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PERSONALITY IN PRESCHOOL AGED CHILDREN: PRELIMINARY
PSYCHOMETRICS OF THE M5-PS

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Western Carolina University in partial fulfillment of the
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ABSTRACT

PERSONALITY IN PRESCHOOL AGED CHILDREN: PRELIMINARY PSYCHOMETRICS OF THE M5-PS

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The study of personality and individual differences in adults has flourished over the past 30 years (Swann & Seyle, 2005). During this time, the Five Factor Model (FFM), most widely researched and defined by Costa and McCrae (1985, 1987), has dominated the field of personality psychology. The FFM suggests that personality can be reduced to five broad domains: Openness to Experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism. Personality research has focused predominantly on adult individual differences. Childhood individual differences have historically been measured through temperament, which holds a strong biological and genetic foundation. Despite temperament's firm hold on the exploration of childhood character differences, more recent studies have been conducted on the presence of the FFM in children (cf. Abe & Izard, 1999; Mervielde, Buyst, & De Fruyt, 1995).

A measure of personality in children, ages 3 to 5, was developed to aid in the expansion of research in childhood individual differences. The M5-PS Questionnaire (Grist & McCord, 2006) was adapted from an adult personality measure, the M5

Questionnaire (McCord, 2002), in order to assess the FFM in children. The current study investigated the preliminary psychometrics of this measure.

Pre-school aged children (ages 2-6) were assessed using the M5-PS and Children's Behavior Questionnaire- Very Short Form (CBQ-VSF); student teachers completed these measures based on their observations of children in a preschool setting. The M5-PS comprises 5 scales that correspond with the five personality domains, and has 90 items. Each of the 18-item scales was refined through the use of item removal in order to obtain maximum internal consistency. Scale refinement resulted in a 72-item measure. External validity of the M5-PS was explored through the relationship between temperament traits (measured using the CBQ-VSF) and personality domains. This relationship was explored both before and after scale refinement.

Scale refinement improved internal validity of the M5-PS, yet it did not provide sufficient evidence that this tool is currently a cohesive, valid measure of childhood personality. Furthermore, fluctuation in correlations between personality and temperament before and after item removal demonstrates a lack of external validity. It is apparent that the M5-PS is in need of further refinement and development.

INTRODUCTION

The study of personality and individual differences has experienced tremendous fluctuations in popularity and status since it first surfaced in the field of psychology in the early 1900s. From defining a taxonomy that represents normal personality traits in adults, to creating a measure to appropriately decode these traits in individuals, this field has advanced tremendously, especially over the past 30 years (Swann & Seyle, 2005).

The most popular and psychometrically sound theory of personality currently accepted in the study of individual differences is the Big 5 (Goldberg, 1990), also known as the Five Factor Model (FFM) of personality (Costa & McCrae, 1985; 1987). This model proposes five dominant personality characteristics: Neuroticism, Extraversion, Openness to Experience, Conscientiousness, and Agreeableness. This paradigm is widely supported and has prompted a great surge in personality research.

While many personality assessments have attempted to dissect adult personality traits, few have stood the test of time and presented psychometrics necessary to gain respect within this field. From the infamous Myers-Briggs, to finding out “Which celebrity personality best suits you” on the popular online networking site Facebook, there are endless ways to access information claiming to decode one’s personality. Yet the psychometrics and empirical research surrounding many of these tests are questionable or entirely lacking. Due to this abundance of unreliable, yet readily available, tests claiming to decode one’s personality, focus was placed on not only finding a reliable taxonomy, but also a dependable measure for assessing personality. For example, the NEO Personality Inventory-Revised (NEO-PI-R, Costa & McCrae, 1992)

has presented sound psychometrics, reliability, and validity, and has dominated the study of individual differences in normal adults.

Personality and individual differences have long been an area of interest and debate; areas that have received substantial attention over the years include differences across culture, links to mental illness, and interpersonal relationships. One area within this field of research that requires further research is that of childhood personality and stability of personality traits over time. While many have attempted to deconstruct personality traits of children (Halverson, Havill, Deal, Baker, Victor, Pavlopoulos, Besevegis, & Wen, 2003), others have argued that children do not have discernible personality traits and such traits do not become detectable until elementary years or adolescence (Costa & McCrae, 1994; Lewis, 2001).

A dependable and valid measurement of assessing childhood personality traits is needed (Mervielde, 1998). Based on the adult form of the M5 Questionnaire (McCord, 2002), a measure was developed, the M5-PS (Grist & McCord, 2006), to assess the Five Factor model of personality in children ages 3 to 5. By adapting the M5 to cater to a younger population, the M5-PS explores the presentation of Neuroticism, Extraversion, Openness to Experience, Conscientiousness, and Agreeableness in a preschool population.

The purpose of the present study is to explore the psychometrics of this newly developed instrument, thus facilitating the creation of a more reliable and robust measure. Through the use of item analysis and item removal at the domain level, each of the scales has been narrowed down to produce a more refined scale, therefore increasing internal consistency. Furthermore, by correlating personality domains of the M5-PS with

temperament scales of the Children's Behavior Questionnaire-Very Short Form (CBQ-VSF; Putnam & Rothbart, 2006), it can determine if external reliability improves after scale refinement.

LITERATURE REVIEW

Personality Assessment: History

For the past three decades, research on personality psychology and individual differences has received considerable attention (Swann & Seyle, 2005). One particular branch of personality psychology that has received a great deal of consideration is the search for a taxonomic representation of personality in adults. Personality is characterized as “the consistent patterns of thoughts, feelings, and actions that people demonstrate... including thoughts, skills, values, defenses, morals, beliefs, and social cognitions” (Rothebart & Bates, 2006, cited in De Pauw, Mervielde, & Van Leeuwen, 2009, p. 309).

Despite its historically fluctuating recognition and relatively recent popularity (Swann & Seyle, 2005), research on personality traits can be traced back as far as the 1930s to the works of Thurstone, Cattell, Fiske, and Eysenck. Thurstone (1934) conducted one of the original studies attempting to find distinct personality traits in adults. His factor analysis of 60 adjectives was reduced to 5 noticeable factors. Unfortunately, it was over a decade before other researchers followed in Thurstone’s footsteps and presented information regarding personality dimensions. The work of Cattell (1947) shook the still-developing field of personality psychology. This study used a factor-analytic approach to dissecting terms and words used to describe personality (Digman, 1990). However, Cattell (1947, 1949) considered multiple traits, resulting in the 16 Personality Factors (16 PF) questionnaire. Though Cattell seemed confident that increasing the number of traits would more accurately define personality, many of the factors were not well defined (Digman, 1996).

Along with Cattell, Fiske (1947, 1949) attempted to follow in the footsteps of Thurstone. His research indicated five factors of personality: social adaptability, conformity, emotional control, inquiring intellect, and confident self-expression (Digman, 1996). These factors were accurately assessed across several sources (self-ratings, peer-ratings, and supervisor-ratings), addressing an area of personality assessment that had not yet been explored. Along with the thorough studies conducted by Fiske, the work of Eysenck (1947, 1955) continued to organize adult personality into traits. Eysenck felt three higher-level, more global traits were able to adequately categorize personality: psychoticism, extraversion, and neuroticism. While these factors would have a great impact on the future of trait categorization, there remained a lack of congruence in the field; a definitive number of traits by which adult personality could be categorized had not yet been presented and defended.

Exploration of adult individual differences came to a halt with the 1968 publication of Walter Mischel's critique of personality psychology. Mischel proposed that personality is situationally defined, thus negating the previously believed paradigm of personality being intrinsic and consistent across settings. His book caused a dramatic decrease in the research of individual differences, and the field went relatively unaltered for a decade. It was not until 1977 that research in this field made a recovery, greatly due to the expansion of the *Journal of Personality and Social Psychology*, which created a section devoted specifically to this field: Personality and Individual Differences. This produced a rebound in interest in this field, and between 1977 and 1987 popularity was higher than it had ever been (Swann & Seyle, 2004).

The Five Factor Model of Personality

After years of criticism regarding the suggested “superficial” nature of personality categorization and relative dormancy during the 1960s and ’70s, research in the field of personality regained popularity (Mischel, 1968; Swann & Seyle, 2004). Lewis Goldberg offered five traits that revolutionized personality research. These five characteristics, referred to as the “Big Five,” were confirmed through a lexical approach and the factor analysis of 1,431 trait adjectives (Goldberg, 1990). Goldberg further helped by creating the International Personality Item Pool (IPIP, 2001)—a public collection of items presented on prominent personality assessments. Whereas most adult personality assessments are copyrighted and do not lend themselves to alteration or expansion, the IPIP promoted advancement in the development of adult personality measures.

Along with Goldberg’s Big Five came the work of Paul Costa and Robert McCrae (1985, 1987) and the Five Factor Model (FFM) of personality, which successfully categorized normal adult personality traits into five distinct bipolar domains. The FFM has been the prevailing paradigm in the field of personality psychology for over 20 years and has been the dominant approach for studying individual differences among adults (Costa & McCrae, 1995; Slotboom, Havill, Pavlopoulos, & Dr Fruyt, 1998; Swann & Seyle, 2005). Barrick and Mount (1991) found the FFM to offer a “meaningful framework for formulating and testing hypothesis relating to individual differences in personality” (p. 23). The FFM has been seen as the “most celebrated empirical accomplishment... as a serviceable description of the structure of personality traits” (McCrea & Costa, 1996, p. 53).

The FFM was most extensively researched and popularized through the work of Costa and McCrae (1985; 1987; 1990; 1992; 1995; Costa, McCrae, & Dye, 1991), who closely paralleled Goldberg in his quest to solidify the acceptance of the Big Five among researchers and psychologists. The FFM contains five broad domains of personality: Neuroticism (N), Extraversion (E), Openness to Experience (O), Conscientiousness (C), and Agreeableness (A). Each of these domains contains six lower-level areas, known as facets, which describe each domain at a more detailed level (see Table 1).

Table 1: Costa and McCrae's Five Factor Model of Personality—5 domains and 30

Facets

1) Neuroticism

- a) anxiety
- b) angry hostility
- c) depression
- d) self-consciousness
- e) impulsiveness
- f) vulnerability

2) Extraversion

- a) warmth
- b) gregariousness
- c) assertiveness
- d) activity
- e) excitement-seeking
- f) positive emotions

3) Conscientiousness

- a) competence
- b) order
- c) dutifulness
- d) achievement striving
- e) self-discipline
- f) deliberation

4) Agreeableness

- a) trust
- b) straightforwardness
- c) altruism
- d) compliance
- e) modesty
- f) tender-mindedness

5) Openness to Experience

- a) fantasy
- b) aesthetics
- c) feelings
- d) actions
- e) ideas
- f) values

Individuals are rated as high, low, or normal in each of these thirty specific facets.

A high score within a specific facet is equivalent to a strong presentation of that specific aspect of one's personality and, likewise, a low facet score corresponds with a less predominant presentation of that facet. For example, a high score on the depression facet within the Neuroticism domain may suggest the individual is prone to feelings of hopelessness and sadness, whereas a low depression score suggests he or she rarely experiences these depressive feelings. Scores may also be interpreted at a more global, domain level; each of the five domains may be presented at low, high, or normal levels as well.

Within each domain, it is not uncommon that facets will vary from high to low; in fact, such variations may be helpful in decoding differences within each domain and related facets. If these variations did not exist, there would be little use for exploring personality at the facet level (Costa & McRae, 1995).

..... Neuroticism explores how one presents emotions and reacts in stressful situations. Emotions may be adjusted to lend themselves to specific situations, or may present as unstable and psychologically distressful. Low Neuroticism presents a more balanced, adaptive emotional regulation, whereas high levels of Neuroticism indicate more maladaptive coping responses to stress. (Example item: "I get upset easily".)

Interpersonal relationships are explored through the Extraversion factor. The quality and intensity of relationships with others and one's desire to engage with one's surroundings are investigated. Those who are excited and motivated by interpersonal relationships and seek out interaction with others will present high Extraversion ("I feel comfortable around people"); low Extraversion may be seen in those who prefer quiet, less socially motivated situations.

Conscientiousness assesses goal-directed behavior and one's desire to achieve and persist in challenging situations. Organization and impulsivity, as well as motivation and dependability are considered in this domain. High Conscientiousness individuals are seen as hard-working, ambitious, and self-disciplined individuals ("I am always prepared"), as opposed to those who may seem aimless, careless, and unreliable.

Interpersonal orientation is the focus of the Agreeableness factor. Levels of compassion in thoughts, feelings, and actions are presented along a continuum. Those with high Agreeableness may be more helpful, forgiving, optimistic and trusting, whereas low Agreeableness may be presented through more cynical, rude, pessimistic, and manipulative traits. (Example item: "I sympathize with others' feelings.")

Of the five broad domains, Openness to Experience may be the least tangible and most abstract factor. Openness to Experiences aims to assess one's desire to seek out the unfamiliar ("I have a vivid imagination"). Those who rank high in openness may be more creative, imaginative, artistic, curious, and emotional. On the other hand, those with low openness may be more down-to-earth and conventional (McCord, 2002).

The five broad domains offer a global look at one's personality, while the 30 facets offer greater specificity and a more narrow focus on particular personality traits.

Costa and McCrae (1995) distinguish the two as follows: “We regard domains as multifaceted collections of specific cognitive, affective, and behavioral tendencies that might be grouped in many different ways, and we use the term facet to designate the lower level traits corresponding to these groupings” (p. 23). While the five domains offer a great deal of information regarding personality and are a starting point from which much information can be gathered, it is the combination of facet scores that offers the most information about the individual (Costa & McCrae, 1995).

Measurement of the FFM

The NEO Personality Inventory-Revised (NEO-PI-R) is the most commonly used instrument to assess personality based on the FFM (Costa & McCrae, 1992). Costa and McCrae began their work in the early 1980s, and over the years have perfected their measure to incorporate items assessing the five domains and their lower-level facets. The NEO-PI-R, presented in a questionnaire format, has 240 items, stated in the first person. Each item is rated on a 5-point Likert scale ranging from Strongly Disagree (1) to Strongly Agree (5), allowing test-takers to rate how closely each statement reflects their personality. The NEO-PI-R greatly impacted the study of individual differences and holds tremendous credit in the field.

Despite the popularity and dominance of Costa and McCrae’s NEO-PI-R, copyright issues prevent researchers from using this measure free of charge; the cost of purchasing the NEO-PI-R for research purposes often deters researchers from utilizing this measure. Furthermore, due to the copyrighted protection of the NEO-PI-R, there is limited flexibility when it comes to adapting, modifying, or customizing the measure to

fit the needs of a given study. The measure cannot be shortened or altered in any way, greatly reducing its flexibility of use, and thus limiting the facilitation of research.

McCord (2002) created a measure to address the lack of flexibility associated with the NEO-PI-R. By not copyrighting his measure, McCord ensured that it could not only be used free of charge, but also be modified and customized to advance research in the area of personality. McCord developed the M5 Questionnaire, a measure of normal adult personality based on the FFM, which follows the hierarchical structure of facets and domains similar to that presented by Costa and McCrae (1995). The M5 contains 336 items, all of which were chosen from Goldberg's International Personality Item Pool (2001). Items are presented in first person statements (i.e., "Like to solve complex problems," "Easily resist temptations," "Plunge into tasks with all my heart") and are rated on a 5-point Likert scale, ranging from (1) Inaccurate to (5) Accurate. Individuals are asked to choose a rating that best represents the level at which each item reflects their individual personality. The M5 has been shown to be a valid and reliable measure of normal adult personality (Proctor & McCord, 2009a; Proctor & McCord, 2009b)

Personality Continuity: Infancy Through Adulthood

Lewis (2001) emphasized the importance of "consistency across time, place, and context" (p. 68) when exploring personality, as the very heart of personality research is to present "a set of enduring individual characteristics that are stable and that are consistent across place, tasks, and people's interactions" (p. 67). Nonetheless, there has been debate regarding the consistency of personality traits across several factors—in particular, age.

It is evident that children have distinct personality characteristics that one can compare to adult traits. One of the first in-depth studies regarding personality traits in

children was conducted by Digman and Inouye (1986). In this study, children ages 11-12 were rated on 43 characteristics; five factors paralleling the FFM emerged from these characteristics. Since this initial study attempting to characterize childhood personality, many studies have explored the presence of personality in children. Mervielde, Buyst, and De Fruyt (1995) found the FFM to be present in children as young as 4 years of age, and Abe and Izard (1999) have found substantial validity for the FFM being present in younger children as well. Therefore, the debate lies not in whether there are tangible characteristics to measure, but whether these characteristics are stable over time. There is disagreement among researchers regarding the stability of personality characteristics across the lifespan, in particular during childhood and adolescence; empirical data supports both sides of this dichotomy (Abe, 2005; McCrae & Costa, 1990;). The importance of this issue lies in the ability to use childhood personality as a predictor of adult personality.

Costa and McCrae (1990, 1994) found personality to stabilize around the age of 30 and suggested that it remains invariant throughout adulthood. Researchers speculate that prior to the age of 30, maturation and developmental changes contribute to changes in personality, thus suggesting that personality characteristics are unstable during early childhood years, and even into adolescence (Costa & McCrae, 1994; Hampson & Goldberg, 2006; Lewis 2001; McCrae, Costa, Pedros de Lima, Simoes, Ostendorf, Angleitner, Marusic, Bratko, Caprara, Barbaranelli, Chae, 1999). Longitudinal studies have found personality traits to present only weak correlations over time (Lewis, 2001). For example, Agreeableness and Conscientiousness have been found to increase with age, while younger adults and adolescents often show higher Neuroticism, Openness to

Experience, and Extroversion in older adults (McCrae et al., 1999). Hampson and Goldberg (2006) found both childhood personality and adulthood personality to remain stable, but as two separate entities; this stability does not extend across these two separate intervals. Also, while there was some stability presented within childhood characteristics, the stability found in adulthood personality is much more convincing. This evidence supporting such fluctuations makes childhood personality a moot point when exploring personality in adults, thus reducing its ability to serve as a predictive tool for later trait levels.

On the contrary, Abe (2005) found there to be “striking continuities in personality from early childhood to adolescence” (p. 423). Children as young as age 3 ½ were found to have consistency among personality characteristics measured using the FFM into their adolescent years. Thus, some research suggests that not only is it apparent that children present measurable personality characteristics at the age of 3, but also that these characteristics are predictive of later personality traits. Another longitudinal study by Caspi, Harrington, Milne, Amell, Theodore, and Moffitt (2003) yielded noticeable similarities in characteristics of participants studied at age 3 and again at ages 18 and 26. This link suggests that behavior in childhood is a strong precursor to personality in adulthood and may present a “foundation of the human personality in the early years of life” (Caspi et al., 2003, p. 496). Overall, these studies present the ability to use the FFM in childhood as a valid predictor of personality through adolescence and adulthood.

Halverson, Kohnstamm, and Martin stated that the FFM is “robust across different groups of subjects, item pools, instruments, and methods of analysis, as well as across different languages and cultures” (1994, p. 2). However, with empirical evidence

presenting both sides of these arguments pertaining to personality traits, especially in children, we see the need for further research to inform this debate.

Why is Childhood Personality Important?

Further research assessing how childhood personality constructs parallel the five personality domains in adults would only bolster the robust nature of the FFM. A concrete set of child personality constructs will “begin the process of linking them to adult personality and to studies of adaptive psychological functioning” (Halverson, Havil, Deal Baker, Victor, Pavlopoulos, Besevegis, & Wen, 2003, p. 1003). Furthermore, understanding personality variables in children can help predict and understand school performance, behavior, resiliency, future mental illness, and “can serve as predictors of possibly relevant pathways to adult personality differences” (Halverson et al., 2003, p. 1016). Understanding childhood personality will “allow researchers to clarify and explore the links between child personality and measures of adult personality” (Halverson et al., 2003, p. 1016).

Having a measure to aid in the exploration of the FFM in children would “open an avenue where we might link child and adult literatures” and would hold “considerable promise for understanding personality in the life-span context” (Havill, Allen, Halverson, & Kohnstamm, 1994, p. 385). However, this helpful, predictive nature of childhood personality has plagued the field of psychology for some time and has yet to be satisfied (Hampson & Goldberg, 2006). One issue that needs to be considered when exploring this link and the FFM in children is temperament.

Temperament Versus Personality

Historically, temperament has been used to categorize individual differences in children. Temperament has been referred to as “individual differences that appear from birth onward, remain relatively stable across the lifespan, and presumably have a strong(er) genetic or neurological basis” (Goldsmith, Buss, Plomin, Rothbart, Thomas, Chess, Hinde, McCall, 1987, cited in De Pauw, Mervielde, & Van Leeuwen, 2009, p. 309). There is a strong biological foundation when referring to temperament. This differs from interpretations of adult individual differences and personality, which is thought to have a much less genetic foundation and to focus more on feelings and thoughts.

There is a lack of empirical research that relates temperament and personality models when considering childhood differences (De Pauw, Mervielde, & Van Leeuwen, 2009). Some believe that this divide may be more historical and theoretical, and less based on any empirical reasoning. Despite this theoretical gap, some studies have attempted to bridge the gap between two potentially related fields. Studies including that of Lanthier and Bates (1995, cited in Hagekull & Bohlin, 2003) have successfully linked temperament and personality traits from infancy through late teens, suggesting temperament may be useful in the validation of exploring personality traits in children and young adults. However, this is an area of research that requires more exploration. Strelau (1987) believes in the importance of not dividing personality and temperament into two separate, mutually exclusive areas of study. Rather, integrating these two theories may ultimately help rather than hinder in the evolution of studying individual differences in children; seeing them as complementary paradigms will expand our knowledge in this area.

Measuring Childhood Personality: Rater Differences

It is essential to consider several factors when discussing the importance of a mode of assessment for childhood personality. Stability over time, reliability across those completing the measure (i.e., teacher versus parent, mother versus father), and the environment in which the observer most often interacts with the child all influence the development of such a measure. The method by which data are collected is an element that ultimately affects the reliability of a measure. An important debate that arises regarding this issue is inter-rater reliability—the reliability of the measure across those completing the measure.

Since children are unable to complete personality measures themselves, it is common for an adult to complete the measure based on his or her interactions with the child. Information may be collected from several sources, including the child's parents, peers/siblings, or teachers. Here, the issues of relationship to the child and the context in which the rater interacts with the child become a factor. Also, the length of time the rater has known the child and how well he or she knows the child may become a concern. Furthermore, teachers are more likely to fall victim to halo effects; whereas parents are only rating their children, teachers may be evaluating many children at once. Barbaranelli (Barbaranelli, Caprara, Rabasca, Pastorelli, 2003; Barbaranelli, Paciello, Di Giunta, Caprara, 2007) explored the potential variance created by using different raters to evaluate the same children. In these studies, there was significant convergence across raters (parent, teacher, self). Yet this potential bias in data needs further exploration.

Current Measures of Childhood Personality

While many have attempted to associate childhood personality to adult traits, there remains one missing link: an adequate tool to measure personality in children. Many instruments and theories provide insight into personality characteristics of adults, yet little has been done to explore such factors for children (Barbaranelli, Caprara, Rabasca, & Pastorelli, 2003; Havill, Allen, Halverson, & Kohnstamm, 1994; Slotboom, Havill, Pavlopoulos, & De Fruyt, 1998), in particular, children ages 3 to 6.

While there has been some exploration within this area of psychology, empirical consistency is lacking across instruments (Halverson et al., 2003); a sound measure of childhood personality is greatly needed. There is a large gap in personality research regarding the development of personality in children, presenting a compelling disadvantage in child personality research. With this lack of focus on child personality structure, there has been insufficient exploration into the link between childhood and adult personality. Halverson et al. (2003) state there is a need for a “rigorous analysis of the structure of individual differences in childhood that can then be linked to the now growing consensus of adult personality” (p. 1001).

With the NEO-PI-R being one of the most widely used instruments for measuring normal adult personality traits, it would only make sense to create a childhood version of this scale. However, due to copyright issues, this scale cannot be modified for use with this population. Therefore, the creation of a new scale to measure these constructs in this new population would be extremely helpful.

Of the successful attempts made to assess childhood personality, Halverson et al. (2003) have been in the forefront of childhood personality research. Halverson et al.

(2003) developed the Inventory of Children's Individual Differences (ICID) to address the dilemma in lacking empirical evidence for the presentation of the FFM in childhood. This measure was created from open-ended parental interviews. The ICID explored variables outlining childhood personality, which collapse into a framework identical to the Big Five Model. These dimensions are stable across children ranging from age 3 to early adulthood. From this study, we see that there are indeed measurable personality constructs that can be identified in children as young as 3 years of age. The ICID has helped facilitate exploration in childhood personality differences, yet this measure is still in development.

Barbaranelli also explored personality development, but focused on late childhood and early adolescence (Barbaranelli et al., 2003; Barbaranelli et al., 2007). Their measure, the Big Five Questionnaire—Children version (BFQ-C) suggests that there are five clear personality domains that emerge in children ages 8-13. While this does not focus on the age range still greatly lacking research (3-5 years old), it offers a bridge through the pre-teen years into young adulthood, and may be useful when exploring data across the lifespan.

Though a few measures of childhood individual differences exist, there is still a need for more empirically based instruments in this area in order to adequately assess the representation of the five-factor model in children (Caspi & Shiner, 2006). Having a variety of instruments measuring individual differences in children available is better for research purposes and thus creates opportunities for expanding knowledge in this area. Also, the development of another measure focusing on childhood individual differences will aid in determining external validity of these measures.

The M5-PS Questionnaire

With the apparent necessity of another valid, reliable measure of childhood personality, Grist and McCord (2006) created the M5-PS Questionnaire, an adaptation of the original M5 Questionnaire (McCord, 2002). The M5-PS Questionnaire focuses on the personality and behavior of preschool children, primarily 3-6 years of age. The development of the M5-PS involved adapting the original M5 to focus on the preschool population. As the M5-PS would be filled out by the children's parent, teachers, or other observing sources, items were first re-worded from the implied first person to a third person perspective (i.e., "has a vivid imagination"). Items presenting content that was irrelevant to a preschool population (i.e., "am politically liberal") were eliminated. Finally, a panel of judges (including academic professors, parents of children of this age, and preschool teachers) rated the relevance of the remaining items to a typical preschool-aged child. All items were sorted by their relevance and items seen as less relevant were discarded. The resulting scale contained 90 items (18 items exploring each of the five factors) and can be completed in 10 minutes (Grist, Socha, & McCord, under review).

The M5-PS, like its close relative, the M5, is not copyrighted, and therefore can be used free of charge. The ability to modify and adapt the M5-PS makes it user-friendly and lends itself well to research. The M5-PS is yet another tool adapted from IPIP (2001) items set that is widely used with adults; expanding these items to address childhood personality traits expands the usefulness of these items. The creation of the M5-PS as a personality measure focusing on children facilitates further research in this area. Having more tools available will thus facilitate further research. Also, as it was modified from the M5, it creates an open door for longitudinal studies of individual differences.

Statement of the Problem

This research is meant to provide scale development and preliminary psychometrics for the M5-PS Questionnaire. The five scales assessed (Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness) will be refined through item removal to provide the most accurate assessment of each trait possible and increase internal validity. Furthermore, by correlating the M5-PS with a widely used temperament scale, the Childhood Behavior Questionnaire-Very Short Form (CBQ-VSF; Putnam & Rothbart, 2006) before and after M5-PS scale refinement, it can be determined if external reliability improves after scale refinement. As the M5-PS is a relatively new scale, these psychometric properties are necessary in scale development.

METHOD

Participants

Eighteen student volunteers in an Education course at Western Carolina University served as participants for the current study. Each student was enrolled in a student-teaching practicum, in which he or she observes and interacts with children in preschool and/or pre-kindergarten classrooms and daycares across Western North Carolina. Students had been interacting with these children for 1 semester (about 4 months) and were offered extra credit in their Adaptations and Modifications for Younger Children with Disabilities course for evaluating these children. Student volunteers served as the participants, as their ratings of these children produced the data set. Therefore, consent forms for the children were not needed, as they were not directly involved with data collection. All data were based on student volunteer observations of children. Due to the observational nature of this study, the Institutional Review Board (IRB) policy states that there was no need to obtain consent from parents of the children.

One hundred twenty-two children were selected, based on age requirements, by the student volunteers. The average age of children observed was 51 months, (4 years, 3 months) and ranged from 35 months (2 years, 11 months) to 72 months (6 years) old, with a standard deviation of 7.14 months. Of the 122 children, 61 were male and 61 were female. Ethnicity varied, with 74% Caucasian children, 13% Hispanic, and the remaining 13% of children identified as Asian, African-American, Native American, or Other.

Measures

The following measures were completed by the participants, based on their observations of the children in their student-teaching classrooms.

M5-PS Questionnaire. The M5-PS Questionnaire (Grist & McCord, 2006) is an adaptation of the original M5 Questionnaire (McCord, 2002), which assesses personality traits in adults. The M5-PS is a preschool version of the M5 designed to explore personality traits in preschool-aged children (3-6 years old). The M5-PS contains 90 items and is designed to be completed by a parent, teacher, or other individual who has a close relationship with the child. Each item is worded in the third person (i.e. “has a rich vocabulary”) and is scored using a 5-point Likert scale (ranging from (1) Inaccurate to (5) Accurate) reflecting the informants’ impressions of the child they are assessing. The M5-PS takes approximately 10 minutes to complete. Further psychometrics of this measure have not yet been explored.

Children’s Behavior Questionnaire-Very Short Form. The Children’s Behavior Questionnaire (CBQ)-Very Short Form (Putnam & Rothbart, 2006) is a measure of temperament for children 3 to 7 years old. It was designed as an abbreviated version of the original Children’s Behavior Questionnaire (Rothbart, Ahadi, Hershey, and Fisher, 2001). Through factor analysis of items, the CBQ-VSF reveals three dimensions of childhood temperament: surgency, negative affect, and effortful control (Putnam & Rothbart, 2006). Negative affect is characterized by high levels of sadness, fear, discomfort, frustration, and low levels of soothability. High levels of impulsivity, activity

level, and pleasure-seeking behavior coupled with low levels of shyness present the surgency dimension. Finally, effortful control is presented through high attention control and inhibitory control along with low perceptual sensitivity. The Very Short Form CBQ contains 36 items and is intended to be a parent or teacher-rating instrument. The rater responds to each item using a 7-point Likert scale, with choices ranging from 1 (extremely untrue of your child) and 7 (extremely true of your child). All items are presented in the third person and in statement form (i.e. “Likes being sung to”, “Prefers quiet activities to active games”, and “Is good at following instructions.”). The Very Short Form CBQ presents high internal consistency for each dimension across samples, ranging from .62 to .78, satisfactory criterion validity, stability over time, and agreement across informants (maternal ratings vs. paternal ratings) (Putnam & Rothbart, 2006). A copy of the CBQ-VSF is not included in the Appendix due to copyright conflicts.

RESULTS

The scale reliability procedure in SPSS 16.0 was used to analyze each of the 5 initial 18 item domain scales to achieve optimal internal consistency. Items were considered for removal based on two criteria: item correlation with scale total and effect on Cronbach's alpha of the complete scale if item were removed. Some trial and error in item removal was utilized in order to achieve an overall maximum Cronbach's alpha, while still maintaining adequate scale lengths. Criteria set for deciphering adequate Cronbach's alpha values and scale lengths were as follows: Cronbach's alpha of .9 or higher for use in a clinical setting, .8 for non-clinical, real life setting, and .7 for use as a research instrument, and a goal of no fewer than 10 item per scale, 8 items at the very least. See Table 2 for original and revised Cronbach's alpha value comparisons.

A 16-item Conscientiousness scale remained after the removal of items 45 and 86 (Appendix A). Cronbach's alpha improved from .882 to .888. The removal of one item, number 36, resulted in improvement in Cronbach's alpha from .805 to .827 for Extraversion. Further item removal was not particularly helpful. This scale remained at 17 items. For the Agreeableness scale, the removal of 5 items resulted in an improved Cronbach's alpha from .708 to .804. Items removed are numbered 3, 27, 31, 56, and 77. This resulted in a 13-item scale. Assessment of the Neuroticism scale suggested the removal of 2 items, resulting in a 16-item scale. This resulted in an improvement in Cronbach's alpha from .854 to .865. Items 9 and 81 were removed. Openness to Experience presented a more difficult task to obtain a satisfactory Cronbach's alpha. A scale of 10 items after the removal of 8 items (items 7, 14, 26, 30, 35, 46, 68, and 88) presented a noticeable increase of Cronbach's alpha from .312 to .551. The further

removal of items 17 and 52, resulting in an eight-item scale, produced a substantial Cronbach's alpha of .772.

Table 2: Cronbach's Alpha Before and After Item Removal

Scale	Cronbach's alpha: Before item removal	Cronbach's alpha: After item removal
Conscientiousness	.882	.888
Extraversion	.805	.827
Agreeableness	.708	.804
Neuroticism	.854	.865
Openness to Experience	.312	.551/.772

All Cronbach's alpha values based on full sample of 122 participants.

The relationship between temperament scales, measured with the CBQ, and personality domains, assessed using the M5-PS, was investigated through the use of Pearson product-moment correlation coefficients. Initial correlations of these two measures before M5-PS domain scale refinement are shown in Table 3.

Conscientiousness presented a weak yet significant negative correlation with surgency ($r = -.259$, $p < .01$) and a strong positive relationship with effortful control ($r = .543$, $p < .01$). There was a significant strong positive relationship between Extraversion and surgency ($r = .513$, $p < .01$). Agreeableness significantly correlated negatively with surgency ($r = -.327$, $p < .05$) and negative affect ($r = -.429$, $p < .01$). Neuroticism and negative affect had a strong significant positive relationship ($r = .601$, $p < .01$). Finally, Openness to Experience was found to have a very weak positive correlation with effortful control ($r = .266$, $p < .05$).

Table 3: CBQ and M5-PS Correlations Before Item Removal

CBQ-VSF				
M5-PS Original Scales		Surgency	Negative Affect	Effortful Control
	Conscientiousness	-.259**	-.009	.543**
	Extraversion	.513**	-.067	.028
	Agreeableness	-.327**	-.429**	.154
	Neuroticism	-.024	.601**	.051
	Openness to Experience	.032	.058	.266*

* $p < .05$, ** $p < .01$. All correlations based on full sample of 122 participants.

After M5-PS scale refinement and item removal at the domain level, each personality trait was once again correlated, using Pearson product-moment correlation coefficients, with the three temperament scales of the CBQ. Conscientiousness had a weak yet significant negative correlation with surgency ($r = -.229$, $p < .05$) and a significant positive correlation with effortful control ($r = .339$, $p < .01$). Extraversion had a significant strong positive relationship with surgency ($r = .528$, $p > .01$) and a weaker, yet still significant positive relationship with effortful control ($r = .253$, $p < .01$). Agreeableness and effortful control had a significant positive correlation ($r = .284$, $p > .01$), while Neuroticism presented a weak, yet significant positive relationship with negative affect ($r = .214$, $p < .05$). Openness to Experience had significant positive correlations with both negative affect ($r = .207$, $p < .05$) and effortful control ($r = .355$, $p < .01$).

Table 4: CBQ and M5-PS Correlations After Item Removal

CBQ-VSF				
M5-PS Refined Scales		Surgency	Negative Affect	Effortful Control
	Conscientiousness	-.229*	.032	.339**
	Extraversion	.528**	.171	.253**
	Agreeableness	-.167	-.069	.284**
	Neuroticism	-.156	.214*	-.140
	Openness to Experience	.060	.207*	.355**

* $p < .05$, ** $p < .01$. All correlations based on full sample of 122 participants.

DISCUSSION

General Conclusions

After item removal at the domain level, the M5-PS presented higher internal consistency for each of the five personality traits: Conscientiousness, Extraversion, Agreeableness, Neuroticism, and Openness to Experience. While Conscientiousness presented an initially strong internal consistency using the full 18 items, the removal of 2 items increased the consistency slightly. The internal consistency of Extraversion also increased after the removal of 1 item, as did the Neuroticism scale after the removal of 2 items. Agreeableness improved considerably after removing 5 items. Each of these four domains presents internal validity adequate to be used in non-clinical and research settings. The refinement of these scales was successful; yet there remains room for improvement in order to bring these scales to the level necessary for clinical use. Standing alone, these four scales present a promising depiction of the success of the M5-PS as a tool for measuring childhood personality, yet require further review.

The refinement of the Openness to Experience scale required the removal of several items, as the initial internal validity of the full 18-item scale was extremely low. After the removal of 8 items, this scale showed a substantial increase in internal validity, but not enough for use in any research or clinical setting. However, the removal of 10 items improved the internal validity to a level at which this scale would be considered valid as a research instrument. Unfortunately, such a minimal number of items on a scale is not recommended, thus negating the positive increase in internal validity. This finding bolsters the common assertion that Openness to Experience is the weakest, most abstract, and most intangible of the five personality domains.

After item removal, 72 items remain on the M5-PS Questionnaire (when considering a 10-item openness scale).

Exploration of external validity of the M5-PS as compared to temperament scales on the CBQ-VSF produced less compelling results. The full 90-item M5-PS found strong correlations between temperament factors and personality domains. Extraversion and surgency had a strong positive relationship, Conscientiousness and effortful control had a strong positive relationship, and Neuroticism and negative affect had a strong positive relationship. After item removal, there was tremendous fluctuation in both the level of significance and the direction of correlation for many temperament scale and personality domain relationships.

From this, we can ultimately conclude that the external validity of the M5-PS with the CBQ-VSF did not improve after scale refinement. Through this fluctuation of relationships, it is evident that further exploration and scale refinement is necessary. Therefore, the M5-PS requires further revision and is not, at this time, ready for distribution. Additional scale refinement of the five domain scales needs to be conducted to improve internal consistency, and may also benefit from comparison with additional childhood personality or temperament scales to improve external validity.

Limitations and Future Research

The relatively small sample size used in this study, as well as the localized geographical selection of children assessed, may limit the ability to generalize the results of this study. Also, this small sample size may hinder the ability to refine scales at a deep enough level necessary to obtain optimal internal consistency. Other limitations to take into account include the relationship between the student volunteers completing the M5-

PS and the children they were observing. Their relationship was restricted to a pre-kindergarten/ daycare setting, which is much more structured than a home setting, forces children to be immersed in a social setting with other children, and may have a different level of discipline than would be found at home. The potential formality, social demands, and teacher-student relationship may have influenced the rating of items on the M5-PS.

With this said, future areas of research will address these items, as well as expand on the current study. Increasing the sample size, as well as offering more diversity in culture, language, geographical setting, and socioeconomic status may bring forth results presenting more definitive conclusions. Comparing parent and teacher administration of the M5-PS may address any rater bias or inconsistency that may have been present in the current study.

One area of future research that is necessary in order to improve psychometrics of the M5-PS is a comparison with other temperament and childhood personality assessments. As one of the many goals of this study was to aid in producing a scale as sound and reliable as those currently dominating the field of temperament, creating external validity with these scales would greatly bolster the reliability of the M5-PS. The abundance of convincing research done on temperament scales is both motivation and rationale for why such a great interest has been placed on the need to create such a positive applicability for the M5-PS. Along with the tremendous need for strong external validity of the M5-PS, further psychometrics need to be explored, such as test-retest reliability and inter-rater reliability. Also, longitudinal studies involving the M5-PS may offer a look into the development and stability of personality traits throughout the

lifespan. The M5-PS is in need of further refinement and comparison. However, the present study acts as the start of this refinement process.

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APPENDIX

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Appendix A

M5-PS Questionnaire

Cathy L. Grist and David M. McCord
Western Carolina University

Child's Name: _____ Age: _____ M F Date: _____

Child's Ethnicity (circle one): White Black Hispanic Asian Native American Other

Teacher's Name: _____ Years of Experience: _____

- This is a personality questionnaire, which should take about 10 minutes. There are no right or wrong answers to these questions; you simply respond with the choice that describes the child best.
- Without spending too much time dwelling on any one item, just give the first reaction that comes to mind.
- In order to score this test accurately, it is very important that you answer *every* item, without skipping any. You may change an answer if you wish

M5-PS Questionnaire						
		Innaccurate	Moderately Innaccurate	Neither	Moderately Accurate	Accurate
1	Worries about things	0	0	0	0	0
2	Has a vivid imagination	0	0	0	0	0
3	Distrusts people	0	0	0	0	0
4	Completes tasks successfully	0	0	0	0	0
5	Gets angry easily	0	0	0	0	0
6	Takes charge	0	0	0	0	0
7	Seldom gets emotional	0	0	0	0	0
8	Breaks rules	0	0	0	0	0
9	Is easily intimidated	0	0	0	0	0
10	Makes friends easily	0	0	0	0	0
11	Trusts others	0	0	0	0	0
12	Gets irritated easily	0	0	0	0	0
13	Likes music	0	0	0	0	0
14	Experiences emotions intensely	0	0	0	0	0
15	Tries to follow the rules	0	0	0	0	0
16	Is always busy	0	0	0	0	0
17	Prefers to stick with things that he/she knows	0	0	0	0	0
18	Is easy to satisfy	0	0	0	0	0
19	Likes to solve complex problems	0	0	0	0	0
20	Radiates joy	0	0	0	0	0
21	Jumps into things without thinking	0	0	0	0	0
22	Tries to excel at what they do	0	0	0	0	0
23	Is indifferent to the feelings of others	0	0	0	0	0
24	Is comfortable in unfamiliar situations	0	0	0	0	0
25	Is always on the go	0	0	0	0	0
26	Dislikes changes	0	0	0	0	0
27	Can't stand confrontations	0	0	0	0	0
28	Has a lot of fun	0	0	0	0	0
29	Is afraid of many things	0	0	0	0	0
30	Loves to daydream	0	0	0	0	0
31	Is wary of others	0	0	0	0	0
32	Sticks to the rules	0	0	0	0	0
33	Feels comfortable with him/herself	0	0	0	0	0
34	Tries to lead others	0	0	0	0	0
35	Is not easily affected by his/her emotions	0	0	0	0	0
36	Likes to take his/her time	0	0	0	0	0
37	Works hard	0	0	0	0	0
38	Seeks adventure	0	0	0	0	0
39	Becomes overwhelmed by events	0	0	0	0	0
40	Is relaxed most of the time	0	0	0	0	0
		Innaccurate	Moderately Innaccurate	Neither	Moderately Accurate	Accurate

M5-PS Questionnaire						Page 2
		Innaccurate	Moderately Innaccurate	Neither	Moderately Accurate	Accurate
41	Does not understand things	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
42	Gets upset easily	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
43	Does not like crowded events	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
44	Knows how to get around the rules	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
45	Wants everything to be "just right"	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
46	Does not like the idea of change	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
47	Loves action	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
48	Feels comfortable around other people	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
49	Trust what people say	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
50	Loves order and regularity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
51	Loves to help others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
52	Is a creature of habit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
53	Yells at people	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
54	Plunges into tasks with all their heart	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
55	Has a rich vocabulary	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
56	Knows the answers to many questions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
57	Knows how to cope	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
58	Gets stressed out easily	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
59	Acts comfortably with others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
60	Enjoys being part of a group	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
61	Leaves his/her belongings around	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
62	Tries to influence others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
63	Is concerned about others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
64	Tells the truth	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
65	Is interested in many things	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
66	Involve others in what he/she is doing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
67	Has frequent mood swings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
68	Experiences very few emotional highs and lows	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
69	Does the opposite of what is asked	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
70	Insults people	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
71	Has difficulty starting tasks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
72	Loses his/her temper	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
73	Likes to begin new things	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
74	Gets back at others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
75	Gets overwhelmed by emotions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
76	Laughs aloud	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
77	Suffers from others' sorrows	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
78	Acts without thinking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
79	Adapts easily to new situations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
80	Does't see the consequences of things	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
81	Is able to stand up for his/herself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
82	Makes him/herself the center of attention	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
83	Amuses his/her friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
84	Sympathizes with others' feelings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
85	Is easily frustrated	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
86	Respects others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
87	Messes things up	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
88	Is demanding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
89	Starts conversations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
90	Finishes what he/she starts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
		Innaccurate	Moderately Innaccurate	Neither	Moderately Accurate	Accurate