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# JUDGING PERSONAL VALUES AND PERSONALITY TRAITS: ACCURACY AND ITS RELATION TO VISIBILITY

by

Jennifer S. McDonald

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To the Graduate Faculty:

The members of the committee appointed to examine the thesis of Jennifer S. McDonald find it satisfactory and recommend that it be accepted.

Tera D. Letzring, Ph.D. Major Advisor

Tara Stewart, Ph.D. Committee Member

John Gribas, Ph.D. Graduate Faculty Representative



Office for Research Integrity 921 South 8th Avenue, Stop 8046 • Pocatello, Idaho 83209-8046

June 18, 2013

Jennifer McDonald Combe MS 8112 Psychology Department Pocatello, ID 83209

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Dear Ms. McDonald Combe:

Thank you for your response to requests from a prior review of your application for the new study listed above. Your study is eligible for expedited review under FDA and DHHS (OHRP) 7. Individual or group behavior designation.

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R⁄aíph Baergen, Ph<del>D, MP</del>H, CIP Human Subjects Chair

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## JUDGING PERSONAL VALUES AND PERSONALITY TRAITS: ACCURACY AND ITS RELATION TO VISIBILITY Thesis Abstract—Idaho State University (2014)

Accuracy of personality judgment research typically focuses on traits, and more visible traits are often judged more accurately (Funder & Dobroth, 1987; John & Robins, 1993). Visibility and accuracy of personal values have not been explored. Accuracy of values has been examined in one study (Dobewall et al., 2014). It was predicted that visibility and accuracy would be positively related, and values overall would be judged more accurately than traits. In groups of 3 acquaintances, 204 undergraduates completed self-report measures of traits and values, and other-reports for their acquaintances. Visibility was assessed with 67 other participants. Values were rated as more visible than traits, but traits were judged more accurately than values. Correlations between visibility and item-level accuracy for both values and traits were small and non-significant. In conclusion, the ease with which people think values and traits can be judged may differ from the actual accuracy of judgments.

#### Chapter 1

#### Introduction

You are always communicating, even when you are silent. This statement may refer to how we share who we are with others, whether we are speaking or not. Individuals continually convey messages about who they are and who they think they are, through their personal appearance, behaviors, words, emotional expressions, and many other cues. The ability to accurately judge messages sent by others through these cues is important, as it contributes to an awareness of who best to include or avoid in many domains of life. The historical background on person perception suggests that in years past, individuals were judged by others based on their principles, such as loyalty or honesty, but in current times principles have given way to a reliance on personality (Nicholson, 2003). According to Nicholson (2003), the self-concept of character was concerned with one's duty to a larger whole whereas the concept of personality is concerned with development of the self. An individual's personality is comprised of many different features, which include personal values, personality traits, attitudes, and beliefs, just to name a few. Certain features of a person, such as values, may describe self-beliefs of an individual; while other features, such as traits, may speak to who others perceive them to be (McAdams, 1995). A pertinent question revolves around the interaction of all these features of personality: Is it possible to truly know, objectively, who a person is? Numerous studies have attempted to answer this question (e.g., Beer & Watson, 2008; Costa & McCrae, 1988; Funder, 1995; McAdams, 1995) using interpeer agreement. Essentially interpret agreement refers to how well two people agree on what a specific person is like. The two judges can be two peers of the target, or one of the peers and the self.

One study found that there are differences between knowing the self and knowing others. When rating the self, distinct characteristics of an individual are more accurately judged, and judges have more confidence in their judgments (Beer & Watson, 2008). When rating strangers, judges use the self-based heuristic of assumed similarity and are less able to judge specific characteristics separately. The differences between ratings of self and others are especially salient for the personality traits of neuroticism, agreeableness, and conscientiousness (Beer & Watson, 2008). McAdams (1995) suggested that people are best known through use of three levels of information. Information in Level I entails descriptive traits of an individual, Level II regards personal concerns or motives, and Level III includes narratives, or in other words, personal identity through his or her life story. Of all the features that represent a person, personality traits (Level I) have frequently been the focus when examining accuracy of personality judgments. In particular, the broad trait domains of the Five Factor Model (extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience) are most commonly employed.

The current study sought to learn if values as a feature of personality share the same characteristics with personality traits and if they can be judged as accurately as traits.

#### **Personality Traits**

Traits have been described as basic components of personality that symbolize the consistent way in which people behave (Allport, 1961), as fundamental inclinations (McCrae & Costa, 1996), and as the number of occurrences of specific actions (Buss & Craik, 1983). Other views of traits include those of Block (1995), who described them as

a progressing system that provides regulation to an individual; and Saucier and Goldberg (1996), as terms used when portraying aspects of another person. In addition, Emmons (1989) described traits as "people's stylistic and habitual patterns of cognition, affect, and behavior" (p. 32).

One of the most widely accepted definitions of traits are the unique ways individuals tend to exhibit enduring patterns of thoughts, feelings, and actions (McCrae & Costa, 1990). Funder (1994) emphasized this point by saying, "thoughts and feelings are important…because of their effects on what people do and say. The only way to know what somebody else thinks or feels is to watch what he or she does or says" (p.126). Traits have a purpose to organize, explain, and review an individual's visible actions as well as one's inner states (Buss & Craik, 1983; Hampshire, 1953; Wiggins, 1974). In addition to providing an understanding of a person's current actions and emotions, traits help to predict a person's behavior and emotions in the future (Funder, 1994).

Many methods have been developed to conceptualize traits. The five factor model (FFM) (Goldberg, 1993; McCrae & John, 1992) is a way to present the broad fundamental aspects under which specific traits may be organized (Vecchione, Alessandri, Barbaranelli, & Caprara, 2011). Traits are viewed in this model as adjectives used to describe people and their behavior and as a means to organize individual differences (Goldberg, 1993). The broad factors of the FFM are: agreeableness (being sympathetic, kind, and affectionate), extraversion (being talkative, energetic, and assertive), openness to experience (having wide interests and being imaginative and insightful), neuroticism (being tense, moody, and anxious) and conscientiousness (being organized, thorough, and planful) (Goldberg, 1993; Srivastava, 2013). The factors of the

Big Five have been found to be quite reliable across the lifespan (Costa & McCrae, 1988; Roberts & DelVecchio, 2000), can be validly assessed across some cultures (McCrae & Costa, 1997), and can be predictive of many life outcomes such as competency in occupation (Barrick & Mount, 1991; Roberts, 1994) and academic domains (Robins, John & Caspi, 1994), as well as predictive of criminal behavior (John, Caspi, Robins, Moffitt, & Stouthamer-Loeber, 1994) and divorce (Cramer, 1993).

Although personality traits are useful in describing and predicting behavior, they cannot explain all aspects of personality. Pervin (1994) expressed that traits are unable to completely account for all behavior, because while they have the capacity to describe patterns and consistencies in behavior, they cannot provide an explanation of the origin of those patterns and consistencies. Funder (1991) responded to this view by expressing that although the explanations for behavior provided by traits are deficient, they still are genuine. While they cannot explain every facet of personality, the ability to identify traits provides a "useful analytic rest stop" (Funder, 1994, p. 127), indicating that traits represent theoretical markers where research on personality and accuracy can be assessed and then move forward to provide an explanation for the behavior that has been observed and described. Incorporating values into the study of personality and accuracy may be useful in filling in some of the gaps left by traits, by helping to explain the "why" of behavior.

Years before Pervin's observations were made, F. H. Allport, (1937) also expressed his concerns with the incomplete concept of traits. He shared an example of three individuals who were rated or measured as equally honest. "One of them might be seeking justice; another might be trying always to help others, while the third might be trying to maintain his self-esteem or reputation" (p. 204). This example illustrates that there may be different values or motivations between trait expression and judgment. Traits also create the framework to either help or hinder achievement of goals, or implementation of values that originated with motives (Winter et al., 1998). For an individual high in extraversion, characterized as talkative, friendly, and energetic, the value of true friendship may be relatively easy to implement. For an individual high in neuroticism, who is anxious, feels threatened easily, and is filled with doubts, living the value of true friendship may be difficult. An expression of a trait may not be in a person's awareness, or under his or her control. For example, an individual who exhibits the broad trait of extraversion is extraverted, no matter if he or she is actively trying to be or not. In addition, individuals who exhibit the trait of neuroticism typically do not desire to be neurotic (McAdams, 1995). Personal values on the other hand are usually desired by the individual who possesses them.

#### **Personal Values**

As another feature of personality, values represent motivations that drive people to make decisions in the manner in which they do (Bilsky & Schwartz, 1994). In other words, a value is a representation of an individual's motive or combinations of motives.

As a method to measure the motivational properties of values, Schwartz (1992) developed the Schwartz Values Survey (SVS). Ten global motivational properties, known as value types, were identified to describe how people meet the three universal requirements for humans to survive as suggested by Schwartz, namely the needs of biological individuals, social interactions, and group welfare and survival (Schwartz, 2006). The motives resulting from these needs are represented cognitively as values (Schwartz & Bilsky, 1990). The ten value types or motivational properties are listed in Table 1. Several items from previous values questionnaires and theories, including the Rokeach Value Survey (RVS, Rokeach,1973), were incorporated into the SVS, such as *mature love (deep, emotional and spiritual intimacy)*, and *a world at peace (free of war and conflict)* from Rokeach's terminal values, representing an individual's end states. Items such as *capable (competent, effective, efficient)* and *forgiving (willing to pardon others)* were used from Rokeach's instrumental values which represent types of behavior. Personal values on the SVS have further been categorized into the higher-order factors of self-transcendence, self-enhancement, conservation, and openness-to-change (Schwartz, 1992). Motives represented by the higher-order factors are in opposition to one another. For example, those who are motivated by the self-transcendence values are not motivated by the self-enhancement values, and individuals motivated by conservation values are not motivated by openness-to-change values.

Schwartz defined values specifically, as "goals that act as guiding principles in one's life" (p. 46) and the ten value domains have been found to be fairly stable across situations, time, and culture in many studies (Roccas, 2002; Schwartz, 1992; Schwartz & Sagle, 2000; Schwartz, Melech, Lehmann, Burgess, Harris & Owens, 2001; Vecchione, Alessandri, Barbaranelli, & Caprara, 2011). It is the stability across situations that allows values to fall into the category of personality. For example, in a longitudinal study examining personality traits across the lifespan, Costa and McCrae (1988) found through self-reports and spouse ratings, some trait facets did change over time, but overall traits did not significantly change as people grew older. The results supported the idea that personality is stable after age 30. Similarly, personal values were determined as **1. Self-direction**: independent thought and action, such as choosing creating and exploring (*creativity, freedom, independent, curious, self-respect,* and, *choosing own goals*)

**2. Stimulation:** excitement, novelty, and challenge in life (*daring*, *a varied life*, and *an exciting life*)

**3. Hedonism:** pleasure or sensuous gratification for oneself (*pleasure* and *enjoying life*)

**4. Achievement**: personal success through achieved competence (*successful*, *capable*, *ambitious*, *intelligent*, *self-respect*, and *influential*)

**5. Power:** attainment of social status and prestige and control or dominance over people and resources (*social power, authority, preserving my public image, social recognition* and *wealth*)

**6. Security:** safety, harmony, and stability of society or relationships, and of self (*family security, national security, social order, clean, sense of belonging,* and *reciprocation of favors*)

**7. Conformity**: restraint of action, inclinations, and impulses that could upset or harm others and violate social expectations and norms (*self-discipline, obedient, politeness,* and, *honoring parents and elders*)

**8. Tradition:** respect, commitment, and acceptance of customs and ideas of the culture or religion one is embedded in (*accepting one's portion in life, humble,* 

devout, respect for tradition, and, moderate)

**9. Benevolence:** preserve and enhance the welfare of people with whom one is in frequent personal contact (*helpful, honest, forgiving, loyal, mature love, true friendship, meaning in life, a spiritual life* and, *responsible*)

**10. Universalism:** understanding, appreciation, tolerance, and protection of the welfare for all people and for nature (*inner harmony, broad-minded, wisdom, social justice, equality, a world at peace, a world of beauty, unity with nature,* and, *protecting the environment*)

(Schwartz & Sagie, 2000, p. 468; Schwartz 1992)

stable in a nine-year longitudinal study of adults in the phase of mid-life, regardless of life circumstances (Stockard, Carpenter, & Kahle, 2014).

Overall, values are usually seen as being desirable. Values express stability by representing goals across situations however, they also fluctuate in importance by person and situation (Schwartz, 1992, 1994; Schwartz & Bilsky, 1987, 1990).

Individuals possess numerous values, while attaching to those values many different priorities. A value that is important for one person may not be important to another and the differences lie in the unique variability of motives driving the person to hold a particular value (Bilsky, 1994). Individuals may maintain values they deem to be important to them in general, but the same value that is important to an individual in one situation may lose its degree of importance to the same individual in another situation. Essentially, values may compete for importance in a single individual depending on the situation. For example, the value *daring (seeking adventure or risk)* may be important in general to an individual, and especially important while he or she is out with friends.

However, the value may not be as important when the same individual is at home, sick with the flu. In that situation, the value of *health (not being sick physically)* will be more salient to the same individual than most other values he or she holds.

Values and life circumstances are reciprocally related, in that value priorities enable individuals to make certain choices that lead them to specific life circumstances. Inversely, the life circumstances of a person may bring about occasions to strive for or demonstrate some values more effortlessly than others. Generally, values influence the circumstances people are in through their choices, which then affords them with opportunities to adapt the priorities of their values, leading them to other life circumstances, which in turn shape their value priorities (Schwartz, 2006). For example, values such as self-direction and achievement are positively associated with the level of education one will achieve, which will have an influence on the individual's life circumstances such as where one chooses to live and how one is employed. If the employment situation is one where the individual has freedom to be creative, the circumstance will influence the priority of the individual's values, making values such as power and self-direction less important, and universalism and benevolence values more important (Schwartz, 2006).

The priority of one's values is also directed by one's motives. McClelland (1985) described motives as the wishes and desires of individuals pertaining to things they want to make happen or want to keep from happening. As stated simply by McClelland, (1985) "motives explain the 'why' of behavior" (p. 232). Motives are also integrated in the construct of goals. Values are similar to goals in their ability to motivate behavior, but depart from goals in having the capacity to be applied across varying situations. Goals are

more specific to the particular situation and values are a way to communicate to others the pursuit of specific goals that one is striving to achieve (Roccas, Sagiv, Schwartz, & Knafo, 2002). Personal values have been described by Roberts and Robins (2000) as "one step up the motive hierarchy" (p.286) from goals and as having the same amount of breadth as traits. Roberts and Robins (2000) further suggest that the domains of the Big Five are at a basic level in portraying personality traits, comparable to how values characterize a basic level for the motive domain. The term basic level means that the category is as broad as it can be without losing reliability (Rosch et al., 1976). In particular, the frequency of evident behaviors within a trait category determines its breadth (Hampson, John, & Goldberg, 1996). The breadth of a category may further determine its level of visibility. If values and traits are both equally broad, then their visibility may likely be similar. The number of behaviors needed to confirm both traits and values should be similar. Thus, the constructs of values and traits are at equivalent levels in a categorical hierarchy to appropriately compare on visibility and accuracy.

In support of implementing values into the study of personality, McClelland (1951) and Funder (1994) expressed the opinion that there is a need for traits and motives in the description and explanation of personality. Although a narrower construct than motives, values function as cognitive representations of motives and may also be helpful in explaining different aspects of personality in conjunction with traits.

#### **Relationships Between Traits and Values**

While it is recognized that traits and values are both helpful in explaining personality, they are different constructs. People may believe that their values are desirable, but traits have the ability to be either positive or negative (Funder, 1995). The

same phrases or words can be construed as a trait, or as a value, yet have very different meanings, such as obedience or success. The word successful as a trait may refer to the number of occurrences and to what degree an individual shows success. Success as a value may refer to the priority a person gives to being successful in influencing how they desire to behave. Having success as a value may not necessarily result in successful behaviors. Further, values can be used as the criterion with which to judge the moral basis of actions of oneself or others, whereas traits are not typically utilized in this way (Bilsky & Schwartz, 1994; Roccas et al. 2002). As fundamental differences between values and traits, Bilsky and Schwartz (1994) posit that traits are seen as descriptions of observed patterns of behavior, whereas values are used by individuals to judge the desirability of behavior, people, and events. Traits also refer to the variability of how much an individual exhibits a particular characteristic, while values refer to the variability of importance individuals ascribe to particular goals. Traits are used as descriptions of behavior due to their dispositions, without respect to desires, and values are used as the descriptions of which desires are salient to an individual at one time. In general, traits show variability or consistency in a person's thoughts, feelings, and behavior, while values show variability or consistency in motivation.

Nine of the ten values identified by Schwartz have been found to be correlated with four of the Big Five personality traits. For example, the traits of extraversion and agreeableness are positively correlated with the value type stimulation, and negatively correlated with conformity and tradition. Agreeableness is positively correlated with benevolence and universalism, and negatively correlated with hedonism and power. Finally, conscientiousness is positively correlated with achievement and conformity, and negatively correlated with universalism and stimulation value types (Roccas, 2002; Vecchione et al., 2011). However, the broad category of neuroticism is only negatively correlated with the achievement value type. Bilsky and Schwartz (1994) suggest that depression typically associated with individuals high in neuroticism "might result from failure to attain the desired level of any one of the ten values" (p.171). Furthermore, neuroticism has consistently been found to be one of the least accurately judged traits (e.g., Beer & Watson, 2008; Funder & Colvin, 1991; John & Robins, 1993; Wall, Taylor, Dixon, Conchie, & Ellis, 2013). Neuroticism and its facets also constitute one of the least visible traits (Funder & Dobroth, 1987). Although correlational, the lack of a strong relationship of neuroticism with any of the personal values may be linked to the lack of accuracy and visibility for neuroticism. It was suggested by Roccas et al., (2002) that those high in neuroticism may have competing motivations and that the behaviors associated with neuroticism are rather automatic and not easily controlled. The neuroticism facets including self-blame were weakly positively correlated with tradition values, and negatively correlated with stimulation and achievement values, thus showing that the motives are at odds with one another. It may be difficult to observe and accurately judge neurotic traits, simply due to the deficiency of relevant cues from either end of the bi-polar scale, which may be explained by competing motives that appear to cancel each other out in regard to one's rated values.

Noting this link between the trait of neuroticism and values, it is important to acknowledge the bi-directional relationship between the other traits and values. Values may affect traits as individuals try to behave in ways that are consistent with their values (Rokeach, 1973; Schwartz, 1996). Conversely, value justification may occur when people

justify their behavior as a function of their traits (Kristiansen & Zanna, 1994). Selfperception theory suggests that traits influence values because people believe that their value priorities come from their behavior, which is a function of their traits (Bem, 1972). Similarly, Dollinger, Leong and Ulicni (1996) examined the relationship between the Big Five traits and Rokeach values and posited "people value qualities that they already possess" (p. 23). The bi-directional relationship between traits and values may also be associated with how accurately one's personality is judged.

#### Chapter 2

#### **Literature Review**

#### **Accuracy of Personality Judgment**

The process of accurate personality judgment is often examined using the Realistic Accuracy Model (RAM, Funder, 1995). The model acknowledges that many sources of information are needed in order to achieve the highest level of accuracy. Funder (1995) suggests that accuracy is possible following completion of the stages of relevance, availability, detection, and utilization of behavioral cues involving real people, in realistic situations. Relevance refers to the cues that are appropriate to the trait being judged. Some situations or contexts are more conducive to the expression of certain trait relevant behavior than others. For instance, the relative strength of a situation (weak, moderate, or strong) is related to how individuals with particular levels of a trait will respond (Marshall & Brown, 2006). Individuals high in the trait of aggression were more provoked by moderate situations than those low in the same trait, however, in a strong situation those low in aggression were provoked more than those high in aggression.

The availability stage means that the cues must be present in a way that makes it possible for the judge to perceive them. The importance of the relevance and availability stages to accuracy has been emphasized by Letzring (2008), who found that the warm and agreeable personality of a judge can create comfortable situations that bring out both relevant and available cues from the target. Therefore it is not just the target that influences the first two stages of accuracy, but the judge has influence on relevance and availability as well.

Once made available, the judge must detect the behaviors relating to the trait being judged. Some available behaviors may be more detectable than others, such as the level of talkativeness versus subtle facial expressions of the target. Results from a metaanalysis of expressive behaviors found that detection of cues and accurate prediction of outcomes could occur in a relatively short amount of time across several different behavioral domains (Ambady & Rosenthal, 1992).

Finally the judge must have the capacity to utilize the cues correctly to make an accurate judgment that the person possesses high or low levels of the trait. Utilization of cues has been demonstrated in studies where accurate judgments of personality traits were achieved based on targets' email addresses (Back, Schmukle, & Egloff, 2008), bedrooms (Gosling, Ko, Mannarelli, & Morris, 2002), and stream-of-consciousness essays (Hollaran & Mehl, 2008).

The model also proposes that accurate personality judgments are best achieved with the presence of the following four moderators: a good judge, a good target, good traits, and good information. A good judge refers to the idea that some people are better judges than others (some people have more ability than others). Vogt and Colvin (2003) found those who have a stronger orientation toward interpersonal relationships are more accurate judges than those who do not view interpersonal relationships as important.

A good target means that some people are easier to judge than others. For instance, a person with more consistent behavior will be easier to judge. Colvin (1993) found that people who are considered more judgable are those possessing higher levels of the personality traits of extraversion, agreeableness, and conscientiousness. Overall, good targets share similar characteristics that pertain to psychological adjustment (Colvin, 1993), higher social status, and socialization of skills which promote judgability (Human & Biesanz, 2013).

The moderator of good traits suggests that some traits are easier to judge than others, for example, a personality trait, such as extraversion, is considered a good trait as it is more accurately judged due to the high number of relevant and available cues associated with it. In addition to the work done by Funder and Dobroth (1987), and John and Robins (1993), Watson, Brock, and David (2000) found that more visible traits were rated as more accurate, but that relationship was not as strong for affective traits.

Lastly, good information means that some interactions have more quantity and quality of information available. The moderator of good information has been applied to unacquainted triads (Letzring, Funder, & Wells, 2006) and to well acquainted dyads. Funder, Kolar, and Blackman (1995) discovered more support for the acquaintanceship effect, or for the idea that knowing someone longer will provide more information and lead to more accurate personality judgments. They further ruled out other explanations - such as assumed similarity, overlap, and communication - as necessary to interjudge agreements. However relationship context provided information quality, such that when two judges were well acquainted with the target in the same context, interpeer agreement tended to be higher. In unacquainted dyads, discussing behaviors provided higher quality information than discussing thoughts and feelings, or engaging in actual behaviors contributed to distinctive accuracy (Letzring & Human, 2013).

#### **Characteristics Contributing to Accuracy**

The characteristics of a trait, such as its observability (visibility), evaluativeness, and if one of the judges is the self (John & Robins, 1993) have been found to be related to accuracy of personality judgment. For instance, the visibility of a trait, which represents the presence of relevant and available cues of that trait, is predictive of the accuracy with which it can be judged (Funder & Dobroth, 1987). In a study conducted by John & Robins (1993) well acquainted participants gave self and other ratings on 100 unipolar trait adjectives from the Big Five personality domains. Self-other and peer-peer agreement correlations between one target and four peers were made. The ratings of observability, desirability, and evaluativeness of the same 100 items were provided by an independent team of raters. The study examined the effects of each of the Big Five domains on interpeer agreement, compared self-peer agreement to peer-peer agreement to determine the influence of the self as a judge, and examined the effects of observability, social desirability, and evaluativeness on interpeer agreement. Traits neutral in evaluativeness resulted in higher interpeer agreement. Differences in observability were found in the bi-polar aspects of traits, for example the high pole of extraversion was the most observable trait.

Funder and Dobroth (1987) examined visibility of the California Adult Q-set (a 100-item measure consisting of descriptive statements about personality; Block, 1961; Bem & Funder, 1978) items on eight dimensions of visibility and one dimension of favorability. One example of a visibility dimension is how easy it is to imagine behaviors that would confirm or disconfirm existence of the trait. Self-other agreement and peer agreement on the same 100 items were determined using two separate samples from the visibility raters. The more visible items resulted in higher levels of interpeer agreement than the less visible items. Overall, visibility ratings were related to interpeer agreement of the same traits in the study.

The observability of traits, as described previously, falls under the relevance and availability stages of RAM, because a trait must be observed in a situation conducive to perceiving cues of the particular trait to be relevant, and further, the level of visibility of a trait will determine its availability. Observability, or visibility, also refers to the moderator of good traits, as some traits are more observable than others. Personal values have the potential of being included within the moderator good traits because values may share some of the same characteristics as personality traits. Similarly to personality traits some values may also be more observable than others, they may vary in evaluativeness, and may be impacted by the type of judge (self or other). For purposes of this study, the moderator of good traits will be referred to as "good constructs" because both values and traits are being assessed in the same context.

Little is currently known concerning the visibility of values, or how accurately they are judged. Self-other agreement and peer-peer agreement was determined in one study for the Big Five personality domains, personal values (using the Portrait Value Survey; Schwartz, 2007), and a culture-specific measure of values. The study found that higher-order values could be accurately judged, however traits were judged more accurately than values (Dobewall, Aavik, Konstabel, Schwartz, & Realo, 2014).

**Visibility.** As mentioned above, it has been established in some studies that the more visible a trait is, the more accurately it is judged (Funder & Dobroth, 1987; John & Robins, 1993; Paunonen, 1989). However, for some traits, the findings linking visibility and accuracy have been mixed. Funder and Dobroth (1987) found that items indicative of extraversion were significantly more visible than those correlated with other traits. Items correlated with neuroticism were rated as the least visible. The accuracy of extraversion

and neuroticism items corresponded with their visibility. For example, the extraversion item "Tends to arouse liking and acceptance" was among the most visible characteristics and among those with the highest interjudge agreement. Conversely, the neuroticism item, "Subtly negativistic" was among the least visible items and among those with the lowest interjudge agreement. In general, items rated the most visible also tended to be among those with highest interjudge agreement. However, except for the neuroticism item listed previously, the items rated the least visible for other traits, were not always judged the least accurately. In the study described previously, John and Robins (1993) found extraversion to be judged with the highest accuracy which could be explained by its high observability/visibility. Agreeableness, on the other hand, had the least agreement between judges, but this level of accuracy could not be explained by observability, because the rated observability of the trait items was at a moderate level. In the same study, emotional stability (neuroticism) was not found to have low agreement nor low visibility.

The mixed findings of visibility and accuracy may be due to several factors, such as the type of questions used to assess visibility, how accuracy is measured, and the acquaintance level of the targets and judges. Some studies have assessed visibility with one unipolar question. Studies which examined visibility and accuracy across traits among subgroups (high and low visibility) have not found a relationship between visibility and accuracy (Check, 1982; Kammann et al., 1984; Kenrick & Stringfield, 1980). Participants in one study signed up in acquainted pairs and levels of acquaintanceship between rater and target and the degree of public observability of rated personality traits were examined on interpeer agreement. Agreement between peer ratings and self-ratings indicated a linear relationship with level of acquaintanceship. The visibility of the behavior domain being judged was a determinant of agreement for low and moderately acquainted dyads, but not for highly acquainted dyads. In general, observability of traits did not show a main effect on self-peer agreement (Paunonen, 1989).

Funder and Dobroth's (1987) study, which examined visibility and accuracy across all raters found visibility to be related with accuracy. Because visibility and accuracy of items can be compared directly across all raters, the restriction of range effects that using subgroups can present is avoided, which can successfully reveal the variability of the trait and value items in different situations. With the use of several questions on the visibility measure indicating how many behaviors or situations would confirm or disconfirm the existence of the trait, Funder and Dobroth (1987) also incorporated the observability of bi-polar dimensions, which may account for the link found between visibility and accuracy. A trait is typically best observed at either the highest or lowest levels of the behavior associated with the particular trait. If the bi-polar aspects of the trait are not taken into account (whether existence of the trait in an individual can be confirmed or disconfirmed), the analysis may not incorporate part of the observability of that trait (Paunonen, 1989). The current study was conducted in a similar manner to Funder and Dobroth's and sought to replicate their findings between visibility and accuracy for traits and in addition, to see if the same relationship between visibility and judgmental accuracy exists for personal values.

Because values are typically conceptualized as being positive, people tend not to attempt to hide them, which would improve the relevance and availability stages of the

RAM. Individuals may even try to actively let others know what their values are or even influence others to adopt the same values, which may increase availability and detection of behavioral cues. On the other hand, there are some traits that people might not desire to have visible to others that they may attempt to hide. Because people may actively endeavor to inform people of what their values are, values may be more visible than traits overall, thus leading to better accuracy based on higher success at the availability stage.

Increased visibility of values ratings may be especially true for people who have known the individual being judged for some time, due to the acquaintanceship effect (the longer people have known each other, the more information they have obtained about one another and the more accurately they are able to judge each other; Colvin & Funder, 1991). A longer acquaintanceship is also linked to increased interjudge agreement of personality traits (Colvin & Funder, 1991; Paunonen, 1989). However, the results should be taken with caution, because as mentioned previously, the relationship between accuracy of personality judgment and observability has only been found for those less acquainted, and not for those in close relationships (Paunonen, 1989). Visibility of traits between highly acquainted dyads may not be as important to judgmental accuracy for a number of reasons. Acquaintances have had a longer period of time to be exposed to many behaviors of the person, making the level of visibility of cues less relevant. The acquaintance knows whether the person has a high or low level of a trait, whether or not that trait is visible. Paunonen (1989) also suggests the possibility that targets may engage in socially desirable responding for self-reports of traits, which does not reflect what the highly acquainted judge actually knows about the individual.

Although accuracy of values has only been examined in one study (Dobewall et al., 2014) and the relationship between visibility and accuracy of judgments of values has not been studied specifically, research has examined the link between an individual's values and the behaviors associated with those values (Bardi and Schwartz, 2003; Pozzebon & Ashton, 2009). It was found that the stimulation and tradition value types as provided by self-report were the best predictors of self-reported and peer- reported behaviors associated with those value types. Values and traits have also been shown to be almost equally as strong in predicting value-relevant behaviors, with personality traits being slightly stronger predictors of behavior overall (Pozzebon & Ashton, 2009). However, behaviors relevant to some values (e.g., tradition) were better predicted by values, and behaviors relevant to other values (e.g., self-direction, stimulation, hedonism, and power) were better predicted by traits. Results from these studies indicate that there is a relationship between some of the personal values and observable cues regarding behavior relating to those values. However, the finding that personality traits are slightly better predictors of value-relevant behaviors than values in general, may mean that traits are more accurately judged than values because of increased availability of behavioral cues, which is contrary to the theoretical argument made above.

#### **Purpose and Rationale**

It has been established that there are many similarities and differences between traits and values. In order to parse out their unique contribution to the study of accuracy of personality judgment, this study sought to determine if values' level of visibility yields the same relationship with accuracy as that of traits' level of visibility. The study attempted to replicate and extend the findings of Dobewall et al. (2014) by examining the subjective visibility of the same trait and value items. Dobewall et al. found that traits were judged more accurately than values, but the difference was not significant, therefore the theoretical argument that visibility of values may contribute to higher levels of accuracy for judgments of values than for traits, is still plausible. Differing from visibility of traits, visibility of values may identify the motives of a person. If values can be judged accurately, relative to the amount of visibility in a way similar to traits, then values may be used as a way to begin to accurately judge another's motivations. The ability to accurately judge motivation for behavior is important because examining what drives someone may clarify the reasons behind the person's disposition and behavior. If an individual's motivation can be understood, it is possible that the person's behavior may be better understood and perhaps more accurately predicted. The information derived from accurately judging another's motivation could potentially be beneficial in selecting and motivating employees, and college students. The ability to judge motivation could also help people be better friends as they can better understand and empathize with others in their sphere. To begin this process of understanding an individual's motivation, it is necessary to examine the visibility of values as a first step.

The current study sought to replicate and extend the findings of Dobewall et al. (2014) and those of Funder and Dobroth (1987) to determine whether values would yield the same visibility as traits and if the visibility of values had the same relationship with accuracy as traits. Self-other agreement was also examined for the higher-order values as well as value types to compare to the findings of Dobewall et al. (2014). Values were examined as good constructs by measuring the visibility and judgmental accuracy of the

value items. It was also determined if values can be considered a part of the relevance and availability stages of RAM.

Hypothesis 1 is that, similarly to traits, more visible values would be judged more accurately than less visible values. Hypothesis 1a, based on the findings of Bardi and Schwartz, (2003), is that stimulation and tradition value types would be the most visible and yield the greatest accuracy of all the values. Hypothesis 1b is that values would be rated as more visible than traits overall.

The current study also examined individuals' ability to judge values of others and compared this with the accuracy of judging another's traits. Hypothesis 2 is that personal values would be judged with greater accuracy than personality traits, holding visibility constant. This hypothesis is based on the motivational nature and desirability of values, both of which are higher than that of traits.

#### **Chapter III**

#### Method

#### **Participants**

204 undergraduate students were recruited for this study. The participants were 62% female, 38% male and were 75% Caucasian, 14% Latino, 4% African-American, 4% Asian/Pacific Islander, 1% Native – American, and 2% Middle Eastern. Age of participants had a mean of 20.07(SD = 2.22), within a range of 18 to 30 years. Religious affiliation was assessed by a free-response question and put into categories by the researcher. Twenty-six percent of participants were LDS, 17% Catholic, 23% Christian, 4% Atheist, 23% no religion, and 7% other. Sixty-eight main participants were recruited through the Psychology department's research participant pool and 136 additional participants (friends, siblings, or romantic partners of the main participant) were invited by the main participant. Participants rated themselves on all types of relationships they had with each of the targets and were able to choose more than one category. Eight-six percent of the total participants rated themselves as friends, 14% roommates, 28% classmates, 8% co-workers, 4% siblings, 8% significant others, and 4% as only other. Sixty main participants and 180 total participants would have achieved sufficient power for an 80% chance of detecting an effect size of d=.5 at p=.05. As this study used the same individuals as both raters and targets, the number of participants also enabled the profile correlations to be more stable. Main participants were reimbursed with one unit of course credit per half hour of participation (the study took about one hour). Acquaintances were given the choice between receiving course credit if they were

enrolled in a psychology course where the credit was valid, or a buy-one-get-one-free coupon for a local coffee establishment.

Sixty-seven additional participants (not included in the accuracy study) were recruited through the Psychology department participant pool to assess the visibility of traits and values. Demographics of these participants were not collected.

#### Measures

**Personality traits.** Personality traits were assessed using The International Personality Item Pool 100-item version of the NEO-PI-R domains (IPIP NEO-PI-R domains; International Personality Item Pool, n.d.). There are 20 items per trait domain based on a 5-point scale ranging from 1 (*very inaccurate*) to 5 (*very accurate*). Questions are both positively and negatively scored. Example questions are: "I often feel blue" for Neuroticism, and "I cheer people up" for Extraversion. The IPIP version of the NEO-PI-R has good established reliability with alphas for Extraversion (.91), Agreeableness (.85), Openness to Experience (.89), Conscientiousness (.90), and Neuroticism (.91) (International Personality Item Pool, n.d.). Using Cronbach's alpha, the current study using both self and other personality ratings yielded reliabilities for Extraversion (.93), Agreeableness (.94), Openness to Experience (.91), Conscientiousness (.95), and Neuroticism (.92).

**Personal values.** Personal values were measured using the Schwartz Values Survey (SVS; Schwartz, 1992). The measure consists of two lists of value items. The first list has 30 items that describe possible end-states, such as *Meaning in life (a purpose in life)*. The second list contains 26 items that describe possible ways of behaving to achieve the end states from the first list, such as *Healthy (not being sick physically or mentally)*. Each value is rated on importance "as a guiding principle in my life" on an asymmetrical 9 point scale from -1 (*Opposed to my values*), 0 (*Not important*), 3 (*important*), 6 (*very important*), and 7 (*of supreme importance*). The asymmetrical scale is used to indicate which values are desirable or undesirable. Each value type is measured with between three (hedonism) and eight (universalism) items. The SVS has adequate reliability with alphas for Hedonism (.64), Power (.72), Achievement (.72), Stimulation (.70), Self-direction (.60), Universalism (.72), Benevolence (.67), Tradition (.63), Conformity (.61), and Security (.61) (Roccas, 2002). Cronbach's alphas in the current study were Hedonism (.80), Power (.86), Achievement (.86), Stimulation (.80), Self-direction (.83), Universalism (.89), Benevolence (.89), Tradition (.84), Conformity (.83), and Security (.83) for all of the value item ratings.

**Visibility.** Visibility was assessed by eight of the nine dimensions developed by Rothbart and Park (1986) see Appendix. Alphas for the dimensions are as follows: ease of imagining confirmed behaviors (.70), ease of imagining disconfirmed behaviors (.72), occasions for confirming behavior (.81), occasions for disconfirming behavior (.76), number of instances to confirm (.81), number of instances to disconfirm (.81), easiness to judge (.87), and favorability (.97). Other researchers have used these dimensions to rate visibility of the California Q-Set items (Funder & Dobroth, 1987), whereas the current study rated the visibility of traits from the IPIP NEO-PI-R 100 item measure, and values from the 56 items of the SVS. Answers are made on a nine point scale from 1 (*quite difficult*) to 9 (*quite easy*) for the ease of imagining confirmed or disconfirmed behavior, and the easiness to judge dimension. Other responses were adapted to fit the remaining items, such as 1 (*very unfavorably*) to 9 (*very favorably*) for the favorably dimension. An example question for ease of imagining confirming behaviors is: "How easy is it to imagine specific, observable behaviors that would provide confirmation of that trait/value?" In the current study alphas for the visibility dimensions were ease of imagining confirmed behaviors (.97; .98), ease of imagining disconfirmed behaviors (.97; .98), occasions for confirming behavior (.96; .98), occasions for disconfirming behavior (.96; .98), number of instances to confirm (.96; .98), number of instances to disconfirm (.98: .98), easiness to judge (.92; 86), and favorability (.96; 97) for values and traits respectively.

### **Procedure**<sup>1</sup>

Acquaintance Judgments. Participants arrived to the research laboratory together in groups of three, wherein everyone had known one another for at least six months. The use of acquainted groups is consistent with the procedure of Funder and Dobroth (1987). Before beginning, a research assistant informed participants that the ratings they provided of their own traits and values, as well as those of others, would be kept confidential. Using data collection software on laptop computers located in different areas of the lab to ensure privacy, participants completed self-reports of traits assessed by the IPIP NEO-PI domains and values assessed by the SVS. After making their selfratings, participants rated their acquaintances' traits and values using other-report versions of the same IPIP NEO-PI domains and the SVS, and reported the length of acquaintanceship and degree of familiarity with each person. A question of "What is your relationship with this individual?" with fixed answers (e.g., family member, friend,

<sup>&</sup>lt;sup>1</sup> Additional measures not used in the current analyses included the Miller Social Intimacy Scale (Miller, 1982) and the Satisfaction With Life Scale (Diener, Emmons, Larsen, & Griffin, 1985).
romantic partner) was included to determine the context of the relationship. Responses for both acquaintances were made one at a time in a "round-robin" method. Participants were instructed to rate the person to their right and entered the names of the target into the software in order to continually reference who is being rated. Finally participants were asked to complete (see footnote) a brief measure of demographic questions. Participants were debriefed of the purpose of the study, reimbursed and dismissed.

**Visibility Ratings.** Participants in the visibility portion of the study were recruited through the Psychology department's research pool and directed to an internet survey site to complete a questionnaire on either the visibility of values or visibility of traits in order to earn course credit. Participants had a choice to either complete the visibility of values study, or the visibility of traits study, or both. For values visibility, participants signed a digital consent form and read instructions on how to complete the study based on the instructions from the Rothbart and Park (1986) visibility study, yet adapted for values:

Personal values represent motivations that drive people to make decisions in the manner in which they do. For some values that people possess, judgments of whether someone has the value or not may be relatively easy. For other values, their presence or absence is much more difficult to judge. For example, consider the value "cares about the environment". Is it ordinarily rather easy to determine whether someone has this value or not? For each of the 56 personal value item terms on the following screens, please rate how difficult or easy you think it would be to judge another person. Please provide your judgment by clicking on an appropriate number from the following scales.

After completing the measure of visibility, participants read a debriefing statement. Completion of the visibility of values questionnaire took raters M=56 minutes (*SD*=43minutes).

The procedure for the visibility of traits questionnaire was the same as for values, except the instructions for completing the measure was used directly from the Rothbart and Park (1986) study. Completion of the visibility of traits questionnaire took raters M=2 hours, 8 minutes (*SD*=3 hours, 21 minutes).

### **Chapter IV**

#### Results

### Assessment of Non-independence in the Data

Due to participants acting as both targets and judges, the problem of violating the assumption of independence of data arises. To address this issue, three subsets of the sample were created. For the first subset, self-other agreement, consensus, and total accuracy were examined using only the main 68 participants as targets and the two acquaintances they recruited as judges. The correlations between the three types of accuracy and visibility were similar to those found when using the entire sample, which showed no relationships. Further, profile correlations of self-other agreement showed that traits were judged more accurately than values, which is consistent with the results using all 204 participants as both targets and judges (see Table 2). Two other independent samples of 68 participants were also examined for item-level analyses between self-other agreement and visibility for both traits and values which, and consistent with the analysis using the entire sample, yielded no relationship.

## **Visibility Ratings of Values and Traits**

**Reliability.** A total of 31 participants provided ratings of visibility dimensions for the value items and 36 participants rated trait items. Inter-rater reliability was examined by correlating each individual set of ratings with all the other raters' sets of ratings, across all items. Ratings provided from two raters for values and four raters for traits were negatively correlated with those of the other raters. Funder and Dobroth (1987) removed insufficient raters from their analyses, but this did not significantly impact

*Results including all participants versus main participants as target* Self-other agreement and visibility (item level)

	N=68 (main participants)		N=204 (all participants)	
	r	p	r	р
Values	0.05	0.73	0.01	0.92
Traits	0.03	0.73	0.01	0.92

Self-other agreement between traits and values (across items)

	N=68		N=204	
	M	SD	M	SD
Values	0.48	0.23	0.47	
Traits	0.68	0.31	0.66	
	t	р	t	р
	-5.22	0.001	-8.5	0.001

reliability. Therefore, in the current study, ratings provided by all of the raters were used. Using Cronbach's alpha to measure reliability, the average ratings for all dimensions ranged from a high of .87 (easiness to judge) to a low of .23 (number of instances to confirm existence of the value) for value items and a high of .97 (favorability) to .21 (number of instances to disconfirm existence of the trait) for trait items. After removing the two dimensions with the lowest reliabilities, composite scores for each of the six remaining separate dimensions were calculated by averaging individual ratings for each item across the 31 participants for values and the 36 participants for traits. Internal consistency for each item across the six visibility dimensions was examined. Without the dimensions with the lowest reliabilities (number of instances to confirm and disconfirm the existence of the trait) the total reliability for all of the value items was .99 and the reliability for trait items was also .99.

**Computing Visibility of Values and Traits.** Composite visibility scores were computed after removing two dimensions; number of instances to confirm and number of

instances to disconfirm. The averages of the remaining six dimensions were averaged for each value and trait item, yielding a visibility score for each item.

### **Computation of Accuracy Scores for Values and Traits**

Consistent with the method of analyses described by Funder & Dobroth (1987) self-other agreement, consensus, and total accuracy were computed in the following ways.

Self-other agreement. Self-other agreement for value and trait items was determined by: 1) averaging the two acquaintance ratings of each target for each item to create an accuracy criterion, and 2) correlating the accuracy criterion (mean acquaintance ratings) with self-ratings for each trait and value item to determine self-other agreement. The correlations were item-level correlations, meaning that a correlation was calculated for each item between self-ratings and the accuracy criterion, across all judge-target pairs. The unit of analysis was the item, not the participant. There were 100 correlations for traits, and 56 correlations for values. A judgment is deemed accurate when the correlations between raters or between the self and the accuracy criterion are significant. Accuracy is therefore not a dichotomous judgment, but is on a continuous scale. An average effect size in social and personality research has been found in a meta-analysis to be r=.21, with a standard deviation of .15 (Richard, Bond, & Stokes-Zoota, 2003). Personality research alone demonstrated the same effect size (r=.21, SD=.14). Therefore, correlations for accuracy above .21 in the current study were considered consequential.

**Consensus.** Consensus between the two peer raters for value and trait items was calculated by correlating the ratings of the two acquaintances of the same target, for each trait and value item.

**Total accuracy.** Total accuracy for value and trait items was calculated by ztransforming and averaging the self-other agreement correlations with the consensus correlations for each item. The 15 most and 15 least accurately judged trait and value items and all three of their accuracy scores can be found in Tables 3 and 4. A considerable amount of agreement exists in both the most accurately judged values and traits. Overall, 24 out of the 56 value items and 77 out of the 100 trait items yielded significant interjudge agreement.

### Visibility and Accuracy

To test Hypothesis 1, the composite visibility scores for each value and trait item were correlated with the self-other agreement correlations, the consensus correlations, and the total accuracy scores for each corresponding value and trait item. Relationships were not found between the visibility scores and any of the three accuracy scores (self-other agreement and visibility for values, r=-.01, p=.93, for traits, r=.01, p=.92; consensus and visibility for values, r=-.04, p=.75, for traits, r=.08, p=.46; total accuracy and visibility for values, r=-.03, p=.82, for traits, r=.05, p=.64). Looking at Tables 5 and 6, it can be seen that half of the most visible value items were also judged accurately. However, half of the least visible items were also judged accurately. For the trait items, about three-quarters of the most and least visible traits were also judged accurately.

**Differences between most and least visible items.** To determine if there was a difference between the degree of self-other agreement for the most visible and least visible values and traits (H1), two significance tests for the difference between two independent correlations were conducted. One test between self-other agreement for the

most visible value type (conformity r=.19) and self-other agreement for the least visible value type (tradition r=.22) yielded no difference in accuracy, z=-.31, p=.75. The second test between the most visible trait domain (extraversion r=.33) and the least visible trait domain (openness r=.24) also did not show a difference in accuracy, z=.98, p=.32.

Accuracy for individual value types and the Big Five personality domains. To test Hypothesis 1a, that the stimulation and tradition value types would be rated the most visible and judged the most accurately, self-other agreement correlations were computed for the higher-order factors of self-transcendence, self-enhancement, openness to change, and conservation, and for individual value types, by averaging the z-transformed item correlations for each value type. Self-other agreement correlations were also computed for each of the Big Five personality traits by averaging the z-transformed item correlations. Extraversion and Neuroticism have the highest agreement for personality traits, and stimulation and tradition have the highest self-other agreement of all the value types which partially confirms Hypothesis 1a. The findings of the highest self-other agreement for the higher-order values of Conservation (.19) and Self-transcendence (.16) were partially consistent with those of Dobewall et al., (2014).

### **Visibility of Values and Traits**

The 15 most visible and 15 least value items can be seen in Table 5 and the 15 most visible and 15 least visible trait items can be seen in Table 6. Means of the composite visibility scores of the 10 value types ranged from 5.86 for tradition to 6.71 for conformity. The findings do not support Hypothesis 1a, as stimulation and tradition were

Average				
	total Self-other		r	
Value Number	agreement	agreement	Consensus	
Mc	st agreement			
51 Devout	51 agreement	60***	/18***	
6 A spiritual life	.5 <b>-</b> 41***	.00 47***	.40 40***	
37 Daring	.71 33***	. <del>-</del> 2 ?8***	38***	
12 Wealth		.20 25***	23**	
29 A world of beauty	.2- <del>-</del> 28**	.20 28***	.23 17*	
24 Unity with nature	.20 22**	.20 22**	.17 21**	
39 Influential	.22 21**	.22 18*	.21 25***	
40 Honoring of parents and elders	.21 21**	.10 20***	<b>.2</b> 5	
$17  \Delta \text{ world at peace}$	.21 21**	.2) 71**	.21 20**	
16 Creativity	.21 21**	12	.20 2 <b>9</b> ***	
56 Clean	.21 10*	.12 73**	.2) 14*	
7 Sense of belonging	.12	.25 ??**	•1 <del>-1</del> 1 <i>4</i> *	
3 Social Power	.10	.22 20**	.17 15*	
25 A varied life	.10	.20 1/1*	.15 .13	
1 Foughty	.10	.17 16*	.21 17*	
	.10	.10	•17	
Lea	ist agreement	0.7		
41. Choosing own goals	09	05	12	
14. Self-respect	06	01	10	
48. Intelligent	04	05	03	
43. Capable	04	08	.00	
28. True friendship	01	.07	08	
44. Accepting my portion in life	.00	.03	03	
32. Moderate	.00	.05	05	
27. Authority	.02	.04	-00	
4. Pleasure	.03	.09	04	
46. Preserving my public image	.03	01	.06	
33. Loyal	.03	06	.00	
47. Obedient	.03	.07	01	
23. Social Recognition	.04	.02	.06	
55. Successful	.04	.11	03	
50. Enjoying life	.04	.06	.02	

Values with highest and lowest interjudge agreement

*Note* . N=56, \*p <.05, \*\*p <.01, \*\*\*p <.001.

Table 4

Traits with highest and lowest interjudge agreement

Average				
	total	Self-other		
Trait Number	agreement	agreement	Consensus	
Most agre	ement			
41. Believe in the importance of art	.47***	.48***	.46***	
52. Do not like art	.40***	.45***	.34***	
35. Don't talk a lot	.34***	.42***	.38***	
28. Talk to a lot of different people at parties	.39***	.48***	.29***	
43. Tend to vote for lib. political candidates	.36***	.40***	.31***	
22. Make friends easily	.35***	.41***	.30***	
5. Panic easily	.34***	.39***	.28***	
34. Don't like to draw attention to myself	.34***	.36***	.32***	
32. Keep in the background	.33***	.37***	.29***	
26. Start conversations	.33***	.39***	.26***	
29. Don't mind being the center of attention	.33***	.32***	.33***	
24. Am the life of the party	.32***	.42***	.22**	
54. Do not enjoy going to art museums	.32***	.38***	.25***	
39. Find it difficult to approach others	.31***	.38***	.25***	
55. Tend to vote for conserv. pol. candidates	.30***	.27***	.32***	
Least agree	eement			
11. Seldom feel blue	.04	.05	.03	
46. Enjoy thinking about new things	.04	.09	.00	
64. Accept people as they are	.05	.00	.09	
82. Pay attention to details	.05	.05	.05	
73. Suspect hidden motives in others	.05	02	.12	
47. Can say things beautifully	.05	.10	.01	
63. Respect others	.07	.03	.10	
7. Feel threatened easily	.08	.11	.04	
95. Shirk my duties	.08	.01	.15	
60. Have difficulty understanding abstract ideas	.08	.18	03	
91. Waste my time	.09	.12	.05	
84. Carry out my plans	.10	.00	.19	
48. Enjoy wild flights of fancy	.10	.12	.08	
49. Get excited about new ideas	.10	.17	.03	
51. Am not interested in abstract ideas	.10	.18	.03	

Note. N=100, \*p <.05, \*\*p <.01, \*\*\*p <.001.

not rated as the most visible value types. The visibility means for the higher order factors for values and the Big Five personality domains can be seen in Table 7. The means for the Big Five personality domains range from 5.08 for openness to experience to 6.02 for extraversion.

To determine whether values or traits are more visible (Hypothesis1b), an average was computed across all items for each rater. An independent samples t-test showed that values (M=5.78, SD=.67, 95% CI [5.53, 6.03]) were more visible than traits (M=5.32, SD=.60, 95% CI [5.12, 5.52], t(65)=-2.96, p=.004, d=.72.

### **Comparison of Accuracy for Judging Values and Traits**

**Distinctive accuracy.** The influence of normativeness, or what people are like on average, can be problematic when assessing accuracy with profile correlations. When correlating the profiles of two people, the resulting correlation may not reflect how similar the specific ratings of two people are to one another, but instead reflect two people's ratings of the "average person." Cronbach (1955) criticized profile correlations as assessment of accuracy, because similarity between the ratings of two people could actually be due to the raters' ability to rate the average person instead of the ability to rate a specific person. Normativeness of profile correlations may artificially inflate overall accuracy because what is being assessed is the degree of similarity between two "average people". The problem can be addressed by calculating a distinctive profile (Furr, 2008) by subtracting the normative profile (or the average of the items across persons) from the individual profiles, which then represents the unique aspects of each set of ratings.

Accuracy correlations computed with the normative profile for the accuracy criteria reflect the consistency between the judgment and the unique aspects of the

	Total				
Visibility Self-other Total					
Value Number	Score	agreement	Consensus	agreement	
	Most vi	sible			
11. Politeness	7.16	.22**	.10	.16*	
56. Clean	6.94	.23**	.14*	.19*	
52. Responsible	6.91	.20**	.12	.16*	
48. Intelligent	6.86	05	03	04	
40. Honoring of parents and elders	6.74	.29***	.13	.21**	
22. Family security	6.73	.15*	.05	.10	
49. Helpful	6.68	.05	.23**	.14*	
43. Capable	6.63	08	.00	04	
26. Wisdom	6.61	.08	.15*	.12	
14. Self-respect	6.59	01	10	06	
45. Honest	6.58	.20**	.10	.15*	
28. True friendship	6.56	.07	08	.00	
55. Successful	6.56	.11	03	.04	
36. Humble	6.55	.22**	.09	.16*	
20.Self-discipline	6.54	.16*	.07	.12	
	Least vi	sible			
2. Inner harmony	5.19	.16*	.09	.12	
21. Detachment	5.33	.16*	.10	.13	
44. Accepting my portion in life	5.39	.03	03	.00	
32. Moderate	5.48	.05	05	.00	
8. Social order	5.53	.11	.00	.06	
19. Mature-love	5.65	.13	.19**	.16*	
29. A world of beauty	5.68	.28***	.17*	.23**	
24. Unity with nature	5.71	.22**	.21**	.22**	
46. Preserving my public image	5.72	01	.06	.03	
10. Meaning in life	5.75	.18*	.00	.09	
13. National security	5.78	.14*	.01	.07	
4. Pleasure	5.81	.09	04	.02	
7. Sense of belonging	5.81	.22**	.14*	.18*	
25. A varied life	5.83	.14*	.21**	.17*	
23. Social recognition	5.87	.02	.06	.04	

*Values highest and lowest in judged visibility (composite index)* 

*Note*. N=56, \**p* <.05, \*\**p* <.01, \*\*\**p* <.001.

Traits highest and lowest in judged visibility (composite Index)

	Total			
	Visibility	Self-other		Total
Trait Number	Score	agreement	Consensus	agreement
Ν	lost visible			
26. Start conversations	6.92	.39***	.26***	.33***
21. Feel comfortable around people	6.92	.43***	.13	.28***
63. Respect others	6.83	.03	.10	.07
12. Feel comfortable with myself	6.68	.22**	.13	.18**
27. Warm up quickly to others	6.65	.31***	.19**	.25***
22. Make friends easily	6.63	.41***	.30***	.35***
64. Accept people as they are	6.59	.01	.09	.05
89. Finish what I start	6.58	.06	.18**	.12
70. Treat all people equally	6.57	.17*	.13	.15*
30. Cheer people up	6.57	.16*	.14*	.15*
50. Have a rich vocabulary	6.51	.28***	.11	.19**
24. Am the life of the party	6.51	.41***	.22**	.31***
65. Make people feel at ease	6.49	.15*	.23**	.19**
35. Don't talk a lot	6.49	.42***	.38***	.40***
90. Follow through with my plans	6.48	.07	.23**	.15*
L	east visible			
58. Believetoo much moneysupport artists	3.37	.26***	.17*	.21**
60. Have difficulty understanding abstract ideas	4.46	.18*	03	.08
59. Am not interested in theoretical discussions	4.46	.16*	.23**	.19**
33. Would describe my experiences asdull	4.50	.26***	.19**	.22**
51. Am not interested in abstract ideas	4.60	.18*	.03	.10
73. Suspect hidden motives in others	4.61	02	.12	.05
52. Do not like art	4.61	.45***	.34***	.39***
43. Tend to vote for liberal political candidates	4.63	.40***	.31***	.36***
53. Avoid philosophical discussions	4.69	.26***	.09	.17*
41. Believe in the importance of art	4.74	.48***	.46***	.47**
56. Do not like poetry	4.75	.29***	.14*	.21*
54. Do not enjoy going to art museums	4.78	.38***	.25***	.31***
6. Am filled with doubts about things	4.80	.22*	.10	.16*
57. Rarely look for deeper meaning in things	4.81	.19	.10	.11
48. Enjoy wild flights of fancy	4.90	.12	.08	.10

*Note.* N=100, p < .05, p < .01, p < .01.

	Visibility	Self-other agreement
NEO	М	r
Extraversion	6.02	.33***
Neuroticism	5.81	.25**
Conscientiousness	5.79	.10
Agreeableness	5.76	.19*
Openness	5.08	.24**
SVS		
Conservation	6.23	.19*
Conformity	6.71	.19*
Security	6.13	.17*
Tradition	5.86	.22**
Self- enhancement	6.25	.08
Achievement	6.49	.06
Power	6.00	.11
Self-transcendence	6.13	.16*
Benevolence	6.31	.16*
Universalism	5.95	.16*
Openness- to-change	6.16	.12
Self-direction	6.26	.08
Stimulation	6.13	.20**
Hedonism	6.11	.08

Visibility composite means and self-other agreement of personality domains (NEO-PI-R) higher-order values, and value types (SVS)

*Note*. Visibility ratings: N=67,

Self-other agreement: N=204 \*p<.05, \*\*p<.01, \*\*\*p<.001

accuracy criterion profile. Using the method described above, distinctive accuracy for traits and values was calculated.

The self-judgments were then correlated with the distinctive profile scores for that target for all values and traits. Accuracy scores were z-transformed and compared with a paired-samples t-test. Distinctive accuracy for traits (M=.21, SD=.31, 95% CI [.17, .25])

was higher than distinctive accuracy for values (M=.15, SD=.26, 95% CI [.11, .19]), t(203)=-2.6, p=.01, d=.19, which is consistent with the finding for overall accuracy. To determine whether differences in visibility affected differences in accuracy scores, a multiple regression examining self-other agreement between values and traits was conducted, while holding visibility constant. Visibility was entered into the model in step 1 and a dummy-coded variable representing the category of trait or value was entered in step 2. The dependent variable was self-other agreement. The analysis revealed that even while controlling for visibility, traits were judged more accurately than values,  $\beta$ =-.08, p<.001.

**Tests of dependent correlations.** Although the correlations were weak and nonsignificant, two tests of dependent correlations, one for values and one for traits, were conducted to determine whether the relationship between visibility and accuracy differs from the relationship between visibility and consensus. The tests did not show any significant differences between accuracy and consensus for either values, z=.30, p=.76, nor traits, z=-.61, p=.54.

#### **Chapter V**

## Discussion

It was predicted that, similarly to traits, more visible values would be judged more accurately than less visible values (H1), which was not supported by the data. To support Hypothesis 1, it was projected that values and traits rated as the most visible would have more significant correlations for accuracy of personality judgment. For the least visible values and traits it was expected there would be fewer, if any, significant correlations for accuracy, however, the expected pattern was not found. Although some value items rated as high in visibility were also judged accurately, in general the most visible values were not judged the most accurately. Furthermore, the most visible traits were also not judged the most accurately. Overall, visibility and accuracy were not significantly related in this sample, and the very minor direction of the relationship between the two constructs is the inverse of what was expected.

It was also predicted that stimulation and tradition value types would be the most visible and judged more accurately than the other value types (H1a). The prediction was partially supported in this study, as the most visible value types were actually conformity, achievement, and benevolence, and although not rated as the most visible, the two value types of stimulation and tradition were judged the most accurately in terms of self-other agreement. Values were also predicted to be rated as being more visible than traits which was supported in the current study (H1b) with values rated as significantly more visible than traits in general.

For the last hypothesis (H2), it was predicted that personal values would be judged with greater accuracy than personality traits, holding visibility constant. The opposite was found to be true; traits were judged significantly more accurately than values even when controlling for visibility. The finding was surprising due to the result that values were rated as more visible than traits. Values can be judged accurately, just not as accurately as are traits. Using profile correlations, it was also found that personality traits were judged with greater accuracy than personal values overall. Even after removing the normative profile from the ratings, the difference in accuracy between traits and values was fairly large and significant. Visually examining the differences in accuracy of the 15 most accurate traits and values also led to the same conclusion: traits in this sample were judged more accurately than values.

## **Relations with Previous Research**

Interestingly, the results are inconsistent with those of Funder and Dobroth (1987) who found subjective visibility and accuracy of traits to be moderately correlated and that the most visible trait items were also those with the highest accuracy. It is curious that the current results did not replicate those in the former study, given that most controversies over observability and self-other agreement typically stem from the problem of trait extremes, which is to say, that the bi-polar ends of the scales of traits are usually more visible and also judged more accurately than the middle of the trait scales. The visibility measure used by Funder and Dobroth (1987) and Rothbart and Park (1986) took into account both the existence and non-existence of traits. It was assumed in the current research that using the validated measure would eliminate any problems that often arise when assessing visibility of traits. The problem with trait extremes most likely is not an issue in this study, and does not explain the null findings.

On the other hand, the differences in visibility between values and traits may be explained by "construct extremes". When pondering how easy it is to judge others, the value items may bring to mind more visible behaviors (such as politeness and cleanliness) than trait items (start conversations and feel comfortable around people). The most visible value items may have been viewed as more dichotomous (either you are clean or you are not) making them more observable than the most visible trait items, which may appear to have more variability and therefore thought of as less observable. As discussed previously, the more extreme the trait ratings, the more observable the trait will most likely be (Funder & Dobroth, 1987). Perhaps values were viewed as more extreme (bi-polar) in the current study and thus more visible. The current results are also inconsistent with those of John and Robins (1993), who assessed observability of Big Five traits with one question, and correlated the scores with both self-other agreement and peer agreement. Observability was found to be correlated with both self-other agreement and peer-agreement and, like Funder and Dobroth (1987), indicated that more observable traits were judged more accurately, which again is not what the current study revealed. An explanation for the differences in results from earlier findings is that previous studies examining visibility and accuracy were conducted with college students in the late 1980's and early 1990's. The cohort of undergraduates today may be much different in the way they judge one another based on the advent of social media and reality TV shows. Judging the motives and personalities of others one does not know or does not know well appears to have turned into a national pastime. It may be that when thinking about visibility of traits and values, participants thought of the average person

they know in a distant way and which is different from those they know well and interact with everyday.

Paunonen (1989) found that with highly acquainted individuals, visibility of traits is not necessarily related to accuracy of trait judgment, which the current findings support. The method assessing familiarity between acquaintances in the current study was the same as that used by Paunonen (1989) which rated acquaintanceship on a scale of 1 (low) to 9 (high). He found that at high levels of acquaintanceship (above a score of 5) observability was no longer related to accuracy of trait judgment. Acquaintanceship for the current study had a mean score of 7.29, indicating that most participants were highly acquainted. At such high-levels of acquaintanceship, the visibility of cues may no longer influence accuracy, because judges can detect both high and low visibility cues due to the amount of time previously spent with the target in multiple contexts (Paunonen (1989). Future research should examine the relationship between visibility and self-other agreement in the low and moderately acquainted dyads of the sample as compared to the highly acquainted dyads.

Other current findings consistent with previous research are that stimulation and tradition value types are judged the most accurately. Pozzebon and Ashton (2009) found that self-reported stimulation and tradition value types had the most peer-reported value type behaviors associated with them. However, the visibility ratings do not support their findings linking value ratings and peer-reported behaviors, as the most visible value types (e.g., conformity, achievement, and benevolence) were some of the least predictive value types of peer-reported behaviors in the previous study. Encouragingly, some values are more accurately judged (tradition, stimulation, and conformity), than others (self-

direction and achievement), similar to how some traits (extraversion) are more accurately judged than others (openness). It appears that individuals can accurately judge some values of well-known acquaintances, nevertheless, the accuracy of value judgments does not seem to be related to visibility of values. Other factors such as evaluativeness of the values may explain differences in accuracy of value judgments. Some values may be more or less evaluative which may be related to how well they are judged. (John & Robins, 1993).

Consistent with the research of Dobewall et al. (2014) the current findings reflect that values can be accurately judged, but traits are judged slightly more accurately. Our results show the same superiority of traits over values but to an even larger degree. The results of the current study and Dobewall et al. (2014) are both consistent with other research that found personality traits to be more predictive of behavior than values (Bardi & Schwartz, 2003) and even more predictive of some value relevant behaviors (Pozzebon & Ashton, 2009). A possible explanation for the superiority of traits over values in the current context is that personality traits are better indicators of behavior (external traits), and values are better indicators of thoughts and feelings (internal traits) (Vazire, 2010). Although personality traits do encompass thoughts, feelings, and behavior, traits easily judged by others tend to involve external behaviors. Values on the other hand being cognitive representations of motives, may be more involved in inner processes or thoughts. Values reflect the cognition of the person being judged, which may be more difficult to judge due to less relevant and available cues. Furthermore, Pozzebon and Ashton (2009) suggest that there also may be differences between self-directed and otherdirected behaviors. Specifically, values may be related to collectivist behaviors, and

personality traits related to individualistic behaviors. Although not tested, this hypothesis mirrors the claim made by Nicholson (2003), that character referred to an individual's place in "larger whole" and personality is refers to the development of self as an individual entity. Examining the influence of inner and outer experiences, and self- and other-directed behaviors on accuracy of value and trait judgment would be useful to explore in future research.

### Implications

**Theoretical.** Operating under the framework of the Realistic Accuracy Model (RAM), it appears that in the current sample, participants appraised values as being visible which is consistent with the availability stage of RAM. However, the participants actually making the personality judgments may not have perceived the particular cues relevant to the judgment of values as easily detected or utilized as correctly as was anticipated based on the visibility ratings. Inversely, traits were rated as being less visible, suggesting they would have fewer available cues, but were in fact judged more accurately. The availability stage was therefore most likely not responsible for accuracy for these individuals, but due to the high acquaintanceship level of the participants, the cues that were available were detected and utilized correctly. As discussed previously, due to the lack of relationship between visibility and high levels of acquaintanceship, it may not have mattered if the traits were visible or not for accuracy of judgment to occur. Future research could examine the differences between traits and values at the detection and utilization stages. Another idea is to explore if accurate judgments of values can be made between people of zero acquaintance and if there is an change in the relationship of visibility of values with accuracy of judgments.

In consideration of moderators, there may have been a difference in the abilities of the judges and the judgability of the targets, but most importantly there was a difference in the quality of constructs. Personality traits are indeed better *constructs* than values when making judgments because traits can be judged more accurately. Finally, the moderator of good information plays a part as well. The sample was highly acquainted, which implies that the quantity of information was large and the quality of information was high. It is possible, again due to the high acquaintanceship level, that judges had many opportunities to detect cues of both traits and values due to sheer length of time. However, the kind of information available to the acquaintances may have been more likely to make judgments of personality traits easier than personal values. Traits may have been judged more accurately because in a college student population trait-relevant cues may be expressed more often than value-relevant cues. Chances to learn of another's values could take more time and may require other contexts than those that college environments typically provide. In addition, future research examining accuracy of judgment of personality traits and personal values across the lifespan might reveal differences by age. Targets in older populations may express more value-relevant cues than trait-relevant cues due to the stability of the individual's values and the context in which they are expressed. Older judges may be also better skilled at detecting and utilizing value relevant cues.

Funder (1995) also describes that interactions can occur between moderators. In particular this study may have been impacted by the trait x information interaction, which he refers to as *diagnosticity*. Essentially, this means that some kinds of information lead to accurate judgments, while other kinds of information, no matter the quantity, do not contribute to accurate judgments. As discussed above, college students may have many opportunities to express mainly traits and perhaps just a few values in the context of campus settings such as classrooms, dorm-rooms, and parties with friends which will only yield narrow slices of information. As one sees acquaintances in other settings, such as at work, with family members, or with a romantic partner, other cues become available that may contribute to accurately judging values.

**Applied.** The findings in the current study have potential to be applied in many settings. The belief that some traits or values are more visible than others may generalize to individuals in professional, academic, legal, and even personal settings. People may imagine they are competent at accurately judging values in those settings, but it in reality the values of others may be elusive. There are implications for job interviews, where an interviewer believes he or she can accurately judge what guides an individual looking for a job. The findings may also be applied to those working in human resources, or schools, who believe they know how to motivate individuals. If there is a disconnect between what supervisors believe motivates individuals and what truly motivates their employees, conflict may result. Finally the findings are especially applicable in legal settings where jury selection is crucial. The values of potential jurors are important to lawyers representing a client and if lawyers believe values are more visible than they really are, decisions made about jurors via interviews could impact the outcome of trials in undesirable ways. Measuring the values of individuals in the aforementioned settings in a more systematic way may be called for. The Schwartz Value Survey could be utilized by businesses, schools, and courts in a battery of other personality tests. Combining the use

of surveys and interviews may yield more accurate judgments and better outcomes in these settings.

In the personal domain, the findings imply that not only do people believe the values of others are more visible than they really are, but likewise their own values are more visible to others than they really are. The implication mirrors the social psychological concept of the illusion of transparency (Gilovich, Savitsky, Medvec, 1998), where individuals feel that their inner states are more observable to others than they actually are. The premise of the illusion of transparency is that people are "anchored" to their own experience when making judgments of perspectives of others, and they have difficulty adjusting appropriately from that anchor. In the current study, it may be that participants believed that their own values were more visible to others, which they interpreted to mean that the values of others would likewise be more visible to them. Future research should assess if there are differences between how visible people think their own values or traits are, from the values and traits of others.

Choosing a romantic partner may be impacted by the findings as well. The importance of the context in which one gets to know a future romantic partner cannot be underestimated. One may see a person in a limited number of contexts, such as only on dates at a restaurant or at a movie, which does not provide an individual much information about the values their potential future partner possesses. On the other hand, if one sees the same person in a situation where tough negotiations must be made or where his or her patience is tested, such as at work or on a long drive in heavy traffic, more information about their values will become available as well as their traits. It may be

important to observe individuals who one may share a close relationship with in as many contexts as possible in order to learn his or her values.

### Limitations

One limitation is that visibility ratings were not collected in accord with Funder and Dobroth's (1987) method. In the current study, participants completed ratings for all seven dimensions and one favorability dimension on all 100 trait items and/or all 56 value items which yielded either 800 or 448 total questions to answer. Although ratings were completed online and there was not a time limit, participants may have experienced fatigue and may have begun to randomly respond. Although the reliabilities for visibility ratings were high, they may be showing consistency in fatigue or apathy across the raters. Funder and Dobroth (1987) gave participants only 10 items to rate on 9 dimensions of visibility at a time, which would yield only 90 items for each participant to complete, and therefore reduce levels of fatigue or distractibility. Additionally, ratings collected online have pros and cons, for example, online measures are convenient for participants, but there is no way of controlling the administration of the measures or ensuring that people have minimal distractions. Another limitation is that visibility ratings were collected online while judgments of acquaintances were collected in the lab, which may yield differing responses from participants.

A second limitation is that the 100 trait items were not administered randomly, but instead were listed in order by trait domain (e.g. all 20 of the items for extraversion were listed in order together) which could influence how the raters responded to the questions. It is possible that participants could see a pattern in the questions and perceive

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what trait was being assessed, which inevitably could lead to socially desirable responding.

A third limitation is that the round-robin design was rather confusing and it was not always certain that the participants were rating the correct target at the correct time in the protocol. The researchers were unable to collect acquaintance ratings in the way that was originally planned, which was to list both targets with the corresponding items at the same time on the computer screen. The computer software used to collect the data was not equipped to allow acquaintances to be rated at the same time.

## **Future Research**

Future research to correct some of the limitations mentioned above would be to collect data on visibility according to the method set forth by Funder and Dobroth (1987). Specifically, the two visibility dimensions that generated low reliabilities (number of instances to confirm or disconfirm existence of a trait/value) could be eliminated from the measure of visibility and each participant could rate 20 random trait or value items on the six remaining dimensions. Completing a measure of 120 questions should resolve the problem of fatigue and provide more valid visibility ratings.

To address the issue of mixed results for visibility and accuracy found in the current study as well as previous research, a dimension could be added to the visibility measure to assess self-ratings of visibility (*How difficult or easy would it be for others to judge the degree to which you had this trait?*). The self-visibility dimension could be used to compare how visible people think the trait is within themselves with how visible people think the trait is in others or in general. The above suggestion could also be included with applying the Self-Other Knowledge Asymmetry model (SOKA; Vazire,

2010) to values. The SOKA model posits that some aspects of personality are judged more accurately by the self and other aspects are judged more accurately by other people. In particular, traits low in observability such as neuroticism, are better judged by the self; and traits high in evaluativeness but low in observability such as intellect/openness, are judged better by others. It would be interesting to observe if this model applies to personal value types similarly to how it has been shown to apply to the Big Five personality traits. Some observable values may be best judged by the self and some less observable, yet favorable, values may be best judged by others. For example, value items that are more observable might be judged best by others, such as *wisdom* and *helpful*. (As shown by the current research, consensus was higher for those value items than self-other agreement). Values such as *family-security*, *humble*, and *honest* were rated as highly visible, but self-other agreement was higher for those values and not significant for consensus. Values that are less observable, but more desirable may be judged better by the self. It would also be beneficial to the field of accuracy of personality judgment to examine the values of those that are more or less accurate judges to perhaps gain an understanding of some of the motives held by "good judges". Due to a potentially greater ability to detect and utilize cues, those who hold self-transcendent values may be more accurate at judging the traits and values of others than those who hold self-enhancement values.

Dividing the sample by relationship type and/or religion and measuring accuracy between the groups is another idea for future research. Some relationship contexts may be more accurate than others by providing more relevant cues. Holding some religious beliefs may yield higher or lower accuracy as well. Furthermore, comparing accuracy between those that share the same religion would be beneficial for future research.

Finally, the level of acquaintanceship (familiarity) and relationship closeness could be examined as they are related to self-other agreement. Do those who feel they know each other well, also have a high level of relationship closeness? Another question is how well do the dyads agree on level of acquaintanceship and relationship closeness and how does this relate to self-other agreement? Are people who feel familiar and close to one another also accurate at judging each other's personality? As acquaintanceship length does not necessarily equate with acquaintanceship level, familiarity between acquaintances may also moderate the relationship between acquaintanceship length and judgmental accuracy. A suggestion for future research is to examine the average familiarity ratings of the relationship between the two acquaintances as a moderator between how well-acquainted (familiar) they were with one another and how accurately they judged one another's traits and values. Again, Paunonen (1989) found that visibility was correlated with accuracy for low to moderately acquainted dyads, but not for highly acquainted dyads. The current sample could be divided into subgroups of acquaintance level (low, moderate, and high) to determine if there is a relationship between visibility and accuracy for the lower acquainted group.

## Conclusion

The current study found that traits are judged more accurately than values in a sample of well-acquainted individuals, while values in general are rated as more visible than traits. It may be that this group of participants believes they are good judges of the motives behind the behaviors of others, while in reality they are not, even for those that

they feel they know well. Inversely, people do not feel as confidently that traits can be judged, but in reality they judge them fairly accurately. There appears to be a disconnect between how people think they judge one another (metajudgment) and how they actually judge one another. Future directions in research of accuracy of personality judgment can explore why this disconnect exists and perhaps discover how to narrow the gap between metajudgment and actual judgment of the personalities of others

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## Appendix A

# **Visibility Domain Items**

1. *Imaginability of confirming behaviors*: "How easy is it to imagine *specific, observable behaviors* that would provide confirmation of that trait(value)?"

2. *Imaginability of disconfirming behaviors*: "How easy is it to imagine *specific*, *observable behaviors* that would *disconfirm* (provide evidence against) that trait(value)?"

3. *Frequency of occasions allowing confirming behaviors*: "In the course of normal social interaction, how frequently do occasions arise that would allow for behaviors that confirm this trait(value)?"

4. *Frequency of occasions allowing disconfirming behaviors*: "In the course of normal social interaction, how frequently do occasions arise that would allow for behaviors that *dis*confirm this trait(value)?"

5. *Number of behavioral instances required to confirm trait:* "How many confirming behaviors would a person have to engage in before you would consider this trait(value) to be an accurate description of that person?"

6. *Number of behavioral instances required to disconfirm trait*: "How many confirming behaviors would a person have to engage in before you would decide this trait(value) did not accurately describe of that person?"

7. *Easiness*: "How difficult or easy would it be to judge the degree to which another person had this trait?"

8. *Favorability*: "How favorably or unfavorably would you regard a person who possessed this trait?"

## Appendix B

## **Introduction for Journal Submission**

Accuracy of Judging Personal Values and Personality Traits

You are always communicating, even when you are silent. This statement may refer to how we share who we are with others, whether we are speaking or not. Individuals continually convey messages about who they are and who they think they are, through their personal appearance, behaviors, words, emotional expressions, and many other cues. The ability to accurately judge messages sent by others through these cues is important, as it contributes to an awareness of who best to include or avoid in many domains of life. The historical background on person perception suggests that in years past, individuals were judged by others based on their principles, such as loyalty or honesty, but in current times principles have given way to a reliance on personality (Nicholson, 2003). According to Nicholson (2003), the self-concept of character was concerned with one's duty to a larger whole, whereas the concept of personality is concerned with development of the self. An individual's personality is comprised of many different features, which include personal values, personality traits, attitudes, and beliefs, just to name a few. Certain features of a person, such as values, may describe self-beliefs of an individual; while other features, such as traits, may speak to who others perceive them to be (McAdams, 1995). A pertinent question revolves around the interaction of all these features of personality: Is it possible to truly know, objectively, who a person is? Numerous studies have attempted to answer this question using interpeer agreement (e.g., Beer & Watson, 2008; Costa & McCrae, 1988; Funder, 1995; McAdams, 1995), which refers to how well two people agree on what a specific person is like. Of all the features representing a person, personality traits have frequently been the

focus when examining accuracy of personality judgments. In particular, the broad trait domains of the Five Factor Model (extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience) are most commonly employed.

The current study examines whether values, as a feature of personality, have the same level of visibility as traits and if they can be judged as accurately.

## **Personality Traits**

One of the most widely accepted definitions of traits are the unique ways individuals tend to exhibit enduring patterns of thoughts, feelings, and actions (McCrae & Costa, 1990). Traits have a purpose to organize, explain, and review an individual's visible actions as well as one's inner states (Buss & Craik, 1983; Hampshire, 1953; Wiggins, 1974). In addition to providing an understanding of a person's current actions and emotions, traits help to predict a person's behavior and emotions in the future (Funder, 1994).

Many methods have been developed to conceptualize traits. The five factor model (FFM) (Goldberg, 1993; McCrae & John, 1992) is a way to present the broad fundamental aspects under which specific traits may be organized (Vecchione, Alessandri, Barbaranelli, & Caprara, 2011). Traits are viewed in this model as adjectives used to describe people and their behavior and as a means to organize individual differences (Goldberg, 1993). The broad factors of the FFM: agreeableness (being sympathetic, kind, and affectionate), extraversion (being talkative, energetic, and assertive), openness to experience (having wide interests and being imaginative and insightful), neuroticism (being tense, moody, and anxious) and conscientiousness (being organized, thorough, and planful) (Goldberg, 1993; Srivastava, 2013), have been found to be quite reliable across the lifespan (Costa & McCrae, 1988; Roberts & DelVecchio, 2000), can be validly assessed across some cultures (McCrae & Costa, 1997b), and can be predictive of many life outcomes such as competency in occupation (Barrick & Mount, 1991; Roberts, 1994) and academic domains (Robins, John & Caspi, 1994).

Although personality traits are useful in describing and predicting behavior, they cannot explain all aspects of personality. Pervin (1994) expressed that traits are unable to completely account for all behavior, because while they have the capacity to describe patterns and consistencies in behavior, they cannot provide an explanation of the origin of those patterns and consistencies. Funder (1991) responded to this view by expressing that although the explanations for behavior provided by traits are deficient, they still are genuine. Incorporating values into the study of personality and accuracy may be useful in filling in some of the gaps left by traits, by helping to explain the "why" of behavior.

Years before Pervin's observations were made, F. H. Allport (1937) also expressed his concerns with the incomplete concept of traits. He shared an example of three individuals who were rated as equally honest. "One of them might be seeking justice; another might be trying always to help others, while the third might be trying to maintain his self-esteem or reputation" (p. 204). This example illustrates that there may be different values or motives operating behind the same trait.

### **Personal Values**

As another feature of personality, values represent motivations that drive people to make decisions in the manner in which they do (Bilsky & Schwartz, 1994). In other words, a value is a representation of an individual's motive or combinations of motives. As a method to measure the motivational properties of values, Schwartz (1992) developed the Schwartz Values Survey (SVS). Ten global motivational properties, known as value types, were identified to describe how people meet the three universal requirements for human survival, namely the needs of biological individuals, social interactions, and group welfare and survival (Schwartz, 2006). The motives resulting from these needs are represented cognitively as values (Schwartz & Bilsky, 1990). The ten value types or motivational properties are further categorized into higher-order factors. Conformity, security, and tradition value types are under the higher-order value of conservation. Achievement and power constitute the higher-order value of selfenhancement, while benevolence and universalism are within self-transcendence. Finally self-direction, stimulation, and hedonism make up the openness-to-change higher-order value (Schwartz, 1992). The motives associated with the higher-order factors are in opposition to one another. For example, those who are motivated by self-transcendence values are not motivated by self-enhancement values, and individuals motivated by conservation values are not motivated by openness-to-change values.

Schwartz defined values specifically, as "goals that act as guiding principles in one's life" (p. 46), and the ten value domains have been found to be fairly stable across situations, time, and culture in many studies (Roccas, 2002; Schwartz, 1992; Schwartz & Sagle, 2000; Schwartz, Melech, Lehmann, Burgess, Harris & Owens, 2001; Vecchione, Alessandri, Barbaranelli, & Caprara, 2011). It is the stability across situations that allows values to fall into the category of personality. Values express stability by representing goals across situations however; they also fluctuate in importance by person and situation (Schwartz, 1992, 1994; Schwartz & Bilsky, 1987, 1990).

## **Relationships Between Traits and Values**

While it is recognized that traits and values are both helpful in explaining personality, they are different constructs. People typically believe that their values are desirable, but traits have the ability to be either positive or negative (Funder, 1995). The same phrases or words can be construed as a trait, or as a value, yet have very different meanings, such as obedience or success. The word successful as a trait may refer to the number of occurrences and to what degree an individual shows success. Success as a value may refer to the priority a person gives to being successful and how this influences how they desire to behave. Having success as a value may not necessarily result in successful behaviors. Further, values can be used as the criterion with which to judge the moral basis of actions of oneself or others, whereas traits are not typically utilized in this way (Bilsky & Schwartz, 1994; Roccas et al. 2002). As fundamental differences between values and traits, Bilsky and Schwartz (1994) posit that traits are seen as descriptions of observed patterns of behavior, whereas values are used by individuals to judge the desirability of behavior, people, and events. Traits also refer to the variability of how much an individual exhibits a particular characteristic, while values refer to the variability of importance individuals ascribe to particular goals. Traits are used as descriptions of behavior due to their dispositions, without respect to desires, and values are used as the descriptions of which desires are salient to an individual. In general, traits show variability or consistency in a person's thoughts, feelings, and behavior; while values show variability or consistency in motivation.

A bi-directional relationship exists between traits and values. Values may affect traits as individuals try to behave in ways that are consistent with their values (Rokeach, 1973; Schwartz, 1996). Conversely, value justification may occur when people justify their behavior as a function of their traits (Kristiansen & Zanna, 1994). Self-perception theory suggests that traits influence values because people believe that their value priorities come from their behavior, which is a function of their traits (Bem, 1972). Similarly, Dollinger, Leong and Ulicni (1996) examined the relationship between the Big Five traits and the Rokeach values and posited "people value qualities that they already possess" (p. 23). The bi-directional relationship between traits and values may also be associated with how accurately one's personality is judged.

#### **Accuracy of Personality Judgment**

The process of accurate personality judgment is often examined using the Realistic Accuracy Model (RAM, Funder, 1995). The model acknowledges that many sources of information are needed in order to achieve the highest level of accuracy. According to RAM, accuracy is possible following completion of the stages of relevance, availability, detection, and utilization of behavioral cues involving real people in realistic situations. Relevance refers to the cues that are appropriate to the trait being judged. Some situations or contexts are more conducive to the expression of certain trait relevant behavior than others. For instance, the relative strength of a situation (weak, moderate, or strong) is related to how individuals with particular levels of a trait will respond (Marshall & Brown, 2006).

The availability stage means that the cues must be present in a way that makes it possible for the judge to perceive them. The importance of the relevance and availability stages to accuracy has been emphasized by Letzring (2008), who found that the warm and agreeable personality of a judge can create comfortable situations that bring out both relevant and available cues from the target.

Once made available, the judge must detect the behaviors relating to the trait being judged. Some available behaviors may be more detectable than others, such as the level of talkativeness versus subtle facial expressions of the target. Results from a metaanalysis of expressive behaviors found that detection of cues and accurate prediction of outcomes could occur in a relatively short amount of time across several different behavioral domains (Ambady & Rosenthal, 1992).

Finally, the judge must have the capacity to utilize the cues correctly to make an accurate judgment that the person possesses high or low levels of a trait. Utilization of cues has been demonstrated in studies where accurate judgments of personality traits were achieved based on targets' email addresses (Back, Schmukle, & Egloff, 2008), bedrooms (Gosling, Ko, Mannarelli, & Morris, 2002), and stream-of-consciousness essays (Hollaran & Mehl, 2008).

The model also proposes that accurate personality judgments are best achieved with the presence of the following four moderators: a good judge, a good target, good traits, and good information. A good judge refers to the idea that some people are better judges than others (some people have more ability than others). Vogt and Colvin (2003) found those who have a stronger orientation toward interpersonal relationships are more accurate judges than those who do not view interpersonal relationships as important. A good target means that some people are easier to judge than others. Overall, good targets share similar characteristics that pertain to psychological adjustment (Colvin, 1993), higher social status, and socialization of skills which promote judgability (Human & Biesanz, 2013). The moderator of good traits suggests that some traits are easier to judge than others, for example, a personality trait, such as extraversion, is considered a good trait as it is more accurately judged due to the high number of relevant and available cues associated with it. In addition to the work done by Funder and Dobroth (1987), and John and Robins (1993), Watson, Brock, and David (2000) found that more visible traits were rated as more accurate, but that relationship was not as strong for affective traits. Lastly, good information consists of two aspects: quantity and quality. For example, the acquaintanceship effect, or the idea that knowing someone longer will provide more information (quantity), while the context of the relationship may impact the kind of information one can assess (quality). In unacquainted dyads, discussing behaviors provided higher quality information and contributed to higher distinctive accuracy compared to discussing thoughts and feelings, or engaging in actual behaviors (Letzring & Human, 2013).

### **Characteristics Contributing to Accuracy**

The characteristics of a trait, such as its observability/visibility and evaluativeness, and if one of the judges is the self (John & Robins, 1993) are related to accuracy of personality judgment. For instance, the visibility of a trait, which represents the presence of relevant and available cues of that trait, is predictive of the accuracy with which it can be judged (Funder & Dobroth, 1987). The observability of traits, as described previously, falls under the relevance and availability stages of RAM, because a trait must be observed in a situation conducive to perceiving cues of the particular trait to be relevant, and further, the level of visibility of a trait will determine its availability. Observability, or visibility, also refers to the moderator of good traits, as some traits are more observable than others. Personal values have the potential of being included within the moderator of good traits because values may share some of the same characteristics as personality traits. Similarly to personality traits, some values may also be more observable than others, they may vary in evaluativeness, and they may be impacted by the type of judge (self or other). For purposes of this study, the moderator of good traits will be referred to as "good constructs" because both values and traits are being assessed in the same context.

Little is currently known concerning the visibility of values, or how accurately they are judged. Self-other agreement and peer-peer agreement was determined in one study for the Big Five personality domains, personal values, and a culture-specific measure of values (Dobewall, Aavik, Konstabel, Schwartz, & Realo, 2014). It was found that higher-order values could be accurately judged, however traits were judged even more accurately than values.

## Visibility

As mentioned previously, it has been established in some studies that the more visible a trait is, the more accurately it is judged (Funder & Dobroth, 1987; John & Robins, 1993; Paunonen, 1989). However, for some traits, the findings linking visibility and accuracy have been mixed. Funder and Dobroth (1987) found that items indicative of extraversion were significantly more visible than those correlated with other traits. Items correlated with neuroticism were rated as the least visible. In general, items rated the most visible also tended to be among those with highest interjudge agreement. However, except for the neuroticism item listed previously, the items rated the least visible for other traits, were not always judged the least accurately. John and Robins (1993) found extraversion to be judged with the highest accuracy, which could be explained by its high observability/visibility. Agreeableness, on the other hand, had the

least agreement between judges, but received a moderate level of rated observability. In the same study, emotional stability (neuroticism) was not found to have low agreement nor low visibility.

The mixed findings of visibility and accuracy may be due to several factors, such as the type of questions used to assess visibility, how accuracy is measured, and the acquaintance level of the targets and judges. Some studies not finding a relationship between visibility and accuracy have assessed visibility with one unipolar question (John & Robins, 1993; Paunonen, 1989). Funder and Dobroth's (1987) study, incorporated the observability of bi-polar dimensions with the use of several questions, which may account for the link found between visibility and accuracy. A trait is typically best observed at either the highest or lowest levels of the behavior associated with the particular trait (Paunonen, 1989). The current study was conducted in a similar manner to Funder and Dobroth's and sought to replicate their findings between visibility and accuracy for traits and in addition, to see if the same relationship between visibility and judgmental accuracy exists for personal values.

Increased visibility of values ratings may be especially true for people who have known the individual being judged for some time, due to the acquaintanceship effect (the longer people have known each other, the more information they have obtained about one another and the more accurately they are able to judge each other; Colvin & Funder, 1991). A longer acquaintanceship is also linked to increased interjudge agreement of personality traits (Colvin & Funder, 1991; Paunonen, 1989). However, the results should be taken with caution, because the relationship between accuracy of personality judgment and observability has only been found for those less acquainted, and not for those in close relationships (Paunonen, 1989). Studies which examined visibility and accuracy across traits among subgroups (high and low visibility) have not found a relationship between visibility and accuracy (Check, 1982; Kammann et al., 1984; Kenrick & Stringfield, 1980). In another study, the visibility of the behavior domain being judged was a determinant of agreement for low and moderately acquainted dyads, but not for highly acquainted dyads. Overall, observability of traits did not show a main effect on self-peer agreement (Paunonen, 1989).

Desirability of values may also contribute to an increase in visibility. Because values are typically conceptualized as being positive, people tend not to attempt to hide them, which would improve the relevance and availability stages of the RAM. Individuals may even try to actively let others know what their values are or even influence others to adopt the same values, which may increase availability and detection of behavioral cues. On the other hand, there are some traits that people might not desire to have visible to others that they may attempt to hide. Because people may actively endeavor to inform people of what their values are, values may be more visible than traits overall, thus leading to better accuracy based on higher success at the availability stage.

Although accuracy of values has only been examined in one study (Dobewall et al., 2014) and the relationship between visibility and accuracy of judgments of values has not been studied specifically, research has examined the link between an individual's values and the behaviors associated with those values (Bardi and Schwartz, 2003; Pozzebon & Ashton, 2009). It was found that the stimulation and tradition value types as provided by self-report were the best predictors of self-reported and peer- reported behaviors associated with those value types. Values and traits have also been shown to be almost equally as strong in predicting value-relevant behaviors, with personality traits being slightly stronger predictors of behavior overall (Pozzebon & Ashton, 2009). However, behaviors relevant to some values (e.g., tradition) were better predicted by values, and behaviors relevant to other values (e.g., self-direction, stimulation, hedonism, and power) were better predicted by traits. Results from these studies indicate that there is a relationship between some of the personal values and observable cues regarding behavior relating to those values. However, the finding that personality traits are slightly better predictors of value-relevant behaviors than values in general, may mean that traits are more accurately judged than values because of increased availability of behavioral cues, which is contrary to the theoretical argument made above.

### **Purpose and Rationale**

It has been established that there are many similarities and differences between traits and values. In order to parse out their unique contribution to the study of accuracy of personality judgment, this study sought to determine if values' level of visibility yields the same relationship with accuracy as that of traits' level of visibility. The study attempted to replicate and extend the findings of Dobewall et al. (2014) by examining the subjective visibility of the same trait and value items. Dobewall et al. found that traits were judged more accurately than values, but the difference was not significant, therefore the theoretical argument that visibility of values may contribute to higher levels of accuracy for judgments of values than for traits, is still plausible. Differing from visibility of traits, visibility of values may identify the motives of a person. If values can be judged accurately, relative to the amount of visibility in a way similar to traits, then values may be used as a way to begin to accurately judge another's motivations. The ability to accurately judge motivation for behavior is important because examining what drives someone may clarify the reasons behind the person's disposition and behavior. If an individual's motivation can be understood, it is possible that the person's behavior may be better understood and perhaps more accurately predicted. The information derived from accurately judging another's motivation could potentially be beneficial in selecting and motivating employees, and college students. The ability to judge motivation could also help people be better friends as they can better understand and empathize with others in their sphere. To begin this process of understanding an individual's motivation, it is necessary to examine the visibility of values as a first step.

The current study sought to replicate and extend the findings of Dobewall et al. (2014) and those of Funder and Dobroth (1987) to determine whether values would yield the same visibility as traits and if the visibility of values had the same relationship with accuracy as traits. Self-other agreement was also examined for the higher-order values as well as value types to compare to the findings of Dobewall et al. (2014). Values were examined as good constructs by measuring the visibility and judgmental accuracy of the value items. It was also determined if values can be considered a part of the relevance and availability stages of RAM.

Hypothesis 1 is that, similarly to traits, more visible values would be judged more accurately than less visible values. Hypothesis 1a, based on the findings of Bardi and Schwartz, (2003), is that stimulation and tradition value types would be the most visible and yield the greatest accuracy of all the values. Hypothesis 1b is that values would be rated as more visible than traits overall. The current study also examined individuals' ability to judge values of others and compared this with the accuracy of judging another's traits. Hypothesis 2 is that personal values would be judged with greater accuracy than personality traits, holding visibility constant. This hypothesis is based on the motivational nature and desirability of values, both of which are higher than that of traits.