each of the four dependent variables. Results showed that there was not a significant main effect of the experimenter on letter word count, $F(5,70)=0.56$, $p=0.73$, $\eta^2=0.04$, critical thought feedback ratings, $F(5,70)=0.24$, $p=0.94$, $\eta^2=0.02$, self-reported active engagement, $F(5,70)=0.37$, $p=0.87$, $\eta^2=0.03$, or self-reported critical thought, $F(5,70)=2.25$, $p=0.06$, $\eta^2=0.14$.

Effect of Compensation Type

When registering to participate in the PSYCares Initiative, participants could either choose to be compensated with either one SONA credit that would translate to extra credit in a course or \$10.00 cash. Thus, there was the possibility of a difference in participant behavior based upon compensation type. This was explored by performing four one-way ANOVA analyses examining the effects of compensation type on each of the four dependent variables. There were no significant main effects of compensation type on critical thought feedback ratings, $F(1,74)=0.07$, $p=0.79$, $\eta^2 < 0.001$, self-reported active engagement, $F(1,74)=1.80$, $p=0.18$, $\eta^2=0.02$, or self-reported critical thought, $F(1,74)=0.94$, $p=0.33$, $\eta^2=0.01$. However, there was a significant main effect of compensation type on letter word count, $F(1,74)=6.02$, $p=0.02$, $\eta^2=0.08$. Results showed that participants who were compensated with cash ($M=501.05$, $SD=107.80$) wrote significantly more words during the letter writing task than those who were compensated with SONA credits ($M=445.27$, $SD=88.88$).

Effect of Study Believability

Upon completion of the study, participants were asked to indicate whether they found the study to be believable. This indicates that there could be a difference in participant behavior depending upon whether participants found the study to be believable. This was explored by performing four one-way ANOVA analyses examining the effects of study believability on each of the four dependent variables. There were no significant main effects of study believability on letter word count, $F(1,72)=0.3$, $p=0.59$, $\eta^2 < 0.001$, critical thought feedback ratings, $F(1,72)=0.034$, $p=0.86$, $\eta^2 < 0.001$, or self-reported critical thought, $F(1,72)=2.01$, $p=0.16$, $\eta^2=0.03$.

There was, however, a significant effect of study believability on self-reported active engagement, $F(1,72)=1.18, p=0.01, \eta^2=0.09$. Participants who found the study to be believable ($M=5.78, SD=0.98$) self-reported higher levels of active engagement than those who did not find the study to be believable ($M=5.08, SD=1.08$).

Effect of Liking

As mentioned above, two question items were removed from the critical thought feedback ratings as these questions were determined to pertain to liking of the task/initiative rather than critical thought displayed. Thus, these items were combined together to create a liking score for each participant based upon their feedback.

Task/initiative liking was not originally intended to be measured in this study.

However, there was the potential that how much participants liked the task/initiative could have led to a difference in participant behavior. Exploratory analyses were conducted to determine whether the effect of participant liking was a potential covariate. To explore this, four linear regressions were conducted examining the effects of participant liking on each of the four dependent variables. There was no significant relationship between participant liking and letter word count, $b=2.44, t=0.27, p=0.79$. However, there was a significant relationship between participant liking and self-reported active engagement, $b=0.41, t=5.26, p<0.001$, self-reported critical thought, $b=-0.22, t=-2.38, p=0.02$, and the behavioral critical thought measure, $b=0.17, t=2.26, p=0.03$. These findings suggest that when participants liked the task/initiative more, they reported feeling less critical thought towards the task/initiative and being more actively engaged. However, while self-report indicators of critical thought were negative, behavioral indicators of critical thought were

positive. Participants who liked the task/initiative may have felt less critical but were subconsciously more critical, possibly to provide constructive feedback to a task/initiative they liked.

Analyses with Additional Covariates Included

As there were main effects of compensation type, study believability, and feedback liking ratings, exploratory analyses were conducted to test whether hypothesis testing results differed when controlling for these variables.

Letter Word Count.

Hypotheses one, two, four, and five were rerun with letter word count as the outcome variable and compensation type included as a covariate in addition to handwriting legibility and year in school (see Table 7). The main effect of significance quest on letter word count with the new covariates added was not significant, $F(1,70)=2.86, p=0.10, \eta^2=0.04$. With the new covariates added, the interactions between significance quest and the network, $F(2,66)=0.68, p=0.51, \eta_p^2=0.02$, significance quest and the narrative measures, $F(1,68)=0.00, p=0.99, \eta_p^2 < 0.001$, and significance quest and regulatory focus, $F(1,68)=0.12, p=0.73, \eta_p^2 < 0.001$, were not significant as well.

Self-Reported Active Engagement.

Hypotheses one, two, four, and five were rerun with self-reported active engagement as the outcome variable and study believability and participant liking included as covariates in addition to year in school (see Table 8). The main effect of significance quest on self-reported active engagement with the new covariates added was not significant, $F(1,68)=0.68, p=0.41, \eta^2 < 0.001$. With the new covariates

added, the interactions between significance quest and the network, $F(2,64)=0.51$, $p=0.60$, $\eta_p^2=0.02$, significance quest and the narrative measures, $F(1,66)=0.00$, $p=0.96$, $\eta_p^2 < 0.001$, and significance quest and regulatory focus, $F(1,66)=0.86$, $p=0.36$, $\eta_p^2=0.01$, were not significant as well.

Self-Reported Critical Thought.

Hypotheses one, two, four, and five were rerun with self-reported critical thought as the outcome variable and participant liking included as a covariate in addition to year in school (see Table 9). The main effect of significance quest on self-reported critical thought with the new covariates added was not significant, $F(1,71)=1.13$, $p=0.29$, $\eta^2=0.02$. With the new covariates added, there were no significant interactions between significance quest and the network, $F(2,67)=0.79$, $p=0.46$, $\eta_p^2=0.02$, and significance quest and the narrative measures, $F(1,69)=1.73$, $p=0.19$, $\eta_p^2=0.02$. The interaction between significance quest and regulatory focus orientation remained significant, $F(1,69)=4.45$, $p=0.04$, $\eta_p^2=0.06$.

Behavioral Critical Thought.

Hypotheses one, two, four, and five were rerun with critical thought feedback ratings as the outcome variable and participant liking included as a covariate in addition to year in school (see Table 10). The main effect of significance quest on critical thought feedback ratings with the new covariates added was not significant, $F(1,71)=3.19$, $p=0.08$, $\eta^2=0.04$. With the new covariates added, the interactions between significance quest and the network, $F(2,67)=2.54$, $p=0.09$, $\eta_p^2=0.07$, significance quest and the narrative measures, $F(1,69)=0.08$, $p=0.78$, $\eta_p^2 < 0.001$, and

significance quest and regulatory focus, $F(1,69)=1.93$, $p=0.17$, $\eta_p^2=0.03$, were still not significant.

Exploration of a Potential Three-Way Interaction

As there was a significant interaction between significance quest and regulatory focus, an exploratory analysis was conducted to determine if there was a potential three-way interaction between significance quest, network, and regulatory focus orientation (see Table 11). There were no significant three-way interaction between significance quest, regulatory focus orientation, and network on letter word count when controlling for year in school, compensation type, and handwriting legibility, $F(2,60)=1.58$, $p=0.22$, $\eta_p^2=0.05$, self-reported active engagement when controlling for year in school, participant liking, and study believability, $F(2,58)=1.93$, $p=0.15$, $\eta_p^2=0.06$, critical thought feedback ratings when controlling for year in school and participant liking, $F(2,61)=0.92$, $p=0.40$, $\eta_p^2=0.03$, and self-reported critical thought when controlling for year in school and participant liking, $F(2,61)=1.13$, $p=0.33$, $\eta_p^2=0.04$.

Chapter 6: Discussion

The purpose of this study was to examine the motivational factors that affect the type of follower behavior observed in follower-leader relationships. My study was based on Kelley's (1988) followership model and his suggestion that followers can change their behavior over time and that motivational factors probably account for these behavioral changes. Unfortunately, Kelley did not explicitly identify what motivational factors might contribute to changes in follower behavior.

I applied SQT to the followership literature and I argued that the motivational mechanism discussed in SQT might account for follower behavior. By focusing on the underlying motivational factors driving follower behaviors, I extended Kelley's model from a classification of follower behavior to a more dynamic perspective that allows for potential shifts in behavior over time. In addition to adding to the followership literature, this study also contributes to the SQT literature by extending the contexts that SQT has been applied to.

I used a completely randomized factorial design to test whether manipulating the degree to which people's quest for significance was activated (i.e., significance quest manipulation) and the social identity activated in participants (i.e., network manipulation) would affect follower engagement and follower critical thought. My hypotheses examined the main effect of significance quest condition as well as tested for interactions between significance quest condition and participant network, significance quest condition and narratives towards the university, and significance quest condition and regulatory focus orientation. I also tested to see if there was a relationship between narrative values towards active engagement and critical thought

and the active engagement and critical thought behaviors participants displayed (see Table 12 for a full list of hypotheses).

Results of my study showed partial support for H3 and H5. Analyses of H3 showed there was a significant relationship between narrative active engagement and displayed active engagement, but only for self-reported active engagement. There was also a significant relationship between narrative critical thought and displayed critical thought, but only for behavioral critical thought (i.e., critical thought feedback ratings). This indicates that there were relationships between the narratives the network states they value and behaviors the participants displayed, but that measures are these behaviors are treated differently by participants. Participants may be less willing to self-report themselves as having high critical thought as they may perceive being critical of a network they value in a negative light, even if they believe the organization. Thus, critical thought may be more likely to show in behavioral indicators, while active engagement, which may be perceived more positively, participants may be more willing to self-report. Additionally, partial support was also found for H5. Prevention-oriented individuals were more sensitive to the significance loss condition than promotion-oriented or undifferentiated individuals.

The manipulation checks revealed that neither manipulation worked. While the significance quest manipulation used in my study was successfully used in prior research (Hasbrouck, 2019; 2020), I was unable to find evidence that the manipulation worked in my study. However, when I examined the manipulation check means in the significance quest manipulation, I found that the direction of the means were in the correct direction. Specifically, while not statistically significantly

different, participants in the significance loss condition had a higher significance quest ($M=4.97$) mean than the mean for participants in the control condition ($M=4.76$). The general trend of the means indicates that the manipulation did seem to influence the significance quest as originally intended. Unfortunately, the lack of statistical significance between the two groups, $t(66.01)=-0.80$, $p=0.42$, indicates that any interpretation of the differences between these two groups should be treated with a great deal of caution.

Examination of the means of the four dependent variables across the significance quest conditions was intriguing. Those in the significance loss condition had lower active engagement scores overall, but higher critical thought scores overall as compared to those in the control condition (see Table 1). My original hypotheses expected all of these behaviors would be greater in the significance loss condition than the control condition. I had expected that the significance loss condition would activate the need for significance and thus prompt more motivated behavior to regain the significance that individuals were questing for. While this appeared to be the case for critical thought, it was not for active engagement. A potential explanation for this may be that the significance loss condition served to almost demoralize the participants. Particularly, as the significance loss condition asked participants to recall a time in which they were humiliated and how they felt in that moment. This was specifically done to motivate a need to regain significance, but it may have had an opposite, demoralizing effect instead. Participants seemed to be prompted to display less active engagement in the task, and while critical thought may have been higher, this seemed to may have been in more of a cynical manner (negative critical thought)

than that of constructive criticism (positive critical thought). This finding, while not expected, is not entirely surprising as prior research has found that demoralizing behaviors, like workplace bullying, have led to negative workplace outcomes (Agervold & Mikkelsen, 2006).

Kelley's (1988) original theory organized followers into five categories based upon the two dimensions used in my thesis: exemplary (high engagement/high critical thought), conformist (high engagement/low critical thought), alienated (low engagement/high critical thought), passive (low engagement/low critical thought) and pragmatic (the middle of both dimensions). Alienated followers were described by Kelley as followers who were highly critical of the organization, but their behavior stopped there. They criticized the organization, but their lack of active engagement meant that they did not engage in any proactive efforts to change or improve the organization. It appears that the significance loss condition in this study may have primed participants to become alienated followers according to Kelley's original conceptualization. It is possible that the increased critical thought was a self-defensive mechanism. The significance loss condition required participants to write about a time in which they were humiliated. This may have resulted in participants who felt embarrassed and as a result did not put effort into the task but were highly critical as a means of defending against ego deflation. This could indicate that it is not simply a matter of activating the significance quest in an individual in any particular way, but that the manner in which the significance quest is activated may be important as well. The activation of the significance quest via significance

loss may not be effective in an organizational context as it may prompt highly critical, but not highly engaged behaviors.

I was also unable to find evidence that the network manipulation worked in my study. As this manipulation was designed for the purposes of this study, it could be possible that it was not strong enough to adequately manipulate feelings of similarity or distinctiveness towards one's network, in this case the university. An examination of the means shows few differences between the distinctiveness condition and the control condition (see Table 2). Interestingly, the similarity condition appears to have lower means across the three of the four dependent variables than the distinctiveness condition which was not in line with expectations. Those in the similarity condition self-reported higher levels of active engagement than the distinctiveness condition. This may indicate that those who felt strongly identified with the network felt more actively engaged to participate in a task that they were told would benefit the network. As with the significance quest condition, the lack of statistical significance indicates that great caution should be taken in the interpretations of these means as well.

Another interesting result concerns the narrative items that participants completed. The partial support found for H3 indicates that there was a relationship between the narrative items and resulting followership behavior, at least for self-reported active engagement and critical thought feedback ratings consistent with H3. Interestingly, the mean of the narrative item asking whether the university valued critical thought was 4.83 and the mean of the narrative item asking whether the university valued active engagement narrative item was 5.68. Both of these items

were measured along a 7-point scale that ranged from strongly disagree to strongly agree. These means indicate that the average participant was non-committal on whether the university values critical thought items. The average participant only “somewhat” agreed that the university values active engagement. These results suggest that participants did not appear to believe that their network (i.e., the university) strongly valued these two behaviors. This would also give insight into why the network manipulation did not work overall. The network manipulation primed individuals to feel either similar to or distinct from their network, as well as an unrelated control condition. However, the effectiveness of the network manipulation on follower behaviors was contingent upon the idea that the participants believed that their network placed a value in them engaging in those behaviors. The similarity or distinctiveness towards the network that the participants were primed to feel would have no effect on the followership behaviors if participants did not think that the university placed value on active engagement and critical thought.

This may give insight into the nature of education. While universities’ espoused culture indicates that universities develop critical thinking skills as well as engaged citizens, many of the actual assignments and exams typically encountered by undergraduate students have elements primarily focused on the lower levels of Bloom’s (1956) taxonomy. Bloom’s taxonomy is a teaching framework that orders six categories from lowest to highest where the lowest categories are assignments that are more simple and concrete while the highest categories are more complex and abstract. These categories are as follows, listed from lowest to highest: 1) recalling facts and basic concepts, 2) explaining ideas or concepts, 3) applying information, 4)

drawing connections between ideas, 5) evaluating a position or decision, and 6) creating a piece of original work. Multiple choices and fill in the blank questions are exam types that undergraduate students may encounter on a frequent basis. These are more passive questions that place a great deal of focus on being able to simply recall information without a great deal of critical thought about the information. Less often do students encounter questions that use higher levels of the taxonomy that may tap into elements of critical thought, such as the evaluate and analyze levels where students have to draw connections between ideas to justify a particular decision. This applies to elements of active engagement, such as the create level which asks students to generate a new work of their own, as well. Perhaps by placing more focus on more passive, less critical thought invoking types of assignments, the university actually is signaling that it doesn't value active engagement and critical thought (i.e., endorsed culture is different from espoused culture).

Another surprising finding was the significant interaction of regulatory focus orientation with the significance quest manipulation. Originally, this measure was included as a safeguard in the event that the significance quest manipulation did not function as intended. However, results appear to indicate that regulatory focus orientation was much more of an important factor than I had originally thought as indicated by the results of H5. H5 stated that there would be an interaction between regulatory focus orientation and the significance quest manipulation, and that prevention-oriented individuals would be more sensitive to the significance loss condition. Partial support was found for H5 as there was a significant interaction, but only for self-reported critical thought. Upon closer examination of this interaction, it

was evident that prevention-oriented individuals were more sensitive to the significance loss condition as hypothesized. This indicates that there is a moderating influence of regulatory focus on certain followership behaviors when presented with an event that prompts the activation of the significance quest. This also evokes the possibility of individual-level characteristics playing in the activation of the significance quest. It is possible that based upon individual-level characteristics, such as regulatory focus orientation, different individuals may differ on what activates their significance quest.

There were some potential confounding factors that might have contributed to the lack of significant results. For example, the believability of the cover story, the effect of compensation type, and the effect of participant liking. To test these factors and attempt to control their effect, I conducted exploratory analyses where these variables were added as covariates.

Study Believability

With regard to the believability of the cover story, the results showed those who found the study to be believable self-reported greater levels of active engagement. Finding a main effect of believability was not entirely surprising considering the relatively complex nature of the study and the numerous deceptions involved. The significant effect of believability on self-reported active engagement was not surprising as well, as it makes sense that participants who believed they were actually completing a task for a real initiative at their university would be more engaged than someone who picked up on the study deception.

Compensation Type

Results of the effect of compensation type showed that participants who were compensated with cash wrote more words during the letter task than those who were compensated with SONA credits. I did not expect there to be a difference between compensation groups, however, these findings do not surprise. This is particularly true when one considers that the main effect was found for the behavioral indicator for active engagement, letter word count. These findings appear to indicate that monetary compensation is a stronger motivator of active engagement than extra credit compensation. It is interesting to note that there was not a significant main effect of compensation type for self-reported active engagement. Money appears to be a stronger motivator of active engagement, but also a subconscious one. Participants did not appear to feel more engaged in the task based upon compensation, but it reflected in their behaviors.

Participant Liking

Results of the effect of participant liking showed that participants who liked the task wrote more letters, had higher self-reported active engagement, lower self-reported critical thought, and higher behavioral critical thought. The effect of participant liking was also an unexpected result, especially since this was a variable that was not originally intended to be included and only was included after a factor analysis showed the critical thought feedback rating scores best fit a two-factor solution. How much participants liked the task or the initiative itself appeared to have an effect on three of the four dependent variables measured. The impact of how much a participant likes either something or an individual has been found in prior research

as well. For example, Martinko et al. (2018) found that when leadership measures controlled for how much the participants liked their leader, the previous significant effects of measures measuring multiple different leadership theories were rendered non statistically significant.

The effects of these covariates, as well as the partial support of H3 and H5, all show the value of including both self-report and behavioral indicators which this study made a concerted effort to incorporate. Self-report measures are often easier to use than behavior indicators to capture complex psychological phenomena. However, subjective measures like these are not without their limitations and critiques (Spector, 1994), though it should be noted that objective indicators have received their own critiques as well (Fried et al., 1984). With the exception of participant liking, which had a significant main effect on both self-reported critical thought and critical thought feedback ratings, all significant findings were present in either the behavior indicators of active engagement or critical thought or the self-reported measures, but not both. Therefore, by including both self-report and behavioral indicators of my dependent variables, I allowed for differences to be assessed between the two types of measures of which I did find in my study.

Future Directions

Based upon the findings of my study, there are numerous avenues for future directions for research. First, my study found that the quest for significance manipulation had significant effects on active engagement and critical thought but only for prevention-oriented participants. If this interaction between quest for significance and regulatory focus replicates, several future research ideas

strengthening the connection between regulatory focus and the followership literature may prove very beneficial. For example, in the regulatory focus literature, the idea of regulatory fit (i.e., match between situational context and an individual's regulatory focus orientation) plays an important role in influencing an individual response to a particular situation (Higgins, 2000). Perhaps, follower motivation and behavior may shift as a function of the regulatory focus of the leader or the regulatory pressures of the broader context (e.g., time pressure). If this is true, my result showing an interaction between regulatory orientation and the quest for significance manipulation suggests that shifts in followers regulatory orientation might enhance or diminish the salience of significance quest. Thus, the potential of regulatory fit for understanding follower behavior and shifts in their behavior need further exploration.

Another avenue of future research could be exploring the effect of need for significance and the utility of SQT over time and over the human lifespan at work. Perhaps, need for significance is especially important for younger employees just entering the workforce. These individuals may suffer from imposter syndrome as well as having uncertainty concerning their contributions to the new organization. However, over time and with experience, the need for significance might become less important for employees experiencing previous successes and promotions at work. Of course, there could be people for whom need for significance never loses its importance. These people might be in contexts in which positive feedback is rarely received due to a toxic leader or these people have experienced negative feedback about their contributions being somewhat regulatory. Of course, the long term effect of need for significance probably may also interact with follower regulatory focus as

well. Prevention-oriented individuals may always focus on maintaining, and not losing, their current levels of significance. In contrast, promotion-oriented individuals may continually strive to obtain greater significance through promotions and progressive accomplishments. The moderating effect of time and experience as well as regulatory focus on need for significance and behavior needs more attention in the future.

In the present study, I focused on regulatory focus orientation, but there are probably other individual-level characteristics (e.g., personality, need for cognitive closure) that might play a role in accounting for follower behavior. Perhaps high need for cognitive closure followers or those high in neuroticism might interact with significance quest manipulations in future studies. Indeed, the personality of followers and their leaders have been shown to affect subsequent follower engagement (Gruda et al., 2022).

Finally, recent leadership literature has explored the role of identity in understanding behavior. In my study, SQT focused my attention on participants' identity with the university (i.e., their network). However, identity may play a broader role in the leader-follower relationship beyond identity with a network. For example, the leadership literature is focusing on leader identity to explain leader development, leader emergence, and leader behavior. Of course, the role of identity may be important for the follower and not just the leader in the leader-follower relationships. The identity literature is only beginning to grapple with the follower identity concept. When the follower identity literature matures, future research could explore the extent

to which the content of a person's follower identity might also contribute to follower behavior at work.

As discussed above, the significance loss manipulation unexpectedly appeared to have a demoralizing effect on participants. The incorporation of a significance gain condition in addition to the loss and control conditions could help determine the nature of significance quest activation in different circumstances. The demoralizing effect of the significance loss condition also presents an interesting potential avenue of research regarding the role of expectancy within this model. This study assumed participants to be part of a network, the University, and assessed what participants perceived the values of the network to be. However, the findings indicated that behavior is determined by more than whether there was a match between the perceived University values and the behaviors participants engaged in. Rather, there appears to be an additional expectancy component at play as well. While an individual might believe that the University valued critical thought and active engagement, they might not believe that displaying these behaviors would translate into increased significance for them from the University.

This indicates that there is an expectancy requirement whereby the individual has to believe that their network actually has the means to grant them the significance they desire. This expectation is often implied within significance quest research, however, this may not necessarily always be true. Perhaps, this is due to the lower stakes nature of this study as compared to the radicalization research where significance quest theory has been often used before. Individual behavior that puts an individual's safety at risk, such as radicalized acts, probably are expected to be more

likely to result in significance gain. It is possible that performing lower stakes behaviors, like engaging in more critical thought or more active engagement for a psychology department initiative, do not have the weight for individuals to believe that significance can be derived from these behaviors. An individual could potentially align themselves with a valued organization, but also see this organization as a large entity that they are only a very small part of. Thus, it is unlikely that individual action can grant them the significance that they seek. Additionally, the individual may be aware of what the network values, but if the behaviors that align with what the network values does not fall into their schema of good follower behavior then they may not be inclined to engage in behaviors that align with the network's values because they do not perceive those behaviors to grant them significance. More research is needed to determine the role that the expectancy component has on follower behavior.

Lastly, these findings indicated that the assessed behaviors are likely to be contingent upon the values of the network. Kelley's theory states that followership behaviors exist along two dimensions, active engagement and critical thought. Thus, Kelley's model prescribes that all organizations value active engagement and critical thought. Using the logic of Kelley's model and the logic laid out in the introduction of the present study, individuals should have a path to create personal significance if they engage in organizational-sanctioned behaviors. However, my empirical findings showed that participants did not consider the University to deeply value critical thought nor active engagement. This indicates that there must be alignment between

the behavioral dimensions used to assess follower behavior and the values of the network.

The possibility of a misalignment between behavior and network values suggests a major weakness of Kelley's theory. While critical thought and active engagement are quite likely to be valued by many organizations, there might be organizations where this is not the case. An organization where employees are expected to strictly follow certain rules and guidelines (i.e., an engineer working at a nuclear power plant) would likely not place a value on the type of innovative and creative thinking that makes up part of Kelley's critical thought dimension. This would mean that employees would likely consider behaviors associated with increased critical thought to be a poor way to obtain significance. It also might mean that employees might feel limited in the ways that they could be more actively engaged than they already were. This poses the question of whether active engagement and critical thought should always be used to assess for "ideal" followership behaviors, or should the dimensions assessed should be based on the values deemed important by the particular network, or organization, in question.

Limitations of Current Study

As with any empirical study, this study had a number of limitations that need to be addressed in future research. The clearest limitation is the sample size used in my thesis. As explained earlier, my committee agreed that I could stop collecting data given the year-long data collection period had passed and I had only collected half of my target participants. This level of participant rate was clearly affected by the 2020-2022 pandemic and the reduced willingness of students to participate in

in-person experiments. However, even with my smaller sample, I found partial support for some of my hypotheses (H3 and H5). The lower statistical power makes unambiguous interpretation of the non-significant results difficult. It was intriguing that a number of my predicted relationships “approached significance” but the diagnostic value of “approaching significance” is, of course, suspect. I do believe that the suggestive results for my other hypotheses hints that more definitive answers could be obtained with a larger sample size in a future study.

Another limitation of the present study is that there was no uniformity among the participants in terms of their level of education. Approximately 11% of my sample were graduate students who were interested in the monetary compensation associated with participation. Reviewing my lab notes revealed that, unlike the undergraduate participants, many of the graduate participants did not find the study’s cover story believable. This could be due to graduate education focusing on research design instruction and perhaps increased sensitivity to the use of deception in psychology research. Thus, the inclusion of graduate students in my sample may have skewed results. Future research regarding this topic would benefit from more restrictive eligibility criteria that limited participation to undergraduate students. As evidenced above, there are numerous routes for meaningful and interesting directions for future researchers to explore in this content area.

Appendices

Appendix A

Participant Cover Story Script

Hi! Is your name [VERIFY PARTICIPANTS NAME]. Thanks for coming in to help us out with the PSYCaress Initiative today, we really appreciate it!

So you're going to be helping us with some volunteer work for the PSYCaress Initiative today, but first we need you to do this little side study before we can get to work on the volunteer tasks. We got permission to post spots to get help with the Initiative on SONA and to compensate you for your time, but in order to do so there were a couple of things that we needed to do in order for the volunteer work to still be SONA-eligible. One of those things is you technically have to participate in a study to get SONA credit since compensation must be research related in some way, so we're going to have you participate in a brief study for another study going on in this lab before we can get to the actual volunteer work. It won't take long so you'll have plenty of time to help us with the volunteer task. So we're going to get started with that first.

Appendix B

Script for Leader Role Video

Hi, my name is Paul Hanges, I'm a faculty member at the University of Maryland Department of Psychology. First, I want to thank you for volunteering to take part in the PSYCares Initiative. The purpose of this initiative is to improve the lives of the student body here at the University of Maryland. I strongly endorse this program because I believe that it is consistent with the values and goals of the department and the university. The task you are going to do today will help all University of Maryland students by distributing important information to them. Your work is going to help us achieve this goal. You'll be provided a page of information about the initiative topic that you will be writing about today. A PSYCares Initiative member will provide you more information about this.

Prior research has found that people pay more attention to handwritten letters, receiving a handwritten letter is a lot more impactful than receiving an email or a depersonalized letter that has been duplicated endlessly by some computer. That is why we need your help to handwrite letters about one of our various PSYCares Initiative topics that will be distributed around campus. I want to thank you again for helping today, the work that you do today will improve the lives of your fellow students.

Appendix C

Letter Script and Postcard

Letter Script:

Dear Student,

We recognize that rising costs of tuition are a struggle for many students. Compounding that problem are the costs of other necessary school expenses such as textbooks. The UMD Department of Psychology is already putting efforts in place to reduce costs associated with textbook expenses through greater use of online, free textbooks. While these cost saving resources are being put into place already, the PSYCaress initiative wanted to offer some additional suggestions for saving costs on textbooks.

- **Library Rentals!:** Did you know that many textbooks for classes are available for rent in the UMD library system? Many students do not know that they can potentially get access to required reading for their classes for free this way!
- **Bookholders:** Bookholders is a great, local resource where students can buy, rent, and sell books for a better value than they could often find elsewhere.
- **Speak to your professor about potentially using an older edition:** Often older editions of books offer very similar content as the latest edition for a much lower price. Sometimes the only difference being the examples used and the page numbers. Don't hesitate to speak to your professor with a high cost textbook to see if this is an option for you!

We hope this letter can provide some helpful, cost saving tips on textbooks!

PSYCaress

Postcard:



Appendix D

Quest for Significance Measure

7-point measure: 1 (*Strongly Disagree*), 2 (*Disagree*), 3 (*Somewhat Disagree*), 4 (*Neither Agree or Disagree*), 5 (*Somewhat Agree*), 6 (*Agree*), 7 (*Strongly Agree*)

1. I wish I could be more respected.
2. I want to be more valued by people who are important to me.
3. I was to be more valued by society.
4. I wish I was more appreciated by other people.
5. I wish other people accepted me more.
6. I want more people to care about me.
7. I wish I meant more to other people.
8. I wish other people thought I was significant.
9. I have a strong need to be appreciated by other people.

Appendix E

Social Identity Manipulation Check Measure

7-point measure: 1 (*Strongly Disagree*), 2 (*Disagree*), 3 (*Somewhat Disagree*), 4 (*Neither Agree or Disagree*), 5 (*Somewhat Agree*), 6 (*Agree*), 7 (*Strongly Agree*)

1. The people I know and interact with at the University of Maryland are important to me.
2. I feel close with the people I know and interact with at the University of Maryland.
3. I would go to other University of Maryland members for advice on academic issues.
4. I would go to other University of Maryland members for advice on personal issues.
5. I feel integrated with the University of Maryland community.
6. I will always maintain my strong affiliation with the University of Maryland community.

Appendix F

Narrative - Values Items

7-point measure: 1 (*Strongly Disagree*), 2 (*Disagree*), 3 (*Somewhat Disagree*), 4 (*Neither Agree or Disagree*), 5 (*Somewhat Agree*), 6 (*Agree*), 7 (*Strongly Agree*)

Bolded measures indicate items of interest, all other measures serve as distractors.

- 1. The University of Maryland values individuals sharing their thoughts and opinions about university leadership, even if those opinions are critical.**
- 2. The University of Maryland values individuals being actively engaged around campus.**
3. The University of Maryland values individuals that have strong moral integrity.
4. The University of Maryland values their students having a strong commitment to academic excellence.
5. The University of Maryland values individuals looking out for the needs of others on campus.

Appendix G

Regulatory Focus Measure

7-point measure: 1 (*Strongly Disagree*), 2 (*Disagree*), 3 (*Somewhat Disagree*), 4 (*Neither Agree or Disagree*), 5 (*Somewhat Agree*), 6 (*Agree*), 7 (*Strongly Agree*)

1. Compared to most people, are you typically unable to get what you want out of life?
2. Growing up, would you ever “cross the line” by doing things that your parents would not tolerate?
3. How often have you accomplished things that got you “psyched” to work even harder?
4. Did you get on your parents’ nerves often when you were growing up?
5. How often did you obey rules and regulations that were established by your parents?
6. Growing up, did you ever act in ways that your parents thought were objectionable?
7. Do you often do well at different things that you try?
8. Not being careful enough has gotten me into trouble at times.
9. When it comes to achieving things that are important to me, I find that I don’t perform as well as I ideally would like to do.
10. I feel like I have made progress toward being successful in my life.
11. I have found very few hobbies or activities in my life that capture my interest or motivate me to put effort into them.

RFQ Scoring Key:

Promotion = [(6 – Q1) + Q3 + Q7 + (6 – Q9) + Q10 + (6 – Q11)] / 6

Prevention = [(6 – Q2) + (6 – Q4) + Q5 + (6 – Q6) + (6 – Q8)] / 5

RF = promotion – prevention

Appendix H

Critical Thought Coding Questions

Critical Thought Definition Used for Coding:

This dimension of Kelley's model refers to the extent to which an individual is willing to form their own unique thoughts regarding a matter, independent of what others think. It also reflects a willingness to express those thoughts to a larger body, whether that is leadership or to the organization, even when those thoughts are potentially critical. This may be in the form of curiosity, being unafraid to generate new ideas, think "out of the box", or expressing criticism with instructions or plans that one does not agree. Kelley (1992) characterizes these kind of followers as thinking for themselves, giving constructive criticism, following their own person, and being innovative/creative. At the other end of the dimension are the more dependent, uncritical thinking followers. As one would expect, such followers are less willing or even unwilling voice their own perspectives. Kelley described these followers as having to be told what to do and as not thinking.

Critical Thought Questions:

Bolded questions were retained for critical thought feedback rating scores.

1. Rate the extent the participant indicated how much the participant liked the task. Respond from 1 (strongly disliked) to 7 (strongly liked).
2. **Rate the extent the participant indicated how the task could be improved upon. Respond from 1 (no improvements offered) to 7 (many improvements offered).**
3. Rate the extent the participant indicated how much the participant liked the PSYCares Initiative (if no mention was made to the initiative then put NA). Respond from 1 (strongly disliked) to 7 (strongly liked).
4. **Rate the extent the participant indicated how the PSYCares Initiative could be improved upon (if no mention was made to the initiative then put NA). Respond from 1 (no improvements offered) to 7 (many improvements offered).**
5. **Rate the extent you feel the participant displayed critical thought when assessing the task. Please refer to the provided definition of critical thought for your rating. Respond from 1 (no critical thought) to 7 (a great deal of critical thought).**
6. **Rate the extent you feel the participant displayed critical thought when assessing the PSYCares Initiative. Please refer to the provided definition of critical thought for your rating. Respond from 1 (no critical thought) to 7 (a great deal of critical thought).**

Appendix I

Self-Reported Active Engagement Measure

7-point measure: 1 (*Strongly Disagree*), 2 (*Disagree*), 3 (*Somewhat Disagree*), 4 (*Neither Agree or Disagree*), 5 (*Somewhat Agree*), 6 (*Agree*), 7 (*Strongly Agree*)

1. I felt actively engaged while writing letters.
2. I put a great deal of effort into writing letters.
3. I felt that I tried my best to write as many letters as I could when writing letters.
4. I am satisfied with the amount of effort I put into letter writing.
5. I worked hard to write as many letters as I could when writing letters.

Appendix J

Self-Reported Critical Thought Measure

7-point measure: 1 (*Strongly Disagree*), 2 (*Disagree*), 3 (*Somewhat Disagree*), 4 (*Neither Agree or Disagree*), 5 (*Somewhat Agree*), 6 (*Agree*), 7 (*Strongly Agree*)

1. As I was working on writing letters, I was thinking there has to be a better way to accomplish this task.
2. I thought of more efficient ways to accomplish writing letters.
3. I actually changed the way I was writing letters to make it more efficient.
4. I have multiple thoughts and opinions about the letter writing volunteer task I participated in today.
5. I can see ways in which the letter writing volunteer task I did today could be improved upon.

Tables

Table 1

Means and Standard Deviations for the Significance Quest Manipulation

	Significance Loss		Control	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Narrative Critical	4.97	1.70	4.74	1.76
Narrative Active	5.79	1.01	5.62	1.36
Regulatory Focus	0.18	0.87	0.24	0.83
Word Count	449.62	81.55	488.87	111.44
Critical Rating	2.67	1.01	2.27	0.83
Self-Report Active	5.49	1.16	5.66	0.96
Self-Report Critical	5.72	1.03	5.40	1.16

Table 2*Means and Standard Deviations for the Social Identity Network Manipulation*

	Similarity-Prime		Distinctiveness-Prime		Control	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Narrative Critical	5.04	1.51	4.76	1.85	4.69	1.85
Narrative Active	5.48	1.26	5.80	0.96	5.77	1.45
Regulatory Focus	0.32	0.85	0.22	0.92	0.12	0.76
Word Count	471.76	92.68	479.40	112.49	470.65	104.71
Critical Rating	2.28	0.72	2.51	1.03	2.48	0.98
Self-Report Active	5.70	1.04	5.55	1.10	5.53	1.01
Self-Report Critical	5.54	0.89	5.55	1.08	5.49	1.36

Table 3

Correlation Table of Narrative Items, Regulatory Focus Measure, and Dependent Variables

	1	2	3	4	5	6	7
1. Narrative Critical	NA	-	-	-	-	-	-
2. Narrative Active	0.56**	NA	-	-	-	-	-
3. Regulatory Focus	0.09	0.04	Promotion: 0.73; Prevention: 0.79	-	-	-	-
4. Word Count	-0.03	-0.02	0.03	NA	-	-	-
5. Critical Rating	0.25*	0.24*	-0.03	0.18	NA	-	-
6. Self-Report - Active	0.43**	0.30**	-0.02	0.02	0.18	0.84	-
7. Self-Report - Critical	-0.09	-0.08	0.09*	0.27*	0.36**	-0.07	0.84

Note: * = $p < 0.05$, ** = $p < 0.001$; NA indicates not applicable; the values along the main diagonal are Cronbach's alpha.

Table 4*ANCOVA Tables for H1a and H1b*

Variable	SS	df	F	p-Value	η_p^2
DV: Self-Reported Active Engagement					
Significance Quest Condition	0.56	1	0.50	0.48	<0.001
Year in School	0.34	1	0.31	0.58	<0.001
Error	80.14	72			
DV: Word Count					
Significance Quest Condition	28448	1	2.80	0.10	0.04
Year in School	34918	1	3.44	0.07	0.05
Handwriting Legibility	27	1	0.00	0.96	<0.001
Error	721661	71			
DV: Self-Reported Critical Thought					
Significance Quest Condition	1.32	1	1.07	0.30	0.04
Year in School	1.05	1	0.86	0.36	<0.001
Error	88.75	72			
DV: Critical Thought Feedback Ratings					
Significance Quest Condition	2.46	1	2.30	0.09	0.01
Year in School	0.33	1	0.40	0.53	0.01
Error	59.19	72			

Table 5*ANCOVA Tables for H2a and H2b*

Variable	SS	df	F	p-Value	η_p^2
DV: Self-Reported Active Engagement					
Significance Quest Condition	0.01	1	0.01	0.94	< 0.001
Network Condition	0.08	2	0.03	0.97	< 0.001
Year in School	0.28	1	0.24	0.63	< 0.001
Significance X Network	0.21	2	0.09	0.91	< 0.001
Error	79.44	68			
DV: Word Count					
Significance Quest Condition	71	1	0.01	0.94	0.04
Network Condition	9557	2	0.45	0.64	< 0.001
Year in School	42691	1	4.05	0.05	0.05
Handwriting Legibility	136	1	0.01	0.91	< 0.01
Significance X Network	12757	2	0.60	0.55	0.02
Error	706729	67			
DV: Self-Reported Critical Thought					
Significance Quest Condition	0.08	1	0.06	0.81	0.02
Network Condition	1.10	2	0.43	0.65	<0.001
Year in School	0.73	1	0.58	0.45	0.01
Significance X Network	2.09	2	0.82	0.44	0.02
Error	86.61	68			
DV: Critical Thought Feedback Ratings					
Significance Quest Condition	0.25	1	0.31	0.58	0.04
Network Condition	0.85	2	0.54	0.59	0.01
Year in School	0.05	1	0.06	0.81	< 0.001
Significance X Network	4.74	2	3.00	0.06	0.08
Error	53.79	68			

Table 6*ANCOVA Tables for H4a and H4b*

Variable	SS	df	F	p-Value	η_p^2
DV: Self-Reported Active Engagement					
Significance Quest Condition	1.75	1	1.72	0.19	< 0.001
Narrative - Active Engagement	3.21	1	3.15	0.08	0.09
Year in School	0.42	1	0.41	0.53	< 0.001
Significance X Narrative	1.36	1	1.33	0.25	0.02
Error	71.40	70			
DV: Word Count					
Significance Quest Condition	550	1	0.05	0.82	0.04
Narrative - Active Engagement	33	1	0.00	0.96	< 0.001
Year in School	34939	1	3.34	0.07	0.05
Handwriting Legibility	34	1	0.00	0.95	< 0.001
Significance X Narrative	13	1	0.00	0.97	< 0.001
Error	721574	69			
DV: Self-Reported Critical Thought					
Significance Quest Condition	5.72	1	4.83	0.03*	0.02
Narrative - Critical Thought	0.06	1	0.05	0.82	0.02
Year in School	0.59	1	0.50	0.48	0.01
Significance X Narrative	4.29	1	3.63	0.06	0.05
Error	82.93	70			
DV: Critical Thought Feedback Ratings					
Significance Quest Condition	0.06	1	0.08	0.78	0.04
Narrative - Critical Thought	0.83	1	1.05	0.31	0.05
Year in School	0.34	1	0.43	0.51	< 0.001
Significance X Narrative	0.64	1	0.81	0.37	0.01
Error	55.51	70			

Table 7

ANCOVA Analyses of Word Count Dependent Variable with Exploratory Covariates Added

Variable	SS	df	F	p-Value	η_p^2
H1a & H1b					
Significance Quest Condition	28448	1	2.86	0.10	0.04
Year in School	34918	1	3.51	0.07	0.05
Handwriting Legibility	27	1	0.00	0.96	< 0.001
Compensation Type	24465	1	2.46	0.12	0.03
Error	697196	70			
H2a & H2b					
Significance Quest Condition	1278	1	0.12	0.73	0.04
Network	6334	2	0.31	0.74	< 0.001
Year in School	1867	1	1.81	0.18	0.05
Handwriting Legibility	0	1	0.00	1.00	< 0.001
Compensation Type	24985	1	2.42	0.12	0.03
Significance X Network	13958	2	0.68	0.51	0.02
Error	681744	66			
H4a & H4b					
Significance Quest Condition	347	1	0.03	0.85	0.04
Narrative - Critical Thought	630	1	0.06	0.80	< 0.001
Year in School	15013	1	1.47	0.23	0.05
Handwriting Legibility	15	1	0.00	0.12	< 0.001
Compensation Type	25247	1	2.47	0.97	0.04
Significance X Narrative	1	1	0.00	0.99	< 0.001
Error	696327	68			
H5					
Significance Quest Condition	9116	1	0.89	0.35	0.04

Regulatory Focus Orientation	1405	1	0.14	0.71	< 0.001
Year in School	12215	1	0.19	0.28	0.05
Handwriting Legibility	68	1	0.01	0.12	< 0.001
Compensation Type	24886	1	2.43	0.94	0.03
Significance X Regulatory Focus	1225	1	0.12	0.73	< 0.001
Error	695622	68			

Table 8

ANCOVA Analyses of Self-Report Active Engagement Dependent Variable with Exploratory Covariates Added

Variable	SS	df	F	p-Value	η_p^2
H1a & H1b					
Significance Quest Condition	0.54	1	0.68	0.41	< 0.001
Year in School	0.25	1	0.31	0.58	< 0.001
Study Believability	7.70	1	9.73	0.003*	0.13
Participant Liking	18.23	1	23.04	<0.001**	0.25
Error	53.81	68			
H2a & H2b					
Significance Quest Condition	0.00	1	0.00	0.97	0.01
Network	0.20	2	0.12	0.88	< 0.001
Year in School	0.59	1	0.72	0.40	< 0.001
Study Believability	2.23	1	2.70	0.11	0.12
Participant Liking	18.55	1	22.43	< 0.001**	0.26
Significance X Network	0.85	2	0.51	0.60	0.02
Error	52.92	64			
H4a & H4b					
Significance Quest Condition	0.08	1	0.10	0.75	0.01
Narrative - Critical Thought	2.68	1	3.52	0.06	0.13
Year in School	0.32	1	0.42	0.52	< 0.001
Study Believability	2.26	1	2.96	0.09	0.12
Participant Liking	13.89	1	18.23	< 0.001**	0.23
Significance X Narrative	0.00	1	0.00	0.96	< 0.001
Error	50.27	66			
H5					
Significance Quest Condition	0.85	1	1.05	0.31	0.01
Regulatory Focus Orientation	0.26	1	0.33	0.57	< 0.001

Year in School	0.16	1	0.20	0.65	< 0.001
Study Believability	1.81	1	2.25	0.14	0.04
Participant Liking	18.49	1	22.98	< 0.001**	0.31
Significance X Regulatory Focus	0.69	1	0.86	0.36	0.01
Error	53.11	66			

Table 9

ANCOVA Analyses of Self-Report Critical Thought Dependent Variable with Exploratory Covariates Added

Variable	SS	df	F	p-Value	η_p^2
H1a & H1b					
Significance Quest Condition	1.32	1	1.13	0.29	0.02
Year in School	1.05	1	0.90	0.35	0.01
Participant Liking	5.80	1	4.97	0.03*	0.07
Error	82.94	71			
H2a & H2b					
Significance Quest Condition	0.07	1	0.06	0.81	0.02
Network	1.26	2	0.52	0.60	< 0.001
Year in School	0.26	1	0.21	0.65	0.01
Participant Liking	5.71	1	4.73	0.03*	0.07
Significance X Network	1.92	2	0.79	0.46	0.02
Error	80.90	67			
H4a & H4b					
Significance Quest Condition	3.23	1	2.77	0.10	0.02
Narrative - Critical Thought	0.12	1	0.10	0.75	0.02
Year in School	0.37	1	0.31	0.58	0.01
Participant Liking	2.26	1	1.93	0.17	0.05
Significance X Narrative	2.01	1	1.73	0.19	0.02
Error	80.67	69			
H5					
Significance Quest Condition	3.58	1	3.21	0.08	0.02
Regulatory Focus Orientation	4.89	1	4.39	0.04*	0.01
Year in School	0.01	1	0.01	0.93	0.01
Participant Liking	6.04	1	5.42	0.02*	0.07

Significance X Regulatory Focus	4.97	1	4.45	0.04*	0.06
Error	76.98	69			

Table 10

ANCOVA Analyses of Critical Thought Feedback Rating Dependent Variable with Exploratory Covariates Added

Variable	SS	df	F	p-Value	η_p^2
H1a & H1b					
Significance Quest Condition	2.46	1	3.19	0.08	0.04
Year in School	0.33	1	0.43	0.52	< 0.001
Participant Liking	4.42	1	5.74	0.02*	0.07
Error	54.76	71			
H2a & H2b					
Significance Quest Condition	0.25	1	0.34	0.56	0.05
Network	0.49	2	0.33	0.72	0.01
Year in School	0.24	1	0.33	0.57	< 0.001
Participant Liking	3.71	1	4.96	0.03*	0.09
Significance X Network	3.79	2	2.54	0.08	0.07
Error	50.08	67			
H4a & H4b					
Significance Quest Condition	0.05	1	0.06	0.80	0.04
Narrative - Critical Thought	0.68	1	0.88	0.35	0.06
Year in School	0.54	1	0.70	0.41	< 0.001
Participant Liking	2.10	1	2.72	0.10	0.05
Significance X Narrative	0.06	1	0.08	0.78	< 0.01
Error	53.41	69			
H5					
Significance Quest Condition	1.39	1	1.80	0.18	0.04
Regulatory Focus Orientation	1.06	1	1.37	0.25	< 0.01
Year in School	1.26	1	1.63	0.21	< 0.01
Participant Liking	4.49	1	5.82	0.02*	0.08

Significance X Regulatory Focus	1.49	1	1.93	0.17	0.03
Error	53.18	69			

Table 11*ANCOVA Tables for Exploratory Three-Way Interaction*

Variable	SS	df	F	p-Value	η_p^2
DV: Self-Reported Active Engagement					
Significance Quest Condition	0.32	1	0.41	0.53	0.01
Network	1.51	2	0.97	0.38	0.01
Regulatory Focus Orientation	5.28	1	6.82	0.01*	< 0.001
Year in School	0.05	1	0.07	0.79	< 0.001
Participant Liking	8.77	1	11.34	0.001*	0.34
Study Believability	2.01	1	2.60	0.11	0.04
Significance X Network	1.98	2	1.28	0.29	0.02
Significance X Regulatory Focus	2.68	1	3.47	0.07	0.01
Network X Regulatory Focus	6.57	2	4.25	0.02*	0.09
Significance X Network X Regulatory Focus	2.99	2	1.93	0.15	0.06
Error	44.87	58			
DV: Word Count					
Significance Quest Condition	115	1	0.01	0.92	0.04
Network	7452	2	0.36	0.70	< 0.001
Regulatory Focus Orientation	744	1	0.07	0.79	< 0.001
Year in School	6658	1	0.63	0.43	0.05
Compensation Type	27937	1	2.66	0.11	0.04
Handwriting Legibility	1967	1	0.19	0.67	< 0.001
Significance X Network	6954	2	0.33	0.72	0.02
Significance X Regulatory Focus	5103	1	0.49	0.49	< 0.01
Network X Regulatory Focus	28583	2	1.36	0.26	0.03
Significance X Network X Regulatory Focus	33095	2	1.58	0.21	0.05
Error	629357	60			

DV: Self-Reported Critical Thought

Significance Quest Condition	0.06	1	0.05	0.82	0.02
Network	0.63	2	0.27	0.76	< 0.001
Regulatory Focus Orientation	4.60	1	3.96	0.05	0.01
Year in School	0.24	1	0.20	0.65	0.01
Participant Liking	4.68	1	4.03	0.05	0.08
Significance X Network	1.28	2	0.55	0.58	0.03
Significance X Regulatory Focus	3.26	1	2.81	0.10	0.06
Network X Regulatory Focus	4.35	2	1.87	0.16	0.03
Significance X Network X Regulatory Focus	2.63	2	1.13	0.33	0.04
Error	70.88	61			

DV: Critical Thought Feedback Ratings

Significance Quest Condition	0.62	1	0.82	0.37	0.05
Network	0.19	2	0.12	0.88	0.01
Regulatory Focus Orientation	0.32	1	0.42	0.52	< 0.001
Year in School	0.18	1	0.24	0.63	< 0.001
Participant Liking	3.26	1	4.31	0.04*	0.09
Significance X Network	3.54	2	2.34	0.10	0.08
Significance X Regulatory Focus	0.86	1	1.13	0.29	0.03
Network X Regulatory Focus	2.25	2	1.49	0.23	0.03
Significance X Network X Regulatory Focus	1.40	2	0.92	0.40	0.03
Error	46.08	61			

Table 12*Summary of Hypotheses*

Hypothesis	Hypothesis Wording	Support Found?	Supported Dependent Variables
H1a	Participants whose quest for significance has been activated will be more actively engaged than participants whose quest for significance has not been activated.	Not Supported	-
H1b	Participants whose quest for significance has been activated will have greater levels of critical thought than participants whose quest for significance has not been activated.	Not Supported	-
H2a	The quest for significance-active engagement relationship will be strong when participants have a stronger sense of connection to an important network.	Not Supported	-
H2b	The quest for significance-critical thought relationship will be strong when participants have a stronger sense of connection to an important network.	Not Supported	-
H3	The extent to which participants believe active engagement and critical thought is valued by their network will be positively related to active engagement and critical thought.	Partial Support	Self-reported active engagement; critical thought feedback ratings
H4a	The quest for significance-active engagement relationship will be stronger when participants believe their network values active engagement.	Not Supported	-
H4b	The quest for significance-critical thought relationship will be stronger when participants believe their network values critical thought.	Not Supported	-
H5	The regulatory focus of participants moderates the effectiveness of the quest for significance-active engagement and the quest for significance-critical thought relationships. More precisely, the effect of the quest for significant manipulation will be stronger with prevention-oriented individuals than with promotion-oriented individuals.	Partial Support	Self-Reported Critical Thought

Figures

Figure 1

The Identity Fusion Manipulation Check Measure

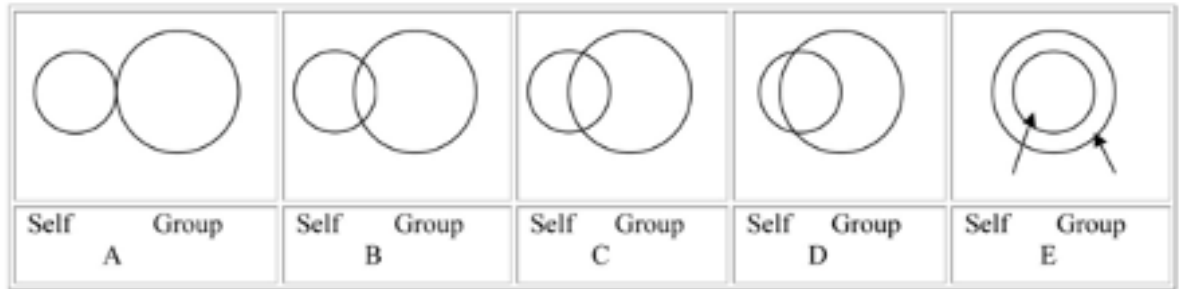


Figure 2

Anchored Rating Scale for Letter Legibility Coding

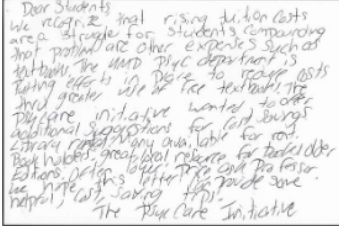
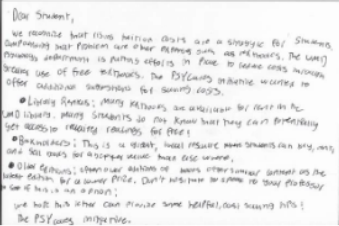
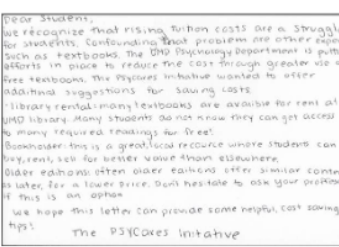
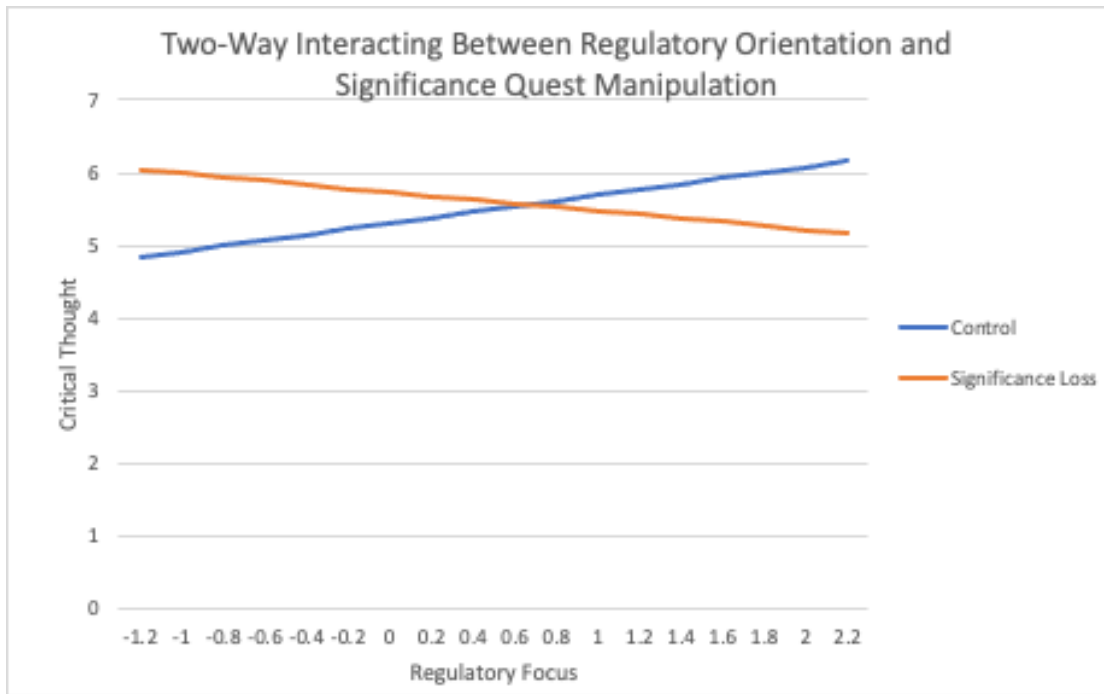
Handwriting Rating Sheet				
1 = Bad Handwriting	2	3 = Medium Handwriting	4	5 = Good Handwriting
<ul style="list-style-type: none"> • Handwriting is highly difficult to read. • Does not follow the structure of the postcard template. • No evidence that legibility of the message to the reader was considered. 		<ul style="list-style-type: none"> • Handwriting is messy but legible. • At least loosely follows the format of the postcard template. • Some evidence that the legibility of the message to the reader was considered. 		<ul style="list-style-type: none"> • Handwriting is very legible, almost font like. • Follows the postcard template. • Additional add-ons (smiley faces, hearts, etc.) have been added to the message. • Evident that care was taken in the writing of the postcard.
				

Figure 3

Plot of the Two-Way Interaction Between Participant Regulatory Focus Orientation and Assigned Significance Quest Condition



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