

EVALUATION OF A CLINICAL ASSUMPTION: ANALYSIS OF SELF-REPORTED
ADAPTIVE BEHAVIORS AND ACQUIESCENT RESPONSE STYLE IN ADULTS
WITH MILD INTELLECTUAL DISABILITY/MENTAL RETARDATION

by

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A DISSERTATION

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ABSTRACT

Traditionally, adaptive behavior assessments have excluded the opinions and ratings of an individual assessed for intellectual disability/mental retardation (ID/MR). This exclusion has been justified via the clinical assumption that individuals with ID/MR are unable to provide valid reports of their own abilities. The current study directly investigated this assumption. Using the Survey Interview Form of the Vineland Adaptive Behavior Scales—Second Edition (Vineland-II), a standardized adaptive behavior measure, the current study compared the self-reported adaptive abilities of 28 individuals with Mild ID/MR with their direct care providers' (DCPs) ratings. Experimental measures designed to detect response acquiescence (yea-saying) and exaggeration of adaptive functioning deficits were also administered. Results indicated that when using the Vineland-II, resultant standard scores on all major domains of adaptive behavior were not significantly different. Age and sex effects were partially observed. The presence of yea-saying did not significantly predict concordance among dyad members. The experimental measure of response bias demonstrated relatively poor specificity and will require revisions to item content. Preliminary conclusions assert that individuals with Mild ID/MR should not necessarily be excluded from their own adaptive behavior assessments. Limitations and contributions of the study as well as future research directions are discussed.

DEDICATION

To GKH. Thanks.

LIST OF ABBREVIATIONS AND SYMBOLS

α	Cronbach's index of internal consistency
ADLs	Activities of daily living
<i>CI</i>	Confidence interval
DCP	Direct care provider
<i>d</i>	Cohen's <i>d</i> effect size estimate
<i>df</i>	Degrees of freedom
GLM	Generalized linear model
η^2	Eta squared effect size estimate
<i>F</i>	F distribution, Fisher's <i>F</i> ratio
ICC	Intraclass correlation consistency measure
ID/MR	Intellectual disability/mental retardation
<i>LL</i>	Lower limit (as of a CI)
<i>M</i>	Mean
η_p^2	Partial eta squared effect size estimate
<i>p</i>	Probability value
<i>r</i>	Estimate of the Pearson product-moment correlation coefficient
<i>SD</i>	Standard deviation
<i>SE</i>	Standard error
<i>SEM</i>	Standard error of measurement
<i>t</i>	Sample value of the <i>t</i> -test statistic

<i>U</i>	Mann-Whitney U test statistic
<i>UL</i>	Upper limit (as of a CI)
<i>v</i>	Vineland-II's <i>v</i> -scale score; Mean of 15 with a standard deviation of 3
<i>z</i>	Standardized score: the value of a statistic divided by its standard error
<	Less than
=	Equal to

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CHAPTER 1

INTRODUCTION

Although the constructs that generally underlie the condition of mental retardation have remained constant for many years, the models and definitions used to describe it have undergone continuous change. Recently, a professional movement toward self-advocacy for individuals with intellectual disabilities has led some clinicians to evaluate the policies and practices used with this special population (AAIDD, 2007; 2008). As part of that endeavor, the current study focused on investigating the validity of clinical practices that do not allow individuals with mental retardation to provide self-reports of their adaptive abilities on standardized measures. Of primary importance to this exclusionary practice is the widely-held belief that individuals with intellectual disabilities tend to possess an acquiescent or ‘yea-saying’ response style.

What’s in a Name?

Approximately one percent of the population of the United States is estimated to meet criteria for a diagnosis of mental retardation (American Psychiatric Association [APA], 2000; American Association on Intellectual Disabilities [AAIDD], formerly known as the American Association of Mental Retardation [AAMR], 2008). In recent years, the condition and developmental disability known as “mental retardation” has undergone both a name change and an intense review of its underlying constructs (AAIDD, 2008; Greenspan, 2006; Schalock, et al., 2007; Switzsky & Greenspan, 2006). Although not yet universally accepted in the mental health community, the replacement of the name “mental retardation” with the term “intellectual

disability” for individuals characterized with this condition will likely continue. This name change is supported by the AAIDD for a multitude of reasons including the following cited by Schalock and colleagues (2007, p.118):

...the term *intellectual* disability (a) reflects the changed construct of disability described by the AAIDD and WHO [World Health Organization], (b) aligns better with current professional practices that focus on functional behaviors and contextual factors, (c) provides a logical basis for a social-ecological framework, (d) is less offensive to persons with the disability, and (e) is more consistent with international terminology.

Although the condition’s name has changed, the definition and assumptions that coincide with the construct of intellectual disability/mental retardation has remained relatively stable during the last few years (Schalock et al., 2007). Both the AAIDD (2008) and the APA’s *Diagnostic and Statistical Manual, Fourth Edition, Text Revision (DSM-IV-TR; 2000)* have asserted that intellectual disability/mental retardation (ID/MR) is characterized by significant deficits in intellectual and adaptive functioning that begin before an individual reaches 18 years of age. The two bodies’ definitions have differed, however, concerning conceptualizations of the levels of severity found in ID/MR and definitions of adaptive behavior or functioning. The APA has described ID/MR in terms of level of severity based on an individual’s score on a standardized measure of intelligence, while the AAIDD has conceptualized the condition in terms of the amount of external support needed for an individual to successfully interact with his or her environment.

Both the APA and the AAIDD have asserted that adaptive behavior refers to an individual’s ability to function successfully in society within the context of his or her particular situation or environment (Luckasson et al, 2002; AAIDD, 2008; APA, 2000). In line with the

AAIDD's 1992 definition (AAMR, 1992), the APA's *DSM-IV-TR* definition states that an individual must possess deficits in at least two of the following skill areas to qualify as having significant impairment: "communication, self-care, home living, social/interpersonal skills, use of community resources, self-direction, functional academic skills, work, leisure, health, and safety" (APA, 2000, p. 41). Notably, in 2002, the AAIDD replaced their previous conceptualization of adaptive behavior (that of multiple skill areas) with three broad skill domain classifications: social, practical, and conceptual. These domains were adopted from Greenspan, Switzky, and Granfield's (1996) tripartite model of intelligence (Greenspan & Switzky, 2003) and various conceptual models of personal competence (Greenspan, 1999; Greenspan & Driscoll, 1997; Gresham & Elliot, 1987; Thompson et al., 1999, as cited in Luckasson et al., 2002). Some examples of conceptual adaptive functioning skills include reading and writing, receptive and expressive language, and money concepts. Social adaptive behavior skills are related to gullibility, responsibility, interpersonal interactions, law obedience, and rule following. Practical adaptive functioning refers to daily living skills such as toileting, mobility, eating, dressing, driving, meal preparation, medication dispensing, and maintaining household activities (Luckasson, et al., 2002).

Assessment of Adaptive Behavior

In recent years, a growing number of professionals and public-interest groups have called for an increase in the development of ways to aid individuals with ID/MR with self-advocacy. Some of the notable gains resulting from this request include: (1) the AAIDD name change from 'mental retardation' to intellectual disability (a presumably less offensive term), (2) greater access to community resources (e.g., assisted living facilities and various skills training programs) and (3) greater social and vocational integration (AAIDD, 2007). In addition,

advocacy groups have been created to aid those individuals with ID/MR involved in the legal system, especially since the U.S. Supreme Court ruling in *Atkins vs. Virginia*, which barred the execution of individuals with mental retardation (2002, 536 U.S. 304). Moreover, the AAIDD (2007) has formally recommended that whenever possible, an individual with ID/MR should be allowed to be an active participant in his or her own treatment planning, service provision, and policymaking.

With the increased focus on self-advocacy within many mental health organizations that support the interests of those with ID/MR (e.g., American Psychological Association, American Psychiatric Association, and AAIDD), it is only natural that clinicians should review and reevaluate their everyday practices to determine if changes are needed to provide sufficient support for this movement. One way to begin to undertake such a comprehensive task is to reevaluate current practices with regard to the diagnostic assessment of ID/MR and to the assessment of adaptive skills within this population.

With regard to determination of one's adaptive abilities, the *DSM-IV-TR* states that the assessment of an individual's adaptive skills should be based on information provided by "one or more reliable independent sources (e.g., teacher evaluation and educational, developmental, and medical history)" (APA, 2000, p. 42). Although the *DSM-IV-TR* mentions the possible use of standardized measures of adaptive behavior to aid in information gathering, it does not endorse any specific methodology for obtaining the information needed for a formal diagnostic determination.

Unlike the APA, the AAIDD has asserted a quantitative component into its criteria for significant deficits in adaptive behavior (Luckasson, et al., 2002). Namely, 'significant deficits' equates to a standard score performance on a standardized measure of adaptive behavior that is at

least two standard deviations below the measure's normative mean (e.g., a score of 70 on a measure with a mean standard score of 100 and a standard deviation of 15). The requirement of using standardized instruments (e.g., Adaptive Behavior Assessment System, Second Edition [ABAS-II; Harrison & Oakland, 2003], Scales of Independent Behavior—Revised [SIB-R; Bruininks, Woodcock, Weatherman, & Hill, 1996], and the Vineland Adaptive Behavior Scales—Second Edition [Vineland-II; Sparrow, Cichetti, and Balla, 2005]) has initiated much debate among clinicians performing assessments of adaptive behavior (Brodsky & Galloway, 2003; Doane & Salekin, 2009; Reschly, Myers, & Hartel, 2002; Salekin, 2004; Salekin & Doane, 2009; Stevens & Price, 2006; Tassé, 2009). Some clinicians have wholeheartedly accepted the use of such instruments for diagnostic purposes, while others have remained staunchly opposed to their use (Greenspan, 2006). Providing further diagnostic complication, the decision to use AAIDD versus APA methods and definitions for diagnosing ID/MR may often depend on the setting. For example, a clinician in a treatment setting may use the AAIDD criteria and methodology, while the same clinician may opt for the less methodologically restrictive APA criteria in a forensic setting.

Perhaps the most essential complication involved in the formal assessment of adaptive behavior concerns the reliance on third-party raters or informants to provide information concerning the assessed individual's abilities across a variety of settings. Both the AAIDD (Luckasson, et al., 2002) and the APA (American Psychiatric Association; 2000) recommend that information related to an individual's adaptive behavior should be gathered from independent sources other than the individual's self-report (unlike the majority of other mental health evaluations which may rely on both the individual's self-report and third-party information). One reason for this recommendation is the commonly-held belief among clinicians

and researchers that individuals with ID/MR tend to have an acquiescent or yea-saying response style, which suggests that individuals with ID/MR would likely endorse greater levels of adaptive abilities than they actually possess. The impact of such a response style could potentially be quite dramatic in the context of an assessment for ‘mental retardation’ in a capital case venue (i.e., a sentence of the death penalty as opposed to life in prison without parole).

Regardless of the format of the adaptive behavior assessment (e.g., structured interview, unstructured interview, or standardized comprehensive measure), third parties such as relatives, friends, teachers, caregivers, and occasionally correctional officers are asked by clinicians to offer their opinion regarding the adaptive skills of an individual being assessed for ID/MR (Doane & Salekin, 2009; Reschly, 2009; Tassé, 2009). Critical to the assessment of adaptive behavior is the depth of knowledge of the rater; the rater must know the individual in question intimately enough to be able to confidently rate adaptive abilities on numerous tasks across multiple domains (AAIDD, 2007; Sparrow, Cicchetti, & Balla, 2005; Tassé, 2009).

Unfortunately, some raters may not have interacted with the individual intimately enough to be able to provide a valid estimate of his or her functioning. Also, the rater may, understandably so, wish to “fake-bad” his or her report to ensure a loved one receives a diagnosis of ID/MR in situations of secondary gain (e.g., social security disability or the avoidance of the death penalty; Reschly, 2009). Many clinicians can attest to the unfortunate frequency with which they encounter less-than-ideal informants (e.g., parents that do not live with their adult children with ID/MR, parents who may also have cognitive deficits, correctional officers, and teachers who have not interacted with the individual being rated for many years), and to the negative impact that these informants have on an evaluation of ID/MR in defendants in capital case litigation (Stevens & Price, 2006; Tassé, 2009).

Although many standardized measures of adaptive behavior possess adequate interrater reliability (ranging from approximately $r = .7$ to $.9$; Bruininks, Woodcock, Weatherman, & Hill, 1996; Harrison & Oakland, 2003; Sparrow, Cichetti, & Balla, 2005; Stevens & Price, 2006), there has been no research published concerning the accuracy of an informant's rating relative to the individual in question's actual abilities. Furthermore, this type of third-party rating system introduces numerous threats to the assessment's validity, including instances where the rater or informant may knowingly or unknowingly provide misinformation that relates to his or her own biases or lack of in-depth knowledge. Such a response style, however well intentioned, could result in an inaccurate estimation of adaptive behavior (Luckasson et al., 2002; Beail, 2003; Stevens & Price, 2006). To date, there have been no published measures that attempt to control or detect biases or inaccuracies within informants' ratings of adaptive behavior.

Despite their criticisms, standardized measures of adaptive behavior are frequently employed across a variety of settings, including those directly involved in determination of eligibility for services or protections (e.g., determination for eligibility for Social Security benefits or *Atkins* protection from execution; Reschly, 2009). Their convenience, general comprehensiveness, and relatively low cost will likely aid in sustaining the use of standardized adaptive behavior instruments for quite some time (Doane & Salekin, 2009).

Clinical Assumptions

Unlike many other types of psychological evaluations, the person who is suspected of, or has been diagnosed with ID/MR is rarely, if ever, asked to rate his or her own adaptive skills (Luckasson et al, 2002; APA, 2000; Villenponteaux, DeCoux, & Beardshall, 1998). Historically, the rationale behind excluding an individual with ID/MR from the assessment process relates to the assumption that individuals with ID/MR (1) do not possess the requisite knowledge needed to

rate themselves, (2) generally yea-say or answer questions of all types in the affirmative, (3) possess a general desire to please others, and (4) do not wish to be stigmatized (Beail, 2002; Finlay & Lyons, 2002; Heal & Sigelman, 1995; Ruddick & Oliver, 2005; Sigelman, Budd, Spanhel, & Schoenrock, 1981a; 1981b; Stevens & Price, 2006; Tassé, 2009). As previously mentioned, all of these response styles would likely lead one to conclude that allowing an individual with ID/MR to rate his or her adaptive abilities would lead to endorsement of abilities greater than what he or she truly possesses (AAMR, 2002; Stevens & Price, 2006). Although these assumptions are made in an effort to protect an individual from an inaccurate assessment of his or her functioning, to date no published data exists that directly supports the assumption of ‘lack of knowledge’ on the part of an individual with ID/MR. Furthermore, the limited literature regarding the acquiescence/yea-saying bias assumption is fraught with methodological problems. Also surprising, no direct empirical attention has been paid to the assumptions that a desire to please and avoid social stigma are both invariably present in individuals with ID/MR and have a resultant negative influence on the validity of their self-reported abilities and thoughts, (Finlay & Lyons, 2002; Stevens & Price, 2006). The first two assumptions will be the primary focus of the current study and are described in more depth below.

Not enough knowledge of abilities. A review of the ID/MR subgroups, which are based on severity of deficits and need for support, is useful when attempting to evaluate the assertion that individuals with ID/MR do not have the requisite knowledge to provide the information needed to identify their adaptive behavior abilities. The AAIDD has separated levels of ID/MR in terms of the amount of support the individual needs from others (i.e., Intermittent for individuals who need periodic, low or high intensity support, Limited for individuals who need greater amounts of support for a limited amount of time, Extensive for individuals who need

support over long periods of time, and Pervasive for those who need intensive support for the duration of their lifetime; AAIDD, 1992; 2008; Luckasson, et al, 2002). The American Psychiatric Association (APA) has divided the levels of severity of ID/MR into four classifications: Mild, Moderate, Severe, and Profound (2000). These levels are based on an intelligence quotient (IQ) with a mean of 100 and a standard deviation of 15 points, which reflects the various levels of intellectual functioning and impairment among those individuals who have been administered a current standardized intelligence measure. To be diagnosed with Mild ID/MR, an individual's IQ must be in the range from 50-55 to approximately 70-75. Individuals diagnosed with Moderate ID/MR have a measured IQ that falls within the range of 35-40 to 50-55. A diagnosis of Severe ID/MR includes those individuals whose IQ ranges from 20-25 to 35-40, and individuals who have a measured IQ below 20-25 are diagnosed with Profound ID/MR (APA, 2000). The structure and scoring rubrics of such standardized intelligence tests directly quantify differences found in the knowledge bases and intellectual skills among those within the impaired range (e.g., significant and marked differences in measured intelligence are demonstrable between individuals with IQs in the 60s versus the 40s). As such this relevant literature suggests any assumption that all individuals with ID/MR are homogenous in their knowledge base appears unfounded. Perhaps understanding the nature of within-group ID/MR differences and the presence of relevant base rates can better clarify if an individual with ID/MR has sufficient knowledge base and intellectual ability to identify his or her own adaptive skills.

Notably, individuals with Mild ID/MR comprise approximately 85% of all individuals estimated to meet diagnostic criteria for ID/MR (APA, 2000). Of those who qualify for a diagnosis of Mild ID/MR, a significant number likely go undiagnosed due to various factors

including poor social support and poor educational records (Reschly, 2009). According to the American Psychiatric Association, individuals classified as having Mild ID/MR are “educable,” may be capable of attaining academic achievement in the 6th grade range, and may often possess the skills needed to engage in a vocation that offers a minimal level of self-support (2000). These individuals may need assistance when undergoing various forms of stress to aid them in successful coping skills (APA, 2000; Moore & Jefferson, 1996). In addition, individuals with Mild ID/MR are more susceptible to emotional and behavioral problems (as are all of the other subtypes of ID/MR; Beirne-Smith, Ittenbach, & Patton, 2002) than individuals in the general population. If one is not aware that an individual has been diagnosed with Mild ID/MR, the individual may (to the untrained eye) simply appear to be socially immature, impulsive, and/or sometimes gullible (Moore & Jefferson, 1996).

The available literature concerning the verbal and physical abilities of an individual with ID/MR suggests that as the measured IQ for an individual decreases, the likelihood of his or her ability to effectively communicate his or her thoughts and feelings to others also decreases (APA, 2000; AAMR, 2002; Beirne-Smith, et al., 2002; Crane, 2002; Moore & Jefferson, 1996; Taylor, Richards, & Brady, 2005). With this trend in mind, one could conclude that individuals with Mild ID/MR may be the most likely subtype of individuals with ID/MR to be able to aid in the process of their own assessments, treatment planning, and goals. In other words, as we generally regard individuals with IQs ranging from 80 to 120 differently in terms of their knowledge base and intellectual functioning, might we offer similar notions to those individuals with IQs that fall within the range of 30 to 70?

Acquiescent responding prevents reliable self-reports. The term “acquiescence” is usually used in the literature to describe an individual’s tendency to agree with or answer yes to a

query regardless of its content (Beail, 2002; Finlay & Lyons, 2001; 2002; Heal & Sigelman, 1995; Raply, 2004; Perkins, 2007; Sigelman, et al., 1981b). Although often referred to in relation to the response style of individuals with intellectual disabilities, acquiescence has been readily observed as a trend in the general population's responses to measurements of attitudes and personality (Finlay & Lyons, 2001; 2002; Heal & Sigelman, 1995; Winkler, Kanouse, & Ware, 1982). For example, when college students were administered a variety of measures in true/false format, they tended to give a "true" response, regardless of the content of the measures (Wehmeyer, 1994).

The widely held belief that all individuals with ID/MR have an acquiescent or "yea-saying" response style is a unique phenomenon to have emerged within the last 25 years (Finlay & Lyons, 2002; Rapley, 2004). The acceptance of the validity of this concept within the mental health community is so well-entrenched, one would expect to find an abundance of literature to support this assumption. That said, very little literature appears to exist that directly supports this notion (Rapley, 2004). 'Confirmation' of the ID/MR-specific yea-saying or acquiescent response style hypothesis can be traced back to the outcomes of three studies endeavored by Sigelman, Budd, Spanhel, and Schoenrock (1981a; 1981b) and Sigelman, et al., (1982). In the first two studies, researchers asked either "yes-no" formatted questions or "either-or" questions to a group of institutionalized adults ($N = 58$) with a mean IQ of 31.69 ($SD = 17.47$). According to their report, the following percentages illustrate the levels of adaptive behavior evidenced by the sample: "26% were at the profound, 35% at the severe, 35% at the moderate, and 4% at the mild level..." (Sigelman, et al., 1981a; 1981b). The researchers did not report what classification scheme was employed to obtain these rating levels. Of note, 13 out of the 16 individuals functioning in the profound range of ID/MR were incapable of responding to any questions they

were asked; thus, the researchers results are based on the findings from the remaining 45 participants.

The adults who participated in the Sigelman, et al. study were asked two sets of four questions, “ ‘Are you usually happy?’; ‘Are you usually sad?’; ‘Are you usually happy or sad?’; and ‘Are you usually sad or happy?’” as well as “ ‘Are you usually by yourself?’; ‘Are you usually with other people?’; ‘Are you usually by yourself or with other people?’; ‘Are you usually with other people or by yourself?’” (Sigelman, et al., 1981b, p.350-351). After approximately one week, the sample was asked the same questions again by an examiner. Sigelman and colleagues (1981b) also asked these questions to an attendant assigned to the participant at the institutional facility.

The researchers reported the outcome of their study in terms of (1) the participants’ ability to respond to the questions, (2) the participants’ consistency in responses across the two measurement times, and (3) the participants’ response agreement with their attendant. They found that 68.1% ($N \approx 39$) and 62.8% ($N \approx 36$) of the participants responded to the yes-no and either-or question formats, respectively. Of those who responded, approximately 53.1% of participants were consistent in their answers to the yes-no queries while 86.2% of individuals were consistent in their response to either-or questions. Participants’ response consistency on the either-or formatted questions ranged from 77.8% to 99.7%. Finally, an average of 72.1 and 85.8% of participants responded in agreement with their attendants on the yes-no and either-or formatted questions, respectively. The researchers were quick to stipulate that on the “Are you usually happy?” question, agreement with the attendant was 90.4% while the agreement for the “Are you usually sad?” was only 53.6%. Sigelman and colleagues (1981b) concluded that this

type of response style was clear evidence that individuals with ID/MR possess an acquiescent response style with regard to yes-no formatted questions.

Sigelman and colleagues did not, however, address two alternative possibilities: (1) that the participants' caretakers may or may not be accurate in their assessment of the mood of the individual in question (Schwartz, & Rabinovitz, 2003) and (2) that "acquiescence" may in fact describe the relationship between the participant and his or her attendant whereby the individual with ID/MR does not report sadness or other "negative" feelings to the attendant as often as happiness or other positive feelings. An additional criticism is warranted; the researchers grouped individuals of all levels of ID/MR together and did not report data concerning the performances of the individuals with ID/MR according to their respective classification levels. Considering the inherent differences between the cognitive functioning of individuals with an IQ in the 60 to 70 range with those functioning in the 30 to 40 range, this omission appears significant (Moore & Jefferson, 1996). Notably, Sigelman, et al. also reported limitations to their studies including small sample size and "highly subjective" questions (1981b, p. 355). In closing, they asserted that alternative methods of questioning should be sought out by clinicians in an effort to discover more "usable techniques with individuals with mental retardation" (Sigelman, et al., 1981b, p.356). Even given their advice, Sigelman and colleagues' work remains the oft-cited backbone of an assumption that has gained near mythic clinical proportions (Rapley, 2004) and has led to the exclusion of individuals with ID/MR from participating in their own formal assessments.

Other researchers have explored the presence of acquiescence in the responses of individuals with ID/MR (Burnett, 1989; Heal & Chadsey-Rusch, 1985; Perlman, Ericson, Esses, & Isaacs, 1994, see Finlay & Lyons, 2002, and Rapley, 2004 for an extensive review). In sum,

Sigelman and colleagues are not the only researchers to suggest that IQ has a negative correlation with one's use of an acquiescent response style, but the lack of available research that explores this trend represents a noteworthy gap in our knowledge of this special population. Although other researchers have found results in their studies that at least partially refute the acquiescent response-bias hypothesis (e.g., Matikka & Vesala, 1997; Rapley & Antaki, 1996; Wehmeyer, 1994), these alternative studies tend to suffer from much of the same methodological problems as the Sigelman, et al. (1981a; 1981b; 1982) endeavors (Finlay & Lyons, 2002).

Finlay and Lyons (2002) offered alternative explanations for the trend of responding by individuals with ID/MR usually described as "acquiescence." First, they cited research completed by Rosen, Floor, & Zistein (1974) in which individuals with ID/MR living in residential facilities were found to possess an acquiescent response style, while those living in the community were not. This outcome led Finlay and Lyons (2002) to suggest that perhaps those individuals with ID/MR living in residential facilities are more prone to see their attendants as authority figures; thus, they may be socialized to offer a more acquiescent response style than those individuals living in the community with limited assistance. Finlay and Lyons also offered that the 'third' assumption that individuals with ID/MR possess "a greater desire to please or conform with expectations" has not been well researched; thus, this type of interpretation should be viewed cautiously (2002, p. 18). Notably, both Finlay and Lyons (2002) and Rapley (2004) offered that acquiescent responding might be more likely to occur as a reaction to an examiner's behaviors (e.g., resistance to take a first response or resistance to take a response that is not one of the choices offered on a measure), than by an actual innate trait for affirmative response bias.

Finally, Finlay and Lyons asserted that one possible and rarely examined explanation for the trend of acquiescence concerns the content of the questions being asked and their "linguistic

complexity” (2002, p. 20). Specifically, they offered that the wordiness of some items might present a problem in comprehension for individuals with cognitive impairments. Furthermore, some research has shown that individuals with cognitive impairments may focus on the root words within an item and ignore the modifiers of the words (e.g., “a”, “un”, “non”, or “de”; Zetlin, Heriot, & Turner, 1985; Heal & Sigelman, 1995). These assertions cast doubt upon the notion that acquiescent responses are generalizable to all individuals with ID/MR in all types of question or scale formats.

In contrast to popular belief, some researchers have found that individuals with ID/MR have provided valid, reliable, and consistent self-reports of subjective experiences and adaptive behavior skills (Finlay & Lyons, 2002; Lunsky & Bramston, 2006; Lindsay, Machie, Baty, Smith, & Millar, 1994; Ramirez, 2005 [using children with ID/MR]; Smith & McCarthy, 1996; Villenponteaux, et al., 1998; Voelker, et al., 1990). Notably, Villenponteaux, et al., (1998) found that a group of 30 older adults with ID/MR who were interviewed with regard to their abilities with activities of daily living (ADLs) and instrumental activities of daily living (IADLs), rated themselves as more deficient than the ratings offered by their informants (i.e., caregivers). These responses were not in the direction predicted by the acquiescent response bias hypothesis. Although they reported greater deficiencies compared to their caregivers, the responses of the individuals with ID/MR in the study still demonstrated high correlation with the caregivers’ responses (ADLs = r_s (Spearman rank order correlation) = .845 and IADLs = .856; Villenponteaux, et al., 1998).

Furthermore, Voelker and colleagues (1987; 1990) examined the relative consistency of reports of adaptive behavior skills in individuals with Mild to Moderate ID/MR (in residential

group homes and those living independently) with the ratings of their counselors.¹ These counselors knew the individuals with Mild to Moderate ID/MR through their affiliation with the Windsor Association for the Mentally Retarded (WAMR) in Ontario, Canada. The 48 participants with ID/MR ranged in age from 20 to 69 years of age whereby 27 were males and 21 were females (Voelker et al., 1990). Notably, IQ was not determined through a review of records or direct intellectual testing. Rather, a “gross estimate of IQ” was obtained through administration of the Peabody Picture Vocabulary Test—Revised (PPVT-R; Dunn & Dunn, 1981; Voleker et al., 1990, p. 307). Based on the outcome of this method of classification, “four subjects (14%) in Level 1 [residents of group homes] were mildly mentally retarded; 25 (86%) were in the moderate to severe range. In Level 2 [independent living] group 11 subjects (58%) were mildly retarded; 8 subjects (42%) were in the moderate to severe range” (Voelker, et al., 1990, p. 307).

The researchers administered the Vineland Adaptive Behavior Scales (VABS; Sparrow, Balla, & Cicchetti, 1984) in the survey interview format to both the individuals with ID/MR and their respective counselors (Voelker, et al., 1990). Different interviewers were used with the individuals with ID/MR than with the counselors. The researchers reported that the interviews with the individuals with ID/MR took approximately 60 to 90 minutes, while interviews with the counselors took approximately 45 minutes to complete. Voelker and colleagues (1990) found that individuals in residential facilities and their counselors rated their adaptive behavior as significantly lower than individuals living independently and their counselors. Both groups of individuals with ID/MR rated their abilities across the domains of Communication, Daily Living Skills, Socialization, and overall Adaptive Behavior Composite consistently with respect to their

¹ Those individuals in residential facilities were dubbed as generally lower functioning in comparison to those individuals living independently and were treated as separate groups in statistical analyses (Voelker, et al., 1990).

counselors' reports. Notably, when the mean standard scores for the respective domains of the VABS are observed, the counselors consistently rated adaptive skills slightly greater than their ID/MR counterparts (e.g., residential setting composite score, 39.0 [ID/MR rating] versus 40.4 [Counselor rating]; independent living composite score, 63.5 [ID/MR rating] versus 67.2 [Counselor rating]). All groups of participants consistently rated the greatest amount of adaptive skills deficits in the Communication domain of the VABS.

For the Maladaptive Behavior domain (an optional subtest) significant differences for type of individual with ID/MR (residential setting versus independent living) and type of rater (self-report versus counselor report) were observed. Individuals who lived independently rated significantly fewer problem behaviors than individuals in residential facilities. All counselors rated significantly greater problem behaviors than did the participants with ID/MR. The results of the Voelker et al., (1990) study suggest that a socially desirable response style by individuals with ID/MR may be significant when problematic behavior is addressed, and not significant when addressing general adaptive skills.

Although the study by Voelker and colleagues (1990) suggests that self-report abilities among some individuals with ID/MR may be consistent (and thus presumed accurate) with their informant/caregivers, the study suffers from numerous methodological flaws that potentially compromise their conclusions. These limitations include: (1) the lack of classification of ID/MR by traditional validated methods; (2) the lack of report concerning the amount of time spent between the counselor with the individual ID/MR (a measure of appropriateness for the use of a particular informant/caregiver in standardized adaptive behavior measures); (3) the use of only one referral source for participant recruitment (i.e., WAMR); and (4) the potentially problematic

use of different interviewers within the reporter dyads (i.e., individual with ID/MR was interviewed by a different person than his or her counselor; Sparrow, Cicchetti, and Balla, 2005).

To review, despite its criticisms, much of the research on acquiescence or “yea-saying” has led many to conclude that individuals with ID/MR are likely to respond affirmatively to queries of any type or nature, whether due to a tendency to “say yes,” the desire to please others, or a simple lack of knowledge (Beail, 2002; Finlay & Lyons, 2001; 2002; Heal & Sigelman, 1995; Ruddick & Oliver, 2005; Sigelman, Budd, Spanhel, & Schoenrock, 1981a; 1981b; Winkler, et al., 1982). In addition, many clinicians and researchers hold strong to the belief that the majority of individuals with ID/MR do not want to experience the perceived stigma attached to admitting an inability or refusal to do something (Luckasson, et al., 2002; Stevens & Price, 2006). In the context of endorsements on an adaptive behavior measure, that belief would lead one to assume that individuals with ID/MR will respond in a manner that makes them appear to have more competence or abilities than they actually possess (Luckasson et al., 2002; Stevens & Price, 2006). Although preliminary studies concerning the abilities of individuals with ID/MR to accurately rate their own functional abilities and subjective thoughts has been promising (Finlay & Lyons, 2002; Lunsy & Bramston, 2006; Lindsay, Machie, Baty, Smith, & Millar, 1994; Smith & McCarthy, 1996; Villenponteaux, et al., 1998), these findings have had little influence on the prevailing belief that individuals with ID/MR always respond in an acquiescent or socially desirable manner to most types of queries.

Statement of the Problem

To date, much of clinical practice and opinion has been guided by the notion that individuals with ID/MR either lack the knowledge needed or the self-esteem and self-confidence to provide accurate self-reports of their own subjective thoughts and objective abilities.

Consequently, self-reports of individuals with ID/MR have not been viewed as legitimate sources of information for assessments regarding diagnosis, service provision, or eligibility for services and protections (e.g., exclusion from the death penalty). The available research on the validity and reliability of self-reports by individuals with ID/MR is mixed, and many of the studies completed have suffered from major limitations including extremely small sample size and undifferentiation between subtypes of ID/MR.

Currently, none of the available standardized measures of adaptive behavior include measures of consistency or validity to aid in their interpretation, which is problematic given their inherent vulnerability to response bias by any rater. Furthermore, little research is available concerning the consistency between the self-reported ratings of adaptive abilities of individuals with ID/MR and their informants' ratings. Previous attempts to measure pure acquiescent responding (yea-saying or nay-saying) in individuals with ID/MR have been fraught with methodological issues that compromise their strong conclusions (e.g., Sigelman et al., 1981a, p. 348, stated that their research "leaves no doubt about the ruinous effects of acquiescence"). To date, a valid measure of pure acquiescence has yet to be published. Furthermore, no published research has endeavored to determine whether an acquiescent response style on yes/no formatted questions has any relation to an individual's ability to rate his or her own level of adaptive functioning (consistent with ratings provided by an informant). This quasi-experimental study will aim to fill such gaps in the literature and offer insights for clinicians concerning the self-report abilities of individuals with Mild ID/MR.

Primary Hypotheses

1. Although the literature and research regarding the consistency of ratings between individuals with Mild ID/MR and their informants is mixed, it is expected that null hypothesis testing

will not find a significant difference between the domain and composite scores from the Vineland-II, as determined by the reports of participants with ID/MR and the scores obtained from their informants. A nonsignificant difference will be defined in this study in two ways. First, traditional paired-samples null hypothesis testing will be endeavored and generally-accepted cut-offs for significance will be employed (i.e., resultant hypothesis test p value of .05 or less. Second, more restrictive criteria for significance will be examined. A nonsignificant result will be defined as a resultant hypothesis test p value of between .5 and 1. Results of an ambiguous nature will be classified by a resultant p value of between .21 and .49, while a significant difference will be defined as a resultant p value of .19 or lower. This method of classification, although not often used, has found preliminary acceptance in some developmental disabilities matched-groups literature (Flick, 1995; Mervis & Klein-Tasman, 2004).

2. Participants with Mild ID/MR and their direct care provider's (DCP) percent agreement (as defined by exact agreement within five standard score points of one another between the dyad members' domain and composite scores) will fall within an acceptable clinical range as defined by the Vineland-II's current agreement rate among mostly nondisabled adults (i.e., 62% for the Communication domain, 55% for the Daily Living Skills (DLS) domain, 77% in the Socialization domain, and 64% on the Adaptive Behavior Composite [ABC]; Sparrow, Cicchetti, & Balla, 2005, p.119).

Previous research on the Vineland-II's predecessor, the VABS has indicated that individuals with ID/MR and their informants endorse greater deficits in the area of conceptual adaptive behavior (as measured by the Communication domain; Voelker, et al., 1990). The normative data provided for the Vineland-II also suggest that informants generally rate deficits in

the Communication domain significantly lower than the other two domains of adaptive behavior (as measured by the Socialization and Daily Living Skills domains; Sparrow, Cicchetti, & Balla, 2005).

3. Participants with Mild ID/MR and their informants' endorsements of deficits will each yield significant differences among the three general domains of adaptive behavior (Conceptual, Social, and Practical; AAIDD, 2008) as measured by the participants' resultant standard scores on the Vineland-II's domains (Communication, Socialization, and Daily Living Skills). It is hypothesized that the Communication domain will be rated significantly lower than the Daily Living Skills and Socialization domains by both the participants with Mild ID/MR and their DCPs. In accordance with previous research, the Daily Living Skills and Socialization domain mean standard scores are not expected to significantly differ.
4. Scores on the Response Acquiescence Scale (RAS; see Measures section for a description of this instrument) will not significantly predict the standard scores on any of the Vineland-II's adaptive domains or Adaptive Behavior Composite (ABC) for participants with Mild ID/MR or their DCPs.
5. Individuals with Mild ID/MR's raw scores on the RAS will not significantly differ from DCPs' scores as determined by a visual analysis of the groups' total raw score means and their response trends across time.

Exploratory Hypotheses

1. Intraclass correlations (ICCs) will be calculated for the agreement between the participants with ID/MR and their informants on items, ν -scale scores, and standard scores within the Vineland-II's subdomains, domains, and Adaptive Behavior Composite (ABC). Although not

ideal, the following comparisons (a and b) will help to provide a context for expectations regarding the current sample's consistency performance.

- a. It is hypothesized that the ICCs for all domain and ABC standard scores will be greater than or equal to values reported for the interrater reliability seen on the Parent-Caregiver form of the Vineland-II between two adults asked to rate the same adolescent² (Sparrow, Cicchetti, & Balla, 2005).
- b. It is hypothesized that the item-level ICCs calculated for all domains and subdomains will be greater than or equal to the mean ICC (.65) reported for the Parent-Caregiver form of the Vineland-II between two adults asked to rate the same adolescent (Sparrow, Cicchetti, & Balla, 2005).

As part of the current study, the Test of Malingered Adaptive Functioning (TOMAF; Doane, 2006; Doane & Salekin, 2006; 2009; see Measures section for a complete description of this instrument) will be administered to all participants. Administration of this measure will be completed to aid in gaining normative data for this experimental instrument.

2. Participants with Mild ID/MR will not endorse a clinically significant number of severe adaptive functioning symptomology, bizarre symptomology, or symptomology that is not attributable to any known psychopathology on the TOMAF (as defined by a raw score not significantly greater than three on the adaptive functioning [AF] scale and a raw score not significantly greater than 3 on the psychotic processing [PP] scale).
3. Participants with Mild ID/MR and their informants will not significantly differ in their TOMAF subscale or total raw scores as defined by the traditional hypothesis test criteria ($p > .05$).

² Because of a skewed sample and ceiling effects, the interrater reliability for those asked to rate an adult's functioning was not calculated or reported in the Vineland-II manual.

CHAPTER 2

METHODOLOGY

Participants

Data collection was completed between April 2009 and December 2009 following formal approval of the dissertation proposal and official approval from The University of Alabama's Institutional Review Board (IRB). Participants in the study comprised 31 dyads (pairs) consisting of one individual classified as having Mild ID/MR (according to APA diagnostic criteria) and a direct care provider (DCP) who knew this individual well enough to accurately rate this person's adaptive behavior (as defined by having been in close contact with the individual with Mild ID/MR for at least twenty hours per week for the past three months). These dyads were identified through an established liaison at the W. D. Partlow Developmental Center, a residential facility for individuals with developmental and intellectual disabilities. Substantial efforts were made to obtain a sample of participants with Mild ID/MR and their caregivers that was balanced with regard to gender and race. Each participant within the dyad received \$10 for his or her participation. Exclusionary criteria for the current study included: (1) a current diagnosis of a thought disorder and (2) any major physical/articulatory disability that might prevent the participant from responding to the questionnaires provided in the study. Any potential participants approached who did not meet either of the above exclusionary criteria qualified for study inclusion.

Although 31 dyads completed the study, three dyad pairs were removed from the current analyses due to having met exclusionary criteria. Specifically, one dyad was removed because the participant with Mild ID/MR had a current and active thought disorder diagnosis. Another dyad was removed because the DCP only knew the participant with Mild ID/MR for approximately one month. Finally, a third dyad was removed because a record review revealed the participant with Mild ID/MR's recorded Full Scale IQ was 38, well below the Mild ID/MR range. As such, 28 dyads were included in the current study.

Procedures

Informed consent was obtained from the legal guardians and DCPs for the participants with Mild ID/MR and verbal assent (or informed consent if they had no legal guardian) was obtained from the participant with Mild ID/MR in accordance with procedures approved by The University of Alabama's Institutional Review Board (see Appendix K). The consent and assent procedures were adapted from a previously approved university study involving participants with Mild ID/MR and their guardians (personal communication, Karen L. Salekin, Ph.D., September 15, 2008). Initial contact with the guardians of participants was made by phone and/or mail following receipt of the guardians' names, addresses, and telephone numbers by the liaisons at the residential facility. Guardians were approached for their consent via an introductory letter (see Appendix A) and a copy of the consent to participate form (see Appendix B).

Communication with the guardian was initiated via a telephone call approximately 10 days following the mailing of the introductory letter by liaisons at the residential facility. Once reached by telephone, the guardians received a brief explanation of the study and, if the guardian was interested in learning more about the study, the conversation continued with detailed explanation of the study's procedures.

Upon receipt of verbal consent, the liaison requested that the consent form be signed and returned via the self-addressed stamped envelope enclosed in the consent form packet. The guardian was also given the option of signing the consent form in person with the researcher at a mutually agreed upon location (e.g., the residential facility) if he or she wished. Guardians were encouraged to call the liaison or researcher at any time if they had questions regardless of whether the guardian had yet to sign the consent form. Upon receipt of informed consent from the guardian, the identified individual with Mild ID/MR was contacted in person by the researcher.

Upon initial contact with the participant with Mild ID/MR, he or she was asked if he or she wished to know further details concerning the current study and if he or she had any questions concerning the project (see Appendix C for relevant scripts for individuals with and without legal guardianship). All recruited participants agreed to discuss the study with the researcher and any questions were addressed directly by the researcher. Following agreement to participate in the current study, the participant with Mild ID/MR was read the assent form (see Appendix D) and was asked to sign it. In cases where participants did not have a legal guardian, the participant with Mild ID/MR was read the consent form (see Appendix E)

Once informed consent and assent procedures were completed for the participant with Mild ID/MR (and his or her legal guardian when applicable), the DCP (direct care provider) was approached to offer his or her consent via face-to-face contact at the residential facility. All DCPs were explained the purpose and procedures of the study. After all questions were answered and the DCP agreed to participate in the current study, he or she was provided with the caregiver informed consent form (see Appendix F) and his or her signature was obtained.

Upon receiving informed consent and/or assent from the appropriate parties, each participant with Mild ID/MR was asked to rate his or her abilities in different areas of adaptive behavior via the Survey Interview Form administration of the Vineland Adaptive Behavior Scales, Second Edition (Vineland-II; Sparrow, Cicchetti, & Balla, 2005). Upon completion of the Vineland-II, the participant with Mild ID/MR was administered the computerized version of the Medical Symptom Validity Test (MSVT; Green, 2004), the interview format of the TOMAF (Doane, 2006; Doane & Salekin, 2006) and the print-on-paper administration of the Response Acquiescence Scale (RAS). The participant with Mild ID/MR received a mandatory 5-minute break between administrations of the Vineland-II and the MSVT. The measures in the current study were counter-balanced for both informants and participants with Mild ID/MR. Specifically, half of the dyads were administered the measures in the aforementioned order, while the remaining dyads received the MSVT, the TOMAF, and the RAS prior to the 5-minute break, and were administered the Vineland-II following the break.

The DCPs were administered the Informant Demographic Questionnaire (IDQ; see Appendix G). The DCP was subsequently asked to rate the adaptive behaviors of the participant with ID/MR using the Survey Interview Form administration of the Vineland-II. Upon completion of the Vineland-II, the computerized administration of the Medical Symptom Validity Test (MSVT) was given, followed by the interview format of the TOMAF and the print-on-paper administration of the RAS. The measures for the informants were also counterbalanced in the manner described above. Following completion of the measures, all participants were reminded of the purpose of the study, thanked for their participation, and paid their monetary compensation (\$10 cash).

All participants were administered the study protocol by either the current author or a trained research assistant. Interobserver reliability was calculated to determine the exact agreement and consistency rates for the researchers' administration and scoring procedures within the Vineland-II. Exact percent agreement reliability was calculated using six participants with Mild ID/MR and six DCP participants. Specifically, as one interviewer completed the survey interview with the participant, the second interviewer silently scored her own record form. Exact item percent agreement was calculated for each item on the Vineland-II. Overall interobserver reliability (exact item agreement) was 98%, which indicates that the two interviewers were administering and coding the Survey Interview form of the Vineland-II with a high degree of reliability.

Measures

Record Review: Participant with ID/MR Demographic Questionnaire (PDQ). This demographic questionnaire includes information gathered concerning the participant with Mild ID/MR including his or her age, years of education, ethnicity, standardized intelligence test scores, possible comorbid mental health diagnoses, and history of residential assistance. A record review was completed for each participant with a diagnosis of Mild ID/MR in the study and all information obtained was recorded on the PDQ (see Appendix H).

Informant Demographic Questionnaire (IDQ). The demographic questionnaire for each DCP consists of items concerning his or her age, ethnicity, years of education completed, relationship to the current participant with Mild ID/MR, previous experience with individuals with ID/MR (including the participant with Mild ID/MR), and evaluation history for ID/MR and learning disabilities (see Appendix G).

Wide Range Achievement Test—Fourth Edition (WRAT4)—Word Reading subtest.

The WRAT4 is a norm-based measure of academic achievement that assesses word reading, sentence comprehension, spelling, and mathematics for individuals ranging in age from 5 to 94. The measure includes two different forms for use with respondents who may need retesting: the Blue form and the Green form. The measure's Word Reading subtest is administered individually with the examinee and his or her scores are compared to age-based or grade-referenced peers. Scores obtained from the current study were based on comparison with age-based peers. Administration time for the WRAT4 Word Reading subtest is approximately five minutes or less. Median internal consistency reliability of the WRAT4 Word Reading subtest is excellent with a coefficient of .92 for both the Blue and Green forms. Alternate form test-retest reliability is also strong with coefficients ranging from .78 to .89 for the entire test. Convergent and divergent validity is also strong (reading) when compared to instruments such as the WIAT-II Word Reading (.73) and Reading Composite (.78), WJ-III Broad and Basic Reading (.73), SB5 (.78), WAIS-III (.79), and the WISC-IV (Ages 10-15 = .81).

Vineland Adaptive Behavior Scales—Second Edition (Vineland-II). The Vineland-II is a norm-based standardized measure of adaptive behavior that assesses the adaptive skills of individuals ranging in age from birth to 90 years (Sparrow, Cicchetti, & Balla, 2005). The measure includes three different ratings forms for use with respondents: the Survey Interview Form (see attached measure), Parent/Caregiver Rating Form, and the Teacher Rating Form. The Survey Interview Form is administered via a semi-structured interview by an experienced clinician to a respondent who is asked questions regarding another individual's adaptive behavior. The Parent/Caregiver and Teacher Ratings Forms are filled out in a self-report format

by a respondent who is asked to rate another individual's adaptive behavior. The Survey Interview Form was utilized in the current study.

The Survey Interview Form has 433 items and takes approximately 20 to 60 minutes to administer "depending on the age or developmental level of the individual being assessed" and the response style of the interviewee (Sparrow, Cicchetti, & Balla, 2005). The Vineland-II Survey Form contains 11 subdomains measuring different aspects of adaptive behavior, which comprise three domains of adaptive behavior (Communication, Daily Living Skills, and Socialization), as well as a general Motor Skills domain. The Vineland-II also contains an overall measure of adaptive behavior called the Adaptive Behavior Composite. See Appendix I for a content description of the domains and subdomains measured in the Survey Form. The measure yields *v*-scale scores for the 11 subdomains and standard scores for the four domains and overall Adaptive Behavior Composite.

Administration of the Vineland-II Survey Form is unique in comparison to other comprehensive adaptive behavior assessments in that it is administered via a semi-structured format and scored by the interviewer. The interviewer asks general questions to the respondent regarding the individual of interest and scores the measure based on the respondent's answers. Probing as needed is essential to gleaning valid data from the informant and different types of probes are needed depending on the respondents' answers to queries; thus, the Vineland-II does not include standardized interview questions or probes (Sparrow, Cicchetti, & Balla, 2005; see Appendix J for self-authored subdomain questions). The Vineland-II relies on the experience of the interviewer to choose appropriate questions and probes that fit the respondent's level of general understanding and response elaboration. Although the Vineland-II does not include normative data concerning an individual's self-report of their own abilities during the interview,

the manual states that the Survey Interview can be used with the individual of interest in cases where another qualified rater is unavailable (Sparrow, Cicchetti, & Balla, 2005).

Reliability and validity for the Vineland-II has also been initially established and a comprehensive review is offered below. Namely, reliability for the Vineland-II Survey Form has been established using internal consistency, test-retest, and interinterviewer reliability. Internal-consistency and test-retest reliabilities for the Vineland-II were determined combining data from the Survey Interview Form and the Parent/Caregiver Rating Form. Internal-consistency split-half reliabilities for the subdomains on the measure ranged from moderate to high (.72 to .93) with the exception of the Play and Leisure subdomain where reliability for adults aged 19-51 was .58. The domain split-half reliabilities ranged from .77 to .93 with reliabilities for adults aged 19 to 90 falling between .77 (for the Motor Skills domain) to .89 (for the Daily Living Skills domain). Split-half reliabilities for the Adaptive Behavior Composite ranged from .93 to .97. For all age ranges except 14-21, the mean test-retest reliability intraclass correlations (r_i) for the Vineland-II's subdomains were .85 or greater. For those aged 14-21, the intraclass correlations ranged from a low of .68 for the Play and Leisure Time subdomain to a high of .91 for the Receptive subdomain (Sparrow, Cicchetti, & Balla, 2005). According to the authors, this relatively lower reliability pattern likely reflects a developmental period where “youth spend more time away from parents and caregivers, thus, limiting their opportunity to observe behavior” (p. 114).

The interinterviewer reliability (i.e., the comparison of scores obtained on different days with two interviewers with the same interviewee) for ages birth through 18 years ranged from .48 to .92 for the subdomains, .74 to .78 for the domains, and .83 for the Adaptive Behavior Composite. Inter-interviewer reliabilities were not calculated for the sample of 36 adults aged 19 through 90 due to their “lack of variability brought about by the large proportion of cases scoring

at or just below the maximum score on subdomains” (p. 117). In fact, approximately 82% of the cases’ scores consisted of the two highest possible *v*-scale scores (16 and 17). Thus, the authors reported the percentage of interinterviewer score agreement as follows: subdomain raw scores had 72 to 100% agreement, domain scores (within 5 standard score points of each other) had 50 to 69% agreement, and 61% agreement was observed for the Adaptive Behavior Composite (Sparrow, Cicchetti, & Balla, 2005).

The Vineland-II has also demonstrated strong content validity through its theoretical linkage to its previous versions, the Vineland Adaptive Behavior Scales (VABS; Sparrow, Balla, & Cicchetti, 1984) and the construct of adaptive behavior as defined by AAIDD (formerly AAMR, 2002), the American Psychiatric Association (2000), and the National Academy of Sciences (2002). The authors utilized methods from item response theory (IRT) and factor analysis to demonstrate that each item belonged within its assigned subdomain. In addition, the authors used confirmatory factor analysis to demonstrate a strong fit between the hierarchy of the test structure (subdomains, domains, and an overall adaptive composite) and normative data (Sparrow, Cicchetti, & Balla, 2005).

The developers of the Vineland-II also undertook studies to determine the predictive and concurrent validity of the measure. They found that performance by individuals in clinical groups including mental retardation, autism spectrum disorder, attention-deficit/hyperactivity disorder, emotional/behavioral disturbance, learning disability, and visual and hearing impairments yielded distinctive patterns and the levels of adaptive ability expected given the nature of each disorder. Thus, the Vineland-II appears to be able to confidently distinguish between individuals in clinical and nonclinical groups, at least where these disorders are concerned.

Overall, the Vineland-II demonstrates moderately strong convergent validity with other measures of adaptive functioning. Namely, the Vineland-II's domains and Adaptive Behavior Composite and its predecessor, the VABS (Sparrow, Balla, & Cicchetti, 1984), yielded correlations ranging mostly between the upper .80s and .90s for ages birth through 18 (the VABS did not include normative data for individuals greater than age 18). The Vineland-II was also compared with the Adaptive Behavior Assessment System—Second Edition's (ABAS-II; Harrison & Oakland, 2003) multiple age ranges including those aged 17 to 74. Results from comparative analyses suggest that the mean score obtained for adults on the Vineland-II may fall between five to eight points lower than the mean domain and General Adaptive Composite scores from the ABAS-II. The authors provide possible explanations for this phenomenon. Specifically, they state that possible explanations for this result could be

“...because the samples are meant to be representative of the population and the standard score means should be near 100, the fact that the Vineland-II means scores are closer to 100 may indicate that the ABAS-II slightly overstates adaptive functioning in adults. On the other hand, if the samples were not representative, the results suggest that ceiling effects are more pronounced in the Vineland-II, which would restrict performance toward the mean.” (p. 160)

For the domains and composite scores on the Vineland-II and the ABAS-II, correlations fell between .57 (for the Daily Living Skills and Practical domains) and .77 (for the Communication and Conceptual domains). These results suggest that the convergent validity of the Vineland-II is moderate in relation to the ABAS-II. This may be a reflection of the difficulty in assessing the construct of adaptive behavior as it applies to adults. With regard to discriminant validity, the Vineland-II's Adaptive Behavior Composite was compared with Full Scale IQ scores obtained for adults aged 17 to 68 and this yielded a correlation of .20, which suggests that the constructs that these instruments measure (intelligence and adaptive behavior) are distinct (Sparrow, Cicchetti, & Balla, 2005).

Medical Symptom Validity Test (MSVT). The Medical Symptom Validity Test for Windows (MSVT; Green, 2004) is both a brief computerized memory screen and a symptom validity test. The MSVT consists of four memory and effort subtests. The MSVT can be presented in a traditional computerized format or in an oral administration format. In the computerized format, pairs of related words are presented to the examinee. Throughout the remainder of the test, the participant receives various subtests that test his or her knowledge of the word pairs.³

The MSVT has been cross-validated with the Word Memory Test⁴ (Green, 2003) in a wide variety of populations including healthy children and adults, children and adults with severe traumatic brain injury and/or neurological disease, adults with early and advanced dementia, and children with mild mental retardation. In addition, many of these studies have been conducted in various languages including English, Portuguese, German, Spanish, and Dutch with very similar results (Green, 2004). Essential to a successful symptom validity test, the MSVT has also demonstrated exceptional sensitivity (detection of poor effort) and specificity (differentiation of those providing good or adequate effort).

Test of Malingered Adaptive Functioning (TOMAF). The Test of Malingered Adaptive Functioning (TOMAF) was developed by the author to detect malingering or report of exaggerated impairment in raters completing adaptive behavior measures (Doane, 2006; Doane & Salekin, 2006). The TOMAF possesses scales designed to measure two categories of dysfunction. One category falls under the general heading of adaptive functioning and the second

³ Due to the higher level of test security necessary to keep symptom validity tests valid, a detailed explanation of the procedures involved in the measure's subtests in a publication available in the public domain (for which this document qualifies) would not be prudent and would violate current test security laws.

⁴ The Word Memory Test is an established, well-validated and reliable test of poor effort that is considered the "gold standard" by many clinicians who assess response bias (Tan, Slick, Strauss, & Hultsch, 2002).

under psychotic processing. The measure is composed of items written at an average sixth grade reading level.

The scaling of the TOMAF's adaptive functioning (AF) component scale is dichotomous and includes the following response options with regard to an individual's ability to perform certain adaptive behaviors: (1) "Never performs, or is not able to perform" or (2) "Always performs, or is able to perform"⁵. All behaviors included on the adaptive functioning subscale should theoretically be successfully carried out by an individual who has been rated as having ID/MR commensurate with deficits in adaptive behavior that are three standard deviations below the mean on many standardized measures of adaptive behavior (Bruininks, et al., 1996; Harrison & Oakland, 2003; Sparrow, Balla, & Cicchetti, 1984). Raw scores on the AF scale are calculated by scoring one point for an item answered in the "Never performs, or is not able to perform" direction for a minimum score of 0 and a maximum score of 46.

With regard to psychotic processing, the PP scale includes questions that ask about symptoms that are relatively bizarre and would not be endorsed by most individuals with bona fide psychotic disorders. The questions are set on a dichotomous rating scale with the following two response options: (1) True, or (2) False. Each endorsement of a feigned symptom or exaggerated response receives a score of one point. As an individual's raw score increases on the subscales and the overall measure, the greater the likelihood that the individual is endorsing strange/implausible psychiatric symptomology or being inattentive to the task. Raw scores on the PP scale are calculated by scoring one point for an item answered in the "True" direction with a minimum possible score of 0 and a maximum score of 15.

⁵ Due to the higher level of test security necessary to keep symptom validity tests valid, a detailed explanation of the items within the TOMAF's subscales in a publication available in the public domain (for which this document qualifies) would not be prudent and would violate current test security laws. The record form for the TOMAF is available by directly contacting the author.

Response Acquiescence Scale (RAS). The Response Acquiescence Scale (RAS) was developed for this study to aid in informing clinicians whether previously held notions of acquiescent response style in individuals with intellectual disability are valid. In other words, the RAS measures yea-saying response tendencies. The scale consists of 30 items written at a third-grade or lower reading level. The RAS is designed to be used preliminarily in conjunction with the MSVT and should be administered following the standard administration procedures for the MSVT. Upon completion of the MSVT, the individual is presented with 50 word pairs one at a time in a print-on-paper format in a similar fashion as the presentation trial of the MSVT.⁶ Twenty of the word pairs are ones that the participant has already seen in the MSVT (the 10 original word pairs are presented twice in random order throughout the RAS), and 30 of the word pairs are new word pairs (not present in the MSVT). Upon presentation of each word pair, the participant is instructed to simply respond verbally (with “Yes” or “No”) as to whether they have just seen the word pair in the previous test (MSVT). The 30 items that correspond with the newly presented word pairs will make up the RAS. Thus, if the participant responds with a “Yes” to 15 of the 30 newly presented pairs, he or she will have earned a score of 15 on the RAS.

Internal-consistency will be calculated during the data analysis phase of the study to determine the measure’s reliability. Face validity is high in this instrument in that the response choices are seemingly directly related to the construct being measured (that of yea-saying tendencies). The measure also demonstrates preliminary construct validity in that due to the relatively easy and reliable nature of the memorization task within the MSVT, very few of the “new” word pairs should be endorsed as having been seen before. Thus, response bias or

⁶ Permission to use the ten word pairs from the MSVT has been granted by Paul Green, Ph.D., author of the MSVT, only if they are presented in black bold face on plain white paper.

response set (yea-saying) would be the most logical explanation for a significant number of “Yes” responses to new word pairs.

CHAPTER 3

RESULTS

Participants/Sample

As previously mentioned, demographic information was collected from both members of the dyad via the Participant with Mild ID/MR Demographic Questionnaire (PDQ) and the Informant Demographic Questionnaire (IDQ). Information obtained from both dyad members included age, gender, ethnicity, years of education, and history of mental retardation and learning disability diagnoses. Additional information obtained from participants with Mild ID/MR included history of special education involvement, available IQ scores, date of reported intelligence testing, type of intelligence test administered, current mental health diagnoses, and history of residential placement. Additional information obtained from the direct care provider (DCP) participants included years of experience with ID populations, relationship to participant with Mild MR/ID, length of time knowing participant with Mild ID/MR, and the types of settings and times of day the participant with Mild ID/MR's behavior has been observed (e.g., home, community, and work).

Twenty-eight total dyads participated in the current study ($N = 56$). Years of age for participants with Mild ID/MR ranged from 21 to 62 with a mean of 34.39 ($SD = 11.76$), while DCPs' ages ranged from 24 to 52 years with a mean of 33.18 ($SD = 7.59$). Age did not significantly differ between participants with Mild ID/MR and their DCPs, $t(46.169) = .459$, $p = .648$, $d = .12$. Of the 28 participants with Mild ID/MR, 78.6% identified as male ($n = 22$), while 21.4% identified as female ($n = 6$). Of the 28 DCPs, 64.3% identified as female ($n = 18$), while

35.7% identified as male ($n = 10$). With regard to ethnicity, 57.1% of the 28 participants with Mild ID/MR identified as Caucasian/White ($n = 16$), while 42.9% identified as African American/Black ($n = 12$). All 28 DCPs (100%) identified as African American.

On average, Mild ID/MR participants had significantly less years of education than the DCPs, $t(42.32) = -7.16$, $p < .001$, $d = .41$. Mild ID/MR participants' years of education ranged from 5 to 12 with 9 mean years of education ($SD = 2.37$), while DCPs' years of education ranged from 11 to 16 with 12.86 mean years of education ($SD = 1.53$). Two of the participants with Mild ID/MR did not have records that reflected their years of education and as such were not included in the above calculations.

Reading grade equivalent levels (as measured by the WRAT4 Word Reading subtest) for participants with Mild ID/MR ranged from 0.0 to 8.7 with a mean of 1.59 ($SD = 2.07$), while the DCP group's reading grade equivalent level ranged from 4.0 to 12.9 with a mean of 8.23 ($SD = 3.23$). As expected, Mild ID/MR participants' mean reading grade level equivalent was significantly less than the DCPs' reading grade equivalent, $t(45.978) = -9.17$, $p < .001$, $d = 2.49$. All 28 participants with Mild ID/MR possessed a reported Full Scale IQ (FSIQ) in their records. All FSIQs were obtained through administration of either the Wechsler Adult Intelligence Test-Revised (WAIS-R; $n = 13$; Wechsler, 1981) or the Wechsler Adult Intelligence Test-Third Edition (WAIS-III; $n = 15$; Wechsler, 1997). FSIQs ranged from 52 to 75, with a mean of 59.29 ($SD = 6.28$). Corrections for the Flynn Effect (Flynn, 2009) were made to all FSIQs and yielded Flynn-corrected FSIQ scores that ranged from 44 to 67, with a mean of 53.11 ($SD = 6.08$). Flynn-corrected FSIQ scores were used in the current study for statistical analyses.

All participants in the Mild ID/MR group had diagnoses of Mild ID/MR by a mental health or medical professional. Comorbid mental health-relevant diagnoses can be seen in Table

1. Review of records also indicated that the group of participants with Mild ID/MR varied with regard to prior placement. Specifically, of the 28 Mild ID/MR participants, 64.3% ($n = 18$) had received prior group home placement, 28.6% ($n = 8$) had receive inpatient psychiatric placement, 28.6% ($n = 8$) had received placement in a forensic setting (e.g., jail or secure forensic mental health facility), and 14.3% ($n = 4$) had received placement in an independent living facility (e.g., resided in an apartment within an assisted living environment).

With regard to additional DCP demographic information, their years of working with ID/MR populations ranged from 2 to 22, with a mean of 8.05 years ($SD = 5.23$), while years working at the residential facility also ranged from 2 to 22 years with a mean of 7.45 years ($SD = 5.29$). DCPs' years of knowing their respective dyad member (matched participant with Mild ID/MR) ranged from .5 to 19 years, with a mean of 3.52 years ($SD = 3.53$). That said, one DCP knew his respective participant with Mild ID/MR for 19 years and as such, was an outlier as the next longest amount of time knowing another participant was 7.5 years. Twenty-four (85.7%) of the DCPs endorsed having interacted with their dyad member (participant with Mild ID/MR) in "all" settings (home, community, and work). Three (10.7%) DCPs endorsed having interacted with their dyad member at home, while one (3.6%) dyad member endorsed having interacted with her dyad member both at home and work. One DCP participant endorsed a history of a mathematics learning disability diagnosis, and one DCP participant endorsed prior diagnosis of a reading learning disability. None of the DCP participants endorsed prior diagnoses of mental retardation or intellectual disability.

Vineland-II Domain and Composite Score Performance within Sample

Table 2 reports the sample's performance on the Vineland-II, including mean standard scores, standard deviations, mean differences, standard error of the mean differences, t statistics, p values, confidence intervals for the mean difference, and Cohen's d effect size estimates.

A series of paired samples t -tests were completed to compare the mean standard score performance differences on the Vineland-II's Communication, Daily Living Skills, Socialization, and Motor Skills domains and the Adaptive Behavior Composite between each dyad member (the participants with Mild ID/MR and his or her DCP) across the sample of 28 dyads. Using traditional cut-offs ($\alpha = .05$), the tests revealed no significant differences across dyads (see Table 2 for complete report of scores). Specifically, there was no statistically significant difference between Mild ID/MR participants' and their DCPs' standard scores with respect to the Communication ($p = .577$, $d = .12$), Daily Living Skills ($p = .324$, $d = .11$), Social ($p = .234$, $d = .26$), and Motor Skills domains ($p = .581$, $d = .15$). No statistically significant difference was observed between dyad members on the Adaptive Behavior Composite (ABC; $p = .114$, $d = .19$). As reported, the resultant effect sizes across the series of t -tests ranged from negligible to small.

Using the modified criteria of significance outlined in the Primary Hypotheses section, a visual analysis of the resultant p values indicates that the dyad's Communication and Motor Skills domain standard score mean differences were not significantly different from zero, while the mean differences found for the Daily Living Skills and Socialization were ambiguous. Using the modified significance criteria, the ABC standard score mean difference was significantly different from zero, with means indicating that the Mild ID/MR participant rated their overall adaptive abilities significantly greater than their DCPs' ratings.

Vineland-II Percent Agreement between Dyad Members

Agreement for the domain standard scores of each dyad was defined as a difference score of ≤ 5 standard score points as calculated from the difference between domain and composite scores for the participants with Mild ID/MR and their DCPs. For the Communication and Daily Living Skills domains, 60.7% of the dyads ($n = 17$) met the criterion for agreement. Agreement was much lower among dyads for the Motor Skills (28.6%; $n = 8$) and Socialization (25%; $n = 7$) domains. Finally, 39.3% of the dyads ($n = 11$) were in agreement for the Adaptive Behavior Composite. Figure 1 compares these resultant agreement percents with percent agreement reported in the Vineland-II manual. Note, the Vineland-II manual does not report percent agreement between two raters using the Survey Interview format. They only report percent agreement between raters on the self-report Parent/Caregiver rating form across the normative sample. Percent agreement for the Motor Skills domain was not reported in the Vineland-II manual and is thus omitted from the figure. As demonstrated in the figure's graph, a visual analysis of the percentages indicates that percent agreement between groups for the Communication and Daily Living Skills domains is quite similar, while percent agreement for the Socialization domain and the ABC is much lower for the current study.

Vineland-II Interrater Reliability between Dyad Members

Interrater reliabilities for the Vineland's ABC, domains, and subdomains were calculated at the item level via the intraclass correlation (ICC). The Vineland-II does not report reliabilities at the item level; thus, no comparisons can be made between the consistency found within the current study's raters and those for the normative sample. As illustrated in Table 3's second column, "ICC Combined," item level consistency ranged from poor ($ICC = .34$) to good ($.82$). The Socialization domain demonstrated the poorest consistency of all of the domains, while the

Communication and Motor Skills domains demonstrated the best (.70). With regard to the Vineland-II subscales, the poorest consistency was found in the Interpersonal Relationships subdomain (.34), while the strongest consistency was found in the Written Communication subdomain (.82).

To compare interrater reliability estimates reported in the Vineland-II manual directly with the current study, Table 3 also presents ICCs reported in the manual using the Parent/Caregiver rating form for ratings of children ages 7 to 18. ICCs were calculated between the dyad members for Vineland-II's composite and domain standard scores and its subdomain's ν -scale scores. The shaded comparisons highlight those domains and subdomains where the current study's sample achieved greater interrater reliability when compared to the Parent-Caregiver form ICCs. Domain standard score-based reliabilities ranged from poor (Socialization = .30) to excellent (Daily Living Skills (.91). Subdomain ν -scale score reliabilities ranged from extremely poor (Interpersonal Relationships = -.27) to good (Written Communication = .87). All ICCs from the Socialization domain and subdomains were substantially lower than the Parent-Caregiver reported ICCs.

Sample's Ratings of Domain Skill Areas

To determine if participants significantly differed in their endorsement of deficits within the Vineland-II's adaptive domains (Primary Hypothesis #3), a one-way repeated-measures generalized linear model (GLM) was employed.⁷ Within the Mild ID/MR group, a significant and large main effect of domain type was found ($F[3, 81] = 27.21, p < .001, \eta_p^2 = .50$). An examination of the means reported in Table 2's "Mild ID/MR" column illustrates the nature of the significant effect. Mild ID/MR participants rated their adaptive behaviors lowest on the

⁷ The ABC was not included in this analysis as it is derived from the Communication, DLS, and Socialization domains, thus violating the assumption of independence.

Communication domain, followed by the Daily Living Skills (DLS) domain, the Socialization domain, and the Motor Skills domain. Bonferroni-corrected post hoc pairwise comparisons indicate that the Communication domain was rated significantly lower than the other three domains (DLS: $p = .002$, Socialization and Motor Skills: $p < .001$). The DLS domain was rated significantly lower than the Motor Skills domain ($p < .001$), but not the Socialization domain ($p = .597$). Finally, the Motor Skills domain was rated significantly greater than the other three domains (Communication and DLS: $p < .001$, Socialization: $p = .019$).

A second one-way repeated measures GLM was completed to determine if the DCPs' ratings of adaptive behavior for the participants with Mild ID/MR were also significantly different within the Vineland-II's domains. Within the DCP group, a significant and large main effect of domain type was also found ($F[3, 81] = 34.28, p < .001, \eta_p^2 = .56$). An examination of the means reported in Table 2's "DCP" column illustrates the nature of this significant effect. DCP participants rated Mild ID/MR participants' adaptive behaviors lowest on the Communication domain, followed by the Daily Living Skills (DLS) domain, the Socialization domain, and the Motor Skills domain. Bonferroni post hoc pairwise comparisons indicate that the Communication domain was rated significantly lower than the three other domains ($p < .001$). Similar to the Mild ID/MR group, the DLS domain was rated significantly lower than the Motor Skills domain ($p < .001$), but not the Social domain ($p = .999$). Finally, the Motor Skills domain was rated significantly greater than the other three domains ($p < .001$).

A third one-way repeated measures GLM was employed to determine whether the overall difference scores obtained for each domain on the Vineland-II differed significantly within the dyads. Within the dyads, domain type difference scores did not significantly differ ($F[3, 81] = .409, p = .70$, using a Greenhouse-Geisser correction, $\eta_p^2 = .02$). An examination of the mean

differences reported in Table 2's "Mean Differences" column illustrates the nature of this nonsignificant effect. Participants' ratings differed the least amount on the DLS domain, followed by the Communication, Motor Skills, and Socialization domains; the differences were not significant and represent a trivial effect.

Demographic Factors' Effects on Sample's Ratings and Concordance Rates

Secondary statistical analyses were also completed to investigate possible demographic factors' effects on the participants' ratings and their resultant concordance rates (as measured by calculated difference scores). As seen in Table 4, a series of multivariate generalized linear models (GLMs) were employed using domain standard scores obtained from the Mild ID/MR and DCP groups and their resultant difference scores. Table 5 presents results from a series of univariate GLMs aimed at investigating demographic effects on the Adaptive Behavior Composites (ABCs) obtained from the Mild ID/MR and DCP groups and their resultant difference scores. As seen in both tables, the majority of effects were not significant.

With regard to difference scores, only one significant effect was found in the analyses. The sex of the Mild ID/MR participants had a significant and large effect on the ABC difference score. The mean ABC difference score for male participants ($n = 22$) with Mild ID/MR was 5.86 ($SD = 9.82$), while female ($n = 6$) Mild ID/MR participants' mean difference score was -6.00 ($SD = 9.40$). The mean difference scores illustrate that although both males and females were on average approximately six standard score points discordant compared to their caregivers on the ABC, the directionality of their discordance was different. Males, on average, rated themselves approximately six standard score points higher than their DCP rated them, while females, on average, rated themselves approximately six standard score points lower (more deficient) on the ABC compared to their DCP's ratings.

A large effect of DCP sex on the ABC difference score approached significance ($p = .056$). The mean male DCP ($n = 10$) difference score was 8.50 ($SD = 7.71$), while the mean female DCP ($n = 18$) difference score was .44 ($SD = 11.33$). These means suggest that, on average, male DCPs' ratings of their dyad member with Mild ID/MR (who was also male) were more discordant than female DCPs' ratings, though not significantly so.

As reported in Tables 4 and 5, Mild ID/MR participants' age significantly predicted both domain type and the ABC according to univariate and multivariate GLM analyses ($p < .001$) via a large effect ($\eta^2 = .63$). Figure 2 illustrates via regression-based scatterplot, that as the age of participants with Mild ID/MR increased, their self-reported deficits in adaptive behavior increased, which resulted in a lower self-reported ABC standard score. Bonferroni-corrected post hoc comparisons were employed to understand the nature of the significant multivariate GLM. These comparisons suggest that age significantly predicted the Mild ID/MR participants self-reported Daily Living Skills such that, as participants aged, they were significantly more likely to rate themselves lower in practical skills compared to younger participants with Mild ID/MR ($p < .001$). Although this same predictive trend was present for self-reported standard scores on the Communication, Socialization, and Motor Skills domain, the trends were not significant ($p = .08$, $.08$, and $.09$, respectively).

A large effect of Mild ID/MR sex on self-reported domain standard scores approached significance ($p = .083$). A visual analysis of the domain means separated by Mild ID/MR sex suggests that, on average, males in this group endorsed greater deficits in adaptive behavior on the Communication (28.09 [$SD = 12.48$]), Daily Living Skills (39.50 [$SD = 9.26$]), and Motor Skills (56.73 [$SD = 12.32$]) domains compared to their female counterparts (38.00 [$SD = 19.47$], 46.50 [$SD = 17.03$], and 57.18 [$SD = 15.89$], respectively), though not significantly so. Notably,

male participants with Mild ID/MR, on average, rated themselves (47.59 [$SD = 15.45$]) as more capable in the Socialization domain than their female counterparts (39.33 [$SD = 16.68$]), though this was not a significant difference.

Finally, Mild ID/MR age and sex also demonstrated significant effects for the DCP-obtained domain and ABC standard scores ratings of Mild ID/MR participants' adaptive behavior on the Vineland-II. As previously seen in the Mild ID/MR self-reported domain and composite standard scores, regression-based scatterplots indicate that, on average, as Mild ID/MR participants aged, they tended to be rated by their respective DCPs as possessing lower adaptive skills than their younger Mild ID/MR counterparts (see Figure 2 for an example of this same trend in the Mild ID/MR group's ABC). Post hoc univariate GLM analyses confirm this effect in all four Vineland-II domains (p values ranging from $<.001$ to $.02$). With regard to the effects of Mild ID/MR sex, Bonferroni-corrected post hoc analyses confirmed that DCP domain and ABC standard score ratings of male participants with Mild ID/MR were, on average, lower than ratings for females with Mild ID/MR across all domains, though the effect was only statistically significant for the Communication and Daily Living Skills domains ($p = .008$ and $p = .03$, respectively). Mean standard score differences in DCP ratings between male and female participants with Mild ID/MR ranged from 7.15 ($SD = 9.13$) for the Motor Skills domain to 18.21 ($SD = 6.33$) for the Communication domain. When corrected for possible inequality of variances, the main effect of Mild ID/MR sex on DCP-obtained ABC ratings was no longer significant ($p < .02$ changed to $p = .14$), though on average, male Mild ID/MR participants were rated lower than females in the Mild ID/MR group (Male Mild ID/MR = 30.14 [$SD = 2.79$]; Female Mild ID/MR = 45.83 [$SD = 5.34$]).

Performance on the RAS Yea-saying and Nay-Saying Scales

Internal consistency was calculated for the Response Acquiescence Scale (RAS) using the Spearman-Brown formula, which resulted in a Cronbach's α of .83. This value suggests that the RAS had good internal consistency across the two samples.

Performance on the RAS was variable among the participants with Mild ID/MR. As previously mentioned, the lowest score one can obtain on the RAS is a zero, while the highest is a 30. Sixteen Mild ID/MR participants (57.1% of the group) obtained scores of zero on the measure. Two participants obtained scores between 1 and 10 on the measures, while six participants obtained scores between 11 and 20. Lastly, three participants achieved scores between 21 and 30. The mean RAS Yea-saying score was 7.64 ($SD = 10.72$). The mean RAS Nay-saying score was .04 ($SD = .189$), with 25 Mild ID/MR participants obtaining a raw score of zero (89.3% of the group). One participant obtained a raw score of one, while two participants obtained an RAS Nay-saying raw score of three.

Following transformation into standardized z scores, results from univariate and multivariate GLM analyses are reported in Table 6. Mild ID/MR participants' standardized raw RAS Yea-saying scores did not significantly predict their domain or ABC standard scores or resultant difference scores (as calculated by subtracting the DCPs' resultant standard score rating from the Mild ID/MR participant's standard score rating for each domain and the ABC). Formal analyses were not performed on the RAS Nay-saying due to its extreme lack of variability and kurtosis statistic (28.00). With regard to the DCP group, raw scores for both measures ranged from 0 to 1. This very restricted range yielded a mean raw score of .04 ($SD = .189$).

To determine if the two groups of reports (Mild ID/MR and DCPs) were significantly different from one another on the RAS Yea-saying and Nay-saying scales, a Mann-Whitney U

nonparametric test was performed. Results indicate that the Mild ID/MR group had significantly greater RAS Yea-saying scores (Mean Rank = 34.21) than the DCP group (Mean Rank = 22.79), ($U = 232, z = -3.55, p < .001, r = -.47$). This difference suggests a large effect. The two groups did not, however, significantly differ from one another on the RAS Nay-saying scale (Mild ID/MR Mean Rank = 29.54; DCP Mean Rank = 27.46), $U = 363, z = -1.06, p = .287, r = -.14$, though a small effect was present.

Sample's Performance on the TOMAF

The mean self-reported (Mild ID/MR group) TOMAF Adaptive Functioning (AF) subscale raw score was 4.68 ($SD = 4.23$), while the mean AF raw score for the DCP was 9.51 ($SD = 5.23$). The Mean difference across dyads on the AF scale was -4.82 ($SD = 6.58; SE = 1.24$). A paired samples t -test indicated that the Mild ID/MR participants' AF raw score was, on average, significantly lower than the DCP group's resultant AF scale raw score, $t(27) = -3.88, p = .001, d = .52$, and this difference represents a medium effect.

The mean self-reported (Mild ID/MR) TOMAF Psychotic Processing (PP) scale raw score was 4.61 ($SD = 3.37$), while the mean PP raw score for the DCP was .89 ($SD = 1.07$). The mean difference across dyads on the PP scale was -3.71 ($SD = 3.59; SE = .68$). A paired samples t -test indicated that the Mild ID/MR group's PP scale raw score was on average, greater than the DCP group's resultant PP scale raw score, $t(27) = 5.48, p < .001, d = .64$, and this difference represents a medium-large effect.

One sample t -tests were performed to determine if each group's (Mild ID/MR and DCP) mean raw scores on the AF and PP scales of the TOMAF significantly differed from a raw score of three. Resultant effect sizes ranged from large to extremely large. Both groups' TOMAF scores were significantly different from a value of three raw score points (Mild ID/MR AF scale,

$t(27) = 2.10, p = .045, d = .81$; Mild ID/MR PP scale, $t(27) = 2.52, p = .02, d = .97$; DCP AF scale, $t(27) = 6.58, p < .001, d = 2.53$; DCP PP scale, $t(27) = -10.46, p < .001, d = -4.03$). The Mild ID/MR AF and PP scale raw scores, as well as the DCP AF scale raw score, were significantly greater than a raw score of three, while the DCP PP was significantly less than a raw score of three.

CHAPTER 4

DISCUSSION

Recent efforts to improve self-advocacy among individuals with ID/MR coupled with the introduction of capital case evaluations for mental retardation have made it necessary to review clinicians' beliefs and practices regarding the assessment of individuals suspected of having an intellectual disability (ID). The current study provided a preliminary investigation into two clinical assumptions. The first assumption asserts that individuals with Mild ID/MR either lack the knowledge or self-confidence/self-esteem to provide necessary useful self-reports of their adaptive abilities (as measured by concordance with caregivers' ratings). The second and oft-cited notion asserts that individuals with Mild ID/MR possess a 'yea-saying' response bias that precludes their ability to provide reliable self-reports, including those related to adaptive abilities (as measured by concordance with caregivers' ratings; Finlay & Lyons, 2002; Heal & Sigelman, 1995; Ruddick & Oliver, 2005; Sigelman, Budd, Spanhel, & Schoenrock, 1981a; 1981b; Stevens & Price, 2006).

The current study consisted primarily of two related components. The first component directly compared self-reported adaptive behavior ratings from individuals with Mild ID/MR from a residential facility with ratings provided by their direct care providers (DCPs) via the Vineland-II. Within these comparisons, investigation into the nature of any apparent differences as a function of adaptive domain (e.g., Social vs. Conceptual vs. Practical) and demographic effects was also undertaken.

The second component included the creation and employment of a measure of ‘pure’ acquiescent response bias via employment of a simple memory paradigm (Green, 2004). The Response Acquiescence Scale (RAS) was designed, produced, and administered to all participants to determine if an acquiescence effect (as measured through a forced-choice memory test paradigm) was indeed observable in the participants with Mild ID/MR’s response pattern.

In addition to the primary aims of this study, the current research also endeavored to provide normative data and potential validation for a forced-choice experimental measure, the Test of Malingered Adaptive Functioning (TOMAF). The TOMAF is designed to detect exaggerated endorsement of adaptive behavior deficits by raters for an individual undergoing evaluation for a diagnosis of intellectual disability/mental retardation. The validation of such an instrument could lead to improvement in clinicians’ confidence in the validity of a report of adaptive behavior deficits for an individual undergoing assessment, regardless of the rater employed.

Concordance Rates Between Dyad Members

The sample’s performance on all domains of adaptive behavior and the overall composite (ABC) on the Vineland-II confirmed the hypothesis that resultant standard scores from participants’ with Mild ID/MR would not significantly differ from their DCPs’ resultant standard scores. Visual analysis of the directionality of the reported mean differences indicates that, on average, Mild ID/MR participants’ scores were greater on every domain and the ABC (see Table 2) compared to their DCP’s report. This trend, coupled with resultant effect size estimates (*d*), suggests that a negligible-to-small effect of ability inflation via self-report, compared to caregiver reports, may be present in the population. That said, this potential small effect of inflation of abilities by individuals with Mild ID/MR (as indicated by the positive mean

difference scores) would not be of practical importance in the clinical realm. To illustrate this point, a visual analysis of the difference scores (see Table 2) indicates that average differences between raters ranged from approximately one to five standard score points on the domain and ABC scores. Such a difference between two raters who have historically been considered “appropriate” (e.g., a mother and a teacher) would not be considered practically meaningful in a clinical evaluation. A review of the Vineland-II manual’s standard errors of measurement (*SEMs*) and confidence intervals for each domain and the ABC supports this notion. The mean *SEMs* for the domain scores in adults ages 19 to 51 ranges from 4.38 for the Daily Living Skills domain (DLS) to 6.00 for the Motor Skills domain. The overall mean *SEM* for this portion of the normative sample was 3.69. Similar *SEM* ranges are reported for adults ages 52 to 90. The average of the 95% confidence intervals derived from the *SEMs* for adults ages 19 to 90 ranged from a low of ± 7.0 for the ABC to a high of ± 11.5 for the Motor Skills domain. As such, the mean standard score difference found within the current sample was statistically nonsignificant and well within the range of score variability expected with administration of the Vineland-II to traditional raters.

With regard to the alternate statistical significance criteria set forth in Primary Hypothesis #1 (see page 20), the Communication and Motor Skills domains meet criteria for nonsignificance, while the Daily Living Skills and Socialization domains fall into the ambiguous range. The ABC mean difference between dyad members’ ratings ($p = .11$) meets criteria for significance. Some clinicians employing a matched-groups design utilize these criteria for determining significance and nonsignificance of results. For example, a treatment study concerned with detecting the effect of a treatment intervention on a child’s self-reported depression rating could compare the child’s self-rated scores to those of a child who did not

receive the treatment. The ‘comparison’ child would be matched to the child in the treatment group on a number of variables, including baseline depression ratings, age, IQ, and education. “Match” between these two children would not be based on traditional significance criteria ($p > .05$), but rather the more stringent criteria of nonsignificance of a p value of .5 or greater. A nonsignificant difference of this magnitude would suggest that it is more likely than not that these children are indeed more similar than different on a given variable. This alternate significance criterion certainly has its merits with regard to matching participants whose ratings are independent of one another (e.g., separate ratings for depression based on each single child’s psychological experience). That said, it is an unnecessarily stringent criteria for use in paired samples designs whereby the ratings concern only one of the members’ functioning, and pairs are matched primarily on the basis of the presence of that one dyad member. Put another way, this strict criteria would not be commonly used to compare a child’s self-reported ratings of depressive behaviors with ratings solicited from her own mother. In sum, although the aforementioned alternate criteria of significance interpretation are appropriate for use in some matched-pairs designs, they are not generally accepted practice for the paired-samples research design employed in the current study. As such, this interpretation will not be employed for the remaining statistical comparisons.

Another way to determine concordance between two raters is to use the percent agreement statistic. As illustrated in Figure 1, the current sample’s percent agreement for the Communication and Daily Living Skills domains was similar to agreement rates reported in the Vineland-II manual for the self-report Parent/Caregiver Form with a sample of mostly nondisabled adults.⁸ Notably, percent agreement for the Socialization domain differed

⁸ The Vineland-II does not include interrater reliabilities for the Survey Interview form, thus precluding direct comparisons between the sample and the normative population in this area.

substantially (Current Sample = 25%; Parent/Caregiver Form = 77%), and to a lesser extent so did agreement on the ABC (Current Sample = 39.3%; Parent/Caregiver Form = 64%). As such, Primary Hypothesis #2's assertion that the current sample's percent agreement across the measure would be relatively similar to agreement rates reported for the Vineland-II's Parent/Caregiver (P/C) form, was in part, not supported. That said, the lack of comparable rates of interrater reliability using the Survey Interview Form precludes any definitive conclusions based on these apparent percent agreement differences.

As previously reported in Table 2, the Socialization domain also had the greatest discordance among the dyad members as measured by the paired-samples *t*-test, though the difference was not considered significant. Although not significant, this difference as well as the aforementioned observed percent agreement disparity between the sample's concordance rates and those of the manual's self-report P/C Form group, suggests that ratings within the Socialization domain may demonstrate greater variability in this sample than in traditional normative samples. A visual analysis of the directionality of difference scores supports this conclusion. First, within the Socialization domain, the absolute values of the difference scores (produced by subtracting the DCP's standard scores from the Mild ID/MR participant's standard score and ignoring the sign) are on average, greater than those for other domains. Furthermore, a visual analysis of the dyads' Socialization domain difference score distribution and range (i.e., -18 to +20) indicate that directionality of discordance on the Socialization domain appears evenly split between positive difference scores (indicating that Mild ID/MR participants' standard scores were greater than their DCP's scores) and negative difference scores (those obtained when the DCPs rated the participant with Mild ID/MR higher than the individual rated him or herself on social abilities). As such, these differences suggest that, although percent agreement was

comparatively low between dyad members with regard to social adaptive abilities, no significant trend of directionality of difference is apparent in the current sample.

Interrater reliability consistency was also calculated for the sample's responses at the item, *v*-scale score (subdomain), and standard score (domain) level. Exploratory Hypothesis #1a asserted that all domain and subdomain-based ICCs would be commensurate with the average ICC consistency demonstrated in the Parent/Caregiver (P/C) interrater reliabilities (.65). The current sample's results partially affirm and refute this hypothesis. Namely, the ICC calculated for the Motor Skills domain in the current sample was the same as the P/C ICC (see Table 3). The sample's ABC, Communication, and Daily Living Skills ICCs were greater than those reported for the P/C Form's interrater reliabilities. Even so, the Socialization domain ICC in the current sample is substantially lower than the P/C Form ICC and, as such, partially refutes the assumption of Exploratory Hypothesis #1a. Given the current sample's previously reported lower percent agreement statistic for the Socialization domain and its lack of clear difference score directionality, the current sample's low consistency ICC for endorsement of social adaptive abilities is unsurprising.

With regard to item-level interrater reliability consistency, Exploratory Hypothesis #1b asserted that the current sample's resultant ICC for Vineland-II domains and subdomains would be equal or greater to .65. Results described in Table 3 indicate that the Written, Domestic, Gross Motor, and Fine Motor subdomains meet this cutoff, while the remaining subdomains do not. Notably, the Coping Skills, Interpersonal Relationships, and Expressive subdomains were negatively correlated, which indicates little to no relationship was present between the dyad members' scores in these areas. Also, as expected by previous results, none of the Socialization subdomains met the hypothesis's criteria of sufficient consistency. This finding further confirms

that the reports between dyad members for the Socialization domain were quite inconsistent, though no directionality of that inconsistency is observably clear. As such, the generally accepted clinical assumption that Mild ID/MR participants would significantly inflate their adaptive scores in all domains was not supported by the sample's data.

To further clarify possible within dyad differences, the domain standard score ratings for each participant and dyad were compared using repeated-measures GLM analyses. Hypothesis #3 opined that based on previous research (Voelker, et al., 1990; Sparrow, Cicchetti, and Balla, 2005), the dyad unit, as well as each of the dyad's members, would, on average, rate conceptual (Communication) abilities significantly lower than other measured adaptive domains (Practical and Social abilities as measured by the Daily Living Skills and Socialization domains on the Vineland-II). As reported in the Results section, a main effect of domain type was found for both Mild ID/MR and DCP participants. Both groups of participants rated Mild ID/MR participants' adaptive abilities lowest in the Communication domain, followed by the Daily Living Skills domain, the Social domain, and the Motor Skills domain. As such Hypothesis #3 was solidly affirmed and initially suggests that, at least for the original VABS and the Vineland-II, raters for individuals with Mild ID/MR may identify a significantly greater number of deficits in the conceptual (Communication) domain of adaptive behavior relative to other domains. Notably, no significant differences were found among dyads' domain difference scores, which likely reflect a significant variability of difference score directionality within each domain (similar to the pattern previously indicated for the Socialization domain).

To fully consider possible demographic influences on the data, several factors were investigated. As reported in Tables 4 and 5, most demographic factors had little influence on Mild ID/MR participants' standard scores, DCP standard scores, or the resultant difference scores.

That said, the influences of Mild ID/MR participant sex (male or female) and age were indicated for both scores provided by participants with Mild ID/MR and their DCPs. As reported in the results section, male participants with Mild ID/MR tended to rate themselves lower than females on the Communication, DLS, and Motor Skills domains, while females tended to rate themselves lower on the Social domain, though this overall effect was observed only as a trend ($p = .056$). This same directionality of effect was observed in the DCPs' ratings of male and female participants' adaptive behaviors, with the overall effect of Mild ID/MR sex being significant, including Bonferroni-corrected post hoc significant effects for the Communication and DLS domains.

Little is known about sex and gender differences within Mild ID/MR populations. Until recently, gender differences were all but ignored in the ID/MR literature (Umb-Carlsson & Sonnander, 2006). What little literature exists suggests that, with regard to aggressive tendencies and general lifestyle activities, much of the gender differences historically found in the general population have not generalized to individuals with Mild ID/MR (Embregts, Didden, Huitink, & Schreuder, 2009; Umb-Carlsson & Sonnander, 2006). One study however suggests that males with ID/MR report greater legal difficulties and past destructive behavior, which could have had an effect on DCPs' ratings of males if knowledge of prior destructive acts or legal difficulties was known to them (Lunsky Bradley, Gracey, Durbin, & Koegl, 2009). Unfortunately, the current study did not collect specific information regarding legal issues and destructive behavior, and as such, this possible explanation of the results cannot be tested.

With specific regard to adaptive behavior, a review of the relevant literature does not offer much insight into the current results. Gender differences on domain and subdomain scores were not significant in the normative population of the Vineland-II (Sparrow, Cicchetti, and

Balla, 2005). Hayes (2005) reported no significant gender differences across domains and subdomains within a sample of individuals with Mild ID/MR who gave self-reports on the VABS (Sparrow, Balla, & Cicchetti, 1984), though specific mean scores were not reported. Voelker and colleagues (1990) did not report gender means or differences in their research on concordance for the VABS between individuals with Mild ID/MR and their caregivers. As such, more research and information is needed to determine what, if any, factors related to sex and gender may have produced the current study's results.

With regard to age, results from the analyses indicate that as individuals in the Mild ID/MR group aged, their self-report and the DCPs' report of adaptive behavior deficits across domains and the ABC increased. To review, the Vineland-II is normed by age group, thus the deficits endorsed for older participants in the study are above and beyond deficits expected in the older adult normative population. No consistent information was available to control for significant health conditions in the Mild ID/MR group, but arguably one would expect the older participants were at greater risk for health problems that lead to deficits in adaptive abilities, in comparison to their younger counterparts.

Response Acquiescence Scale (RAS)

As reported in the Results section, internal consistency of the RAS within the current sample was good (.83). Perhaps most important, approximately 57.1% of the participants with Mild ID/MR obtained scores of zero on the measure, thus failing to support a 'pure' acquiescent or yea-saying response bias on the measure. Notably, nine participants (30% of the sample) earned raw scores between 11 and 30. As reported in the Results section, these variable performances contributed to significantly greater Yea-saying scale raw scores by participants with Mild ID/MR compared to the DCPs, which refutes Primary Hypothesis #4 for this scale.

The possible origin of this outcome could be multifactorial. For example, this outcome could suggest that this ‘yea-saying’ portion of the sample (1) possesses a genuine yea-saying response style, (2) did not comprehend instructions for the task, and/or (3) did not pay sufficient attention to the MSVT’s learning component to accurately discriminate word pairs from memory. It is difficult to weigh any one of these options greater than the others. Although full exploration into the sample’s performance as a whole within the MSVT is outside the scope of the current project, a preliminary examination of the ‘yea-sayers’ performance on the MSVT does not yield a clear picture; some individuals in this group performed quite well while others less so, though all performed well above chance levels. As such, comprehension level for the MSVT instructions may have varied in the sample, which could contribute to a yea-saying response bias. In other words, in the absence of adequate comprehension of items or task, a greater tendency toward an acquiescent response style could be present. What can be gleaned from these results is that even in the presence or absence of mastery for the MSVT word pairs, yea-saying tendencies appeared on the RAS for some Mild ID/MR participants. This fact supports the notion that, at the very least, a small effect of yea-saying exists in the response style of the Mild ID/MR group. This small effect further ballasts the general assumption that individuals with Mild ID/MR are susceptible to a yea-saying response bias.

In contrast, very few participants with Mild ID/MR (10.7%) responded in a ‘nay-saying’ manner and those that did only endorsed one or two nay-saying items. Consequently, no significant difference between the Mild ID/MR group and the DCP group was observed for the Nay-saying scale’s raw score, which affirms Primary Hypothesis #4 for this scale. Results from administration of the RAS highlight the importance of investigating whether yea-saying tendencies significantly predicted individuals’ adaptive ratings for themselves, as well as their

resultant difference scores within the sample. Such an investigation would aid in determining if the ‘yea-saying’ tendencies observed for part of the Mild ID/MR group on the RAS generalized to those participants’ self-report of adaptive abilities.

As reported in Table 6, *z*-transformed RAS scores did not significantly predict either Mild ID/MR individuals’ ratings of themselves or their difference scores. A visual analysis of difference scores for those individuals with yea-saying tendencies on the RAS also did not reflect any pattern of directionality with regard to report. As such, it appears that in the current sample those individuals with Mild ID/MR who demonstrated yea-saying tendencies on the RAS did not explicitly inflate their report of adaptive abilities (as compared to their DCP reports), thus affirming Primary Hypothesis #3.

Test of Malingered Adaptive Functioning (TOMAF)

To review, the current sample was administered the TOMAF in an effort provide preliminary normative data for the instrument and to determine if its content and initial interpretive rules performed as designed. As reported in the Results section, both groups within the sample (Mild ID/MR and DCP) yielded mean raw scores significantly greater than three raw score points (i.e., greater than three deficits in basic activities of daily living) on the measure’s AF (adaptive functioning) scale. The DCP group endorsed an average of approximately 10 deficits out of 46 possible, while the Mild ID/MR group endorsed approximately 5 out of 46 deficits. With regard to the PP (psychotic processing) scale, significant differences in reporting also emerged between the two groups. The Mild ID/MR group endorsed on average, five statements related to infrequent/implausible psychotic psychopathology, while the DCPs, on average, only endorsed approximately one item. With regard to the DCPs’ endorsements, the PP

scale seems to have performed as it was designed with regard to ruling out inadvertent endorsement of infrequent/implausible psychotic psychopathology by an ‘appropriate’ rater.

Overall, the response style exhibited on average by the Mild ID/MR group may suggest that the TOMAF is vulnerable to possible yea-saying effects and endorsement of infrequent or implausible psychotic symptoms. Notably, some words used within the TOMAF are gauged to require a high school reading level. As such, it is possible that although the measure was administered orally, many of the individuals with Mild ID/MR may have had difficulty comprehending all of the items’ content (most participants’ reading performance was equivalent to less than a second grade level), which may have led to employment of a yea-saying response style on such items. Perhaps most important, the structured format of the statements and dichotomous answer choices found on the measure, which resembles other standardized adaptive behavior measures, may have further contributed to a yea-saying response style. As previously mentioned, some of the literature suggests that the use of such structured queries could potentially contribute to a yea-saying response style in individuals with ID/MR (Finlay & Lyons, 2002). Future research and possible revision of the item content for the TOMAF will be necessary before one can fully evaluate its utility with individuals with Mild ID/MR and ‘appropriately’ screened raters.

Limitations

Several limitations exist for the current study.

1. The current study is quasi-experimental, and as such, the ability to generalize the trends found in the study to the general population of individuals with Mild ID/MR is less than if a randomly selected sample had been used.

2. The method of testing Primary Hypotheses #1 and #5 is not ideal. Namely, in an ideal study design, it would be preferable to use a *t*-test to detect any significant difference in the current data, followed by employment of Bayesian methods to test for equivalence. Unfortunately, achieving enough power to detect equality among the two groups using Bayesian methods would have required at least 78 dyads, an unrealistic sample size given the budget, time, and recruitment constraints of the current study.
3. The study used a relatively homogenous group of informants. Namely, the direct care providers (DCPs) were employed by one institution to provide supportive services for the participant with Mild ID/MR. Cicchetti has stated in the Vineland-II manual (Sparrow, Cicchetti, and Balla; 2005) as well as in a personal communication with the researcher (September 28, 2007) that “Mothers are the best informants.” Unfortunately, the current study was not able to explore this rater-specific assumption.
4. The participants with Mild ID/MR were recruited from a residential facility for individuals with developmental and intellectual disabilities. It has been suggested that some individuals in residential facilities may be more likely to be acquiescent than their community dwelling peers (Rosen, Floor, & Zistein, 1974). In the current study, this suggestion could not be readily analyzed or determined. Future research is needed in this area.
5. Participant sex and ethnicity distribution within the current study was not evenly sampled. For example, the numbers of males and females distributed across groups were not equal. Also, male DCPs only rated male participants with Mild ID/MR, while female DCPs rated male and female participants with Mild ID/MR. Furthermore, all female participants with Mild ID/MR were only rated by female DCPs. Although the Mild ID/MR group was evenly distributed with regard to ethnicity, the DCP group was not (i.e., 100% African American). It

is unknown whether the sex and ethnicity distributions found in the present data reflect those found in other residential facilities in the same region of the country.

6. A comparison of the Mild ID/MR group's mean domain and ABC standard scores with those reported in the Vineland-II's clinical sample of individuals with Mild ID/MR yields notable results. Namely, the Mild ID/MR groups' mean domain scores as rated by their DCPs, ranged from approximately 11 points lower (Communication domain) to 17 points lower (Daily Living Skills domain) than the Vineland-II clinical Mild ID/MR group's mean performances. Some of this difference could be explained by restrictions in performance of some ADLs tapped by the Vineland-II within the residential facility. For example, at the residential facility used for recruitment, residents' possession of certain objects, such as scissors and medical supplies, is highly restricted, thus not allowing opportunity for performance (or nonperformance) of some ADLs. Furthermore, the amount of concordance demonstrated between raters on the current measure could possibly be partially explained by a restricted range of observable behaviors within the residential facility.
7. In the current study, the RAS was effective in detecting a 'pure' yea-saying bias in some of the participants with Mild ID/MR. That said, its use was dependent on the MSVT and, as such, the very low reading level observed in the current sample may have impeded successful learning of the word pairs on the measure. Furthermore, raters' auditory comprehension skills may have affected word-pair learning, which the current study did not specifically measure. Replication of the RAS is needed with a sample who possess stronger reading skills and measured auditory comprehension to determine if the yea-saying effect observed in the current study is generally confined to individuals with Mild ID/MR with very low reading skills.

8. Finally, although all members of the current sample of individuals with Mild ID/MR have prior formal diagnoses of this condition, Flynn-corrected FSIQ scores “reclassified” 32.1% of these individuals into the upper portion of the Moderate range of ID/MR, as defined by the *DSM-IV-TR* (APA, 2000). Consequently, the current sample may include individuals with lower intellectual functioning than initially desired for this study, and as such, are not necessarily representative of the self-report abilities of individuals with Mild ID/MR who reside in a residential facility.

Contributions

The current study provides several positive contributions to psychological science and practice.

1. The current study has provided preliminary data to further our ability to determine if at least some individuals with Mild ID/MR are able to report their own performance of adaptive behaviors consistent with their caregivers (DCPs). Responses within the dyads were not significantly discordant. This suggests that those who provide treatment and diagnostic services should potentially consider inclusion of individuals with Mild ID/MR in their comprehensive assessments of adaptive functioning, at least when employing the Vineland-II Survey Interview Form. This decision would be commensurate with current trends that support better self-advocacy for individuals with Mild ID/MR.
2. The current study offered preliminary data regarding a potentially useful measure of acquiescence, such that the construct of ‘pure’ yea-saying (Rapley, 2004; Finlay & Lyons, 2002) can be measured directly. The current study suggests that *some* individuals with Mild ID/MR (less than half the sample) responded to the measure in a yea-saying manner. That said, this response style did not appear to significantly generalize to those same individuals’ self-reported ratings on a standardized adaptive behavior measure (Vineland-II). Notably, the

use of an open-ended interview measure like the Vineland-II may aid in reducing the effects of a general yea-saying bias.

3. Analysis of the significant differences among the domains measured on the Vineland-II (Communication [measures conceptual skills], Socialization [measures social skills], and Daily Living Skills [measures practical skills]) better informs clinicians about the relative adaptive area strengths and weaknesses found in individuals with Mild ID/MR in different settings, which consequently aids in the evaluation of current and future treatment paradigms and programs. Also, the pattern of domain differences found in the current study replicate the pattern observed in the Vineland-II's normative sample, and preliminary analysis of the normative data suggests that this pattern cannot be solely explained as an artifact of the measure's psychometrics.
4. The current study provided preliminary normative data for the Test of Malingered Adaptive Functioning (TOMAF). This measure may be useful in the future to aid in validity determinations regarding raters' reports in assessments where external incentives are present.
5. The administration of the MSVT, although not of primary interest in the current study, also yielded much needed normative data on adult individuals with Mild ID/MR in the United States. Currently, the MSVT and other symptom validity tests are being used with individuals in this special population without sufficient normative data to provide reliable cut-offs and adequate clinical profiles. A visual analysis of the current study's participants' scores suggests that current cut-offs are likely inadequate for a Mild ID/MR population and, as such, results in unacceptable false-positive failure rates.
6. Finally, one possible contribution of the current study was the provision of a pleasant testing environment for the participants, whereby probing questions were balanced with the

administration of a measure (MSVT) considered relatively easy for most people to complete successfully. In fact, in cases of observable successful performance of this task, many of the participants spontaneously endorsed feelings of greater confidence and enjoyment with the test stimuli than they were used to experiencing in other testing environments. Also, some of the DCP participants offered that administration of the Vineland-II helped them to identify adaptive areas and activities that they hoped to strengthen with their respective dyad members in the future (e.g., learning how to correctly address packages for mailing or remembering to count change back from a purchase at a retailer).

Conclusions and Implications for Future Directions

The current study aimed primarily to investigate the assumptions that (1) individuals with Mild ID/MR demonstrate a ‘yea-saying’ response style regardless of query type, and (2) the presence of this response style precludes individuals with Mild ID/MR from providing concordant reports of their own adaptive abilities, as compared to a traditional rater’s report. The results of this study suggest that at least some individuals with Mild ID/MR may possess a yea-saying response style, even in the presence or absence of mastery of material being queried. That said, as a group, participants with Mild ID/MR in the current sample were able to provide self-reports of their adaptive abilities that were not significantly different from reports provided by traditionally appropriate raters (DCPs). As such, it is possible that even in the presence of a ‘pure’ yea-saying bias, administration of an adaptive interview such as the Vineland-II may still yield ratings from individuals with Mild ID/MR that are concordant with traditional raters’ reports. This result suggests that clinicians may wish to revisit their long-held assumptions regarding the self-report abilities of individuals with ID/MR, and begin to include these individuals in assessments of their own adaptive behavior. This incorporation could potentially

lead to increased self-advocacy and empowerment among individuals with ID/MR, and increased understanding of their own self-perceptions and sense of self-efficacy.

Additional research regarding the construct of ‘yea-saying’ and its measurement in ID/MR populations is greatly needed. Creation of studies differentiating types of ‘yea-saying’ (e.g., social acquiescence bias versus uncomplicated response tendencies) could improve and clarify our understanding of affirmative response bias in a multitude of populations. Moreover, replication of the current study in community-dwelling populations of individuals with ID/MR, with improved sex, education, and ethnicity stratification, could help to determine if the concordant adaptive ratings found can be generalized across a diverse population of individuals with Mild ID/MR. Research aimed at developing more interview-based measures for use with ID/MR populations could serve as a form of advocacy, as well as a unique opportunity to develop flexible psychological measures that rely less on a rater’s understanding of written item content and more on the clinician’s ability to obtain valid data using a client’s own vocabulary and preferred response style.

The current study’s secondary aim was to obtain normative data for the Test of Malingered Adaptive Functioning (TOMAF). This instrument holds potential clinical promise for the detection of feigned, exaggerated, or inaccurate responding to queries regarding an individual’s current adaptive functioning. This response bias measure could be useful in both forensic and general clinical applications to improve a clinician’s confidence in the validity of his or her assessment of adaptive behavior. Results from the current study suggest that both groups of participants endorsed an average of five to nine items on the Adaptive Functioning (AF) scale, and an average of zero (DCP group) to five (Mild ID/MR group) items on the Psychotic Processing (PP) scale. This suggests that some of the measure’s items that are

designed to be rated as “Always performs or is able to perform” by most individuals with Mild ID/MR, and items that are designed to detect feigning of a psychotic disorder, have unacceptable false-positive rates. This outcome suggests that post hoc analysis of the current sample’s responses should be completed to explore items endorsed as “Never performs or is not able to perform” to determine if these items should be modified, removed, and/or replaced. This type of analysis could aid in ensuring that all items on the measure have acceptable specificity.

In addition, the TOMAF’s overall reading level requirement (approximately 8th grade) is likely above acceptable and useful levels for this population. Therefore, item revision may need to be undertaken to decrease this reading level. Finally, the TOMAF could be administered to community-dwelling individuals with Mild ID/MR to determine if differences exist in item endorsement across settings and levels of support.

In sum, the current study provided initial support for the notion that, when administered the Vineland-II, individuals with Mild ID/MR may be more concordant in their self-report of adaptive abilities than previously thought, even in the presence of a suspected yea-saying response tendency. The study also introduced a measure, the RAS, which holds promise in its ability to detect a ‘pure’ yea-saying response bias. Finally, the study provided normative data for another experimental measure, the TOMAF, which with some revision, may be a useful tool in the future detection of inaccurate responding by raters of an individual’s adaptive behaviors.

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TABLES & FIGURES

Table 1

Comorbid Mental Health-Relevant Conditions in Mild ID/MR Group

Conditions	<i>n</i>	% of Sample
Birth Complications	5	17.9
Childhood Encephalitis	3	10.7
Seizure Disorder	4	14.3
Impulse Control Disorder	13	46.4
Intermittent Explosive Disorder	3	10.7
Disruptive Behavior Disorder	1	3.6
Conduct Disorder	1	3.6
Paraphilia	4	14.3

Table 2

Sample's Mean Standard Scores, Mean Differences, and Paired Samples t-tests

Domain	Mild ID/MR		DCP		Mean Difference		95% <i>CI</i>		<i>t</i> (27)	<i>p</i>	Cohen's <i>d</i>	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>SE Mean</i>	<i>LL</i>				<i>UL</i>
Communication	30.21	14.44	28.86	15.48	1.36	12.72	2.40	-3.58	6.29	.56	.58	.12
Daily Living Skills	41.00	11.35	39.68	11.86	1.32	6.96	1.32	-1.38	4.02	1.01	.32	.11
Socialization	45.82	15.78	40.89	17.94	4.93	21.45	4.05	-3.39	13.24	1.22	.23	.26
Motor Skills	57.18	15.89	55.21	19.67	1.96	18.60	3.52	-5.25	9.18	.56	.58	.15
Adaptive Behavior Composite	36.82	11.65	33.50	14.41	3.32	10.77	2.04	-.86	7.50	1.63	.11	.19

Note: Mild ID/MR = Participant with Mild Intellectual Disability/Mental Retardation; DCP = Direct Care Provider; *SE Mean* = Standard Error Mean; *CI* = Confidence interval; *LL* = lower limit; *UL* = upper limit; Cohen's *d* effect size estimates were calculated using Dunlap et al's (1996) formula for use with paired-samples *t*-tests.

Table 3

Intraclass Correlations for the Vineland-II Domains and Subdomains

Vineland-II Domains & Subdomains	ICC	ICC	
	Combined (Item Level)	(Standard or V-Scale Score Level)	
		Parent/Caregiver Form (Ages 7-18) <i>N</i> = 73	Interview Form Current Study <i>N</i> = 28
Communication Domain	.70	.58	.78
Receptive	.64	.57	.02
Expressive	.65	.66	-.14
Written	.82	.58	.87
Daily Living Skills Domain	.58	.70	.91
Personal	.35	.65	.46
Domestic	.71	.68	.69
Community	.69	.53	.59
Social Domain	.49	.68	.30
Interpersonal Relationships	.34	.61	-.27
Play and Leisure	.78	.43	.12
Coping Skills	.35	.54	-.06
Motor Skills Domain	.70	.64	.64
Gross Motor	.66	.67	.65
Fine Motor	.73	.48	.67
Adaptive Behavior Composite	.59	.71	.80

Note: ICC = Intraclass Correlation; Shaded cells indicate domains and subdomains where the current study's interrater reliability was stronger than the Parent-Caregiver Form reliabilities reported in the Vineland-II manual.

Table 4

Multivariate GLM Analyses of Sample Demographic Effects on the Vineland-II Domains

Demographic Variables	Domain Difference Scores ^o				Mild ID/MR Domain Scores ⁺				DCP Domain Scores ⁺			
	<i>A</i>	<i>F</i>	<i>df</i>	η^2	<i>A</i>	<i>F</i>	<i>df</i>	η^2	<i>A</i>	<i>F</i>	<i>df</i>	η^2
M/ID Age	.92	.52	4, 23	.08	.37	9.92***	4, 23	.63	.53	5.19**	4, 23	.47
DCP Age	.83	1.18	4, 23	.17					.88	.81	4, 23	.12
M/ID Sex	.74	2.01	4, 23	.26	.71	2.36†	4, 23	.29	.66	2.91*	4, 23	.34
DCP Sex	.74	2.05	4, 23	.26					.89	.69	4, 23	.11
M/ID Ethnicity	.92	.48	4, 23	.08	.93	.43	4, 23	.07	.90	.65	4, 23	.10
DCP Ethnicity	--	--	--	--	--	--	--	--	--	--	--	--
M/ID Grade	.98	.18	4, 21	.03	.82	1.14	4, 21	.18	.81	1.27	4, 21	.19
DCP Grade	.88	.79	4, 23	.12					.96	.24	4, 23	.04
M/ID Read Grade	.87	.85	4, 23	.13	.86	.97	4, 23	.15	.94	.38	4, 23	.06
DCP Read Grade	.88	.82	4, 23	.13					.82	1.30	4, 23	.18
M/ID Flynn IQ	.84	1.11	4, 23	.16	.83	1.20	4, 23	.17	.90	.67	4, 23	.11
Years Knowing?	.82	1.29	4, 23	.18					.96	.27	4, 23	.05
Work Length?	.96	.27	4, 23	.04					.96	.22	4, 23	.04
When?	.63	1.50	4, 23	.21	.78	.71	4, 23	.12	.73	.93	4, 23	.15

Note: M/ID = Mild ID/MR Participant, DCP = Direct Care Provider Participant

Cells left blank indicate that analysis was not performed due to lack of theoretical relevance to research questions.

* = $p < .05$, ** = $p < .01$, *** = $p < .001$

† = $p < .1$ but $> .05$

^o = Difference scores were calculated by subtracting the DCP standard scores from the Mild ID/MR standard scores (e.g., $55 - 62 = -7$).

⁺ = Mild ID/MR Domain Scores and DCP Domain Scores include the Standard Score obtained by the Communication, Daily Living Skills, Socialization, and Motor Skills domains from the Vineland-II-DCP.

-- = Ethnicity was constant; 100% of DCPs identified as African American

Table 5

Univariate GLM Analyses of Sample Demographic Effects on the Vineland-II Adaptive Behavior Composite

Demographic Variables	ABC Difference Score ^o				Mild ID/MR ABC Score				DCP ABC Score			
	<i>F</i>	<i>df</i>	<i>p</i>	η^2	<i>F</i>	<i>df</i>	<i>p</i>	η^2	<i>F</i>	<i>df</i>	<i>p</i>	η^2
M/ID Age	.75	1, 26	.40	.03	11.79	1, 26	.002**	.31	12.95	1, 26	.001**	.33
DCP Age	.40	1, 26	.53	.02					.18	1, 26	.68	.01
M/ID Sex	6.99	1, 26	.014*	.21	.50	1, 26	.49	.02	6.80	1, 26	.02**	.21
DCP Sex	4.00	1, 26	.056†	.13					3.45	1, 26	.07†	.12
M/ID Ethnicity	.41	1, 26	.53	.02	2.08	1, 26	.16	.07	.43	1, 26	.52	.02
DCP Ethnicity	--	--	--	--	--	--	--	--	--	--	--	--
M/ID Grade	.01	1, 26	.91	.01	.37	1, 26	.55	.02	.32	1, 26	.58	.01
DCP Grade	2.33	1, 26	.14	.08					.34	1, 26	.56	.01
M/ID Read Grade	.58	1, 26	.45	.02	.27	1, 26	.61	.01	.02	1, 26	.89	.00
DCP Read Grade	.78	1, 26	.38	.03					.38	1, 26	.54	.01
M/ID Flynn IQ	3.61	1, 26	.069†	.12	.08	1, 26	.79	.00	2.65	1, 26	.12	.09
Years Knowing?	1.22	1, 26	.28	.05					.98	1, 26	.33	.04
Work Length?	.83	1, 26	.37	.03					.11	1, 26	.74	.00
When?	.81	1, 26	.46	.06					.94	1, 26	.40	.07

* = $p < .05$ ** = $p < .01$ *** = $p < .001$ † = indicates possible trend ($p > .05 < .10$)

Table 6

Univariate and Multivariate GLM Analyses of RAS Yea-saying Scores' Nonsignificant Effect on Mild ID/MR Participants' Self-Reported Vineland-II Scores

Vineland-II Self Standard Scores	$F(1,26)$	p	R^2	Adjusted R^2
Communication Domain	.01	.94	.00	-.04
Daily Living Skills Domain	.73	.40	.03	-.01
Social Domain	.19	.67	.01	-.03
Motor Skills Domain	.25	.62	.01	-.03
Adaptive Behavior Composite	.39	.54	.02	-.02

Vineland-II Difference Scores	$F(1,26)$	p	R^2	Adjusted R^2
Communication Domain	.25	.62	.01	-.03
Daily Living Skills Domain	1.57	.22	.06	.02
Social Domain	.13	.72	.01	-.03
Motor Skills Domain	1.20	.28	.04	.01
Adaptive Behavior Composite	.61	.44	.02	-.02

Note: GLM = Generalized Linear Model; RAS = Response Acquiescence Scale; ABC = Adaptive Behavior Composite

Figure 1

Percent Agreement for Raters from the Current Study (Survey Interview Form) Compared to Raters from the Vineland-II Manual (Parent/Caregiver Form)

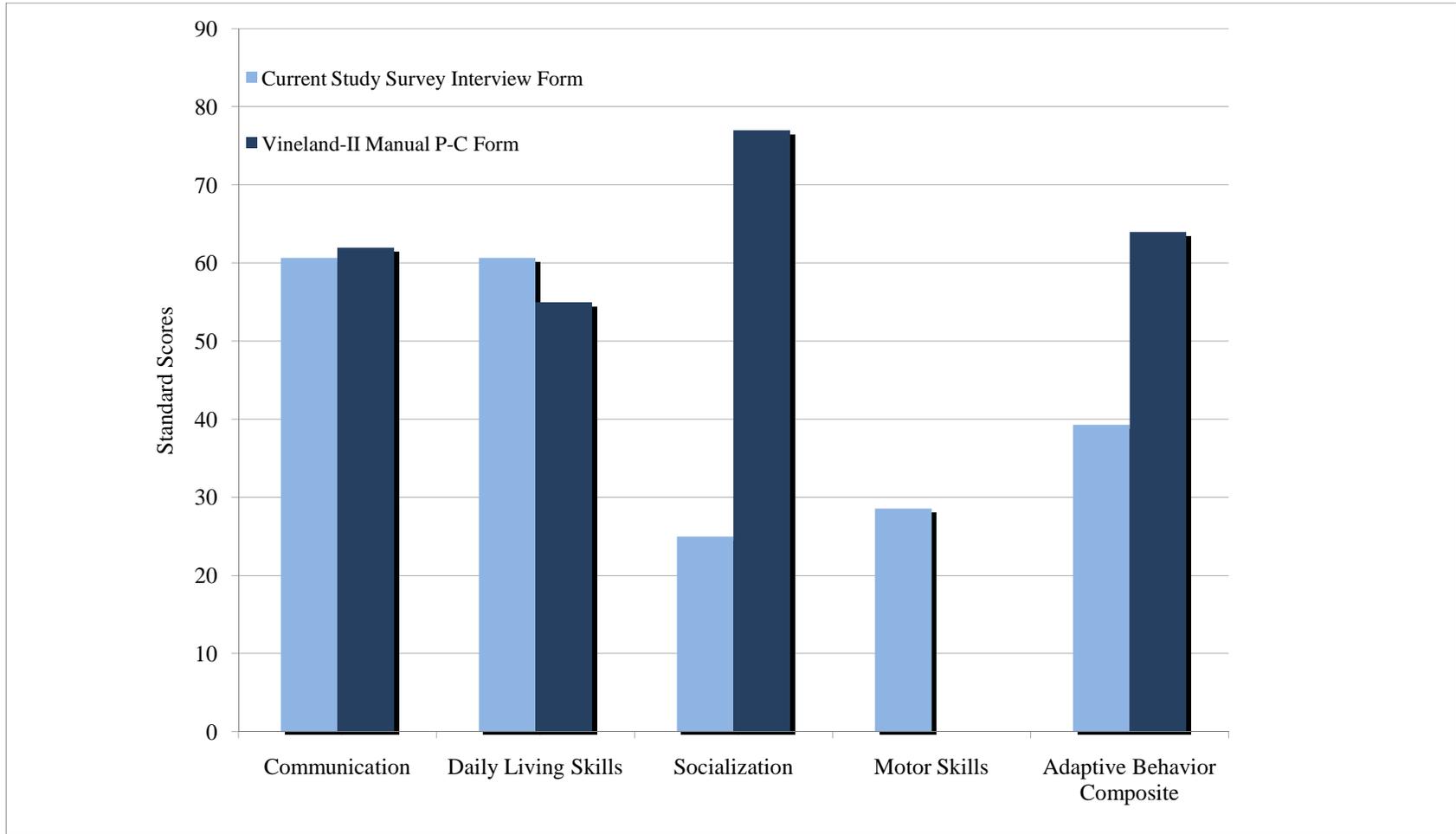
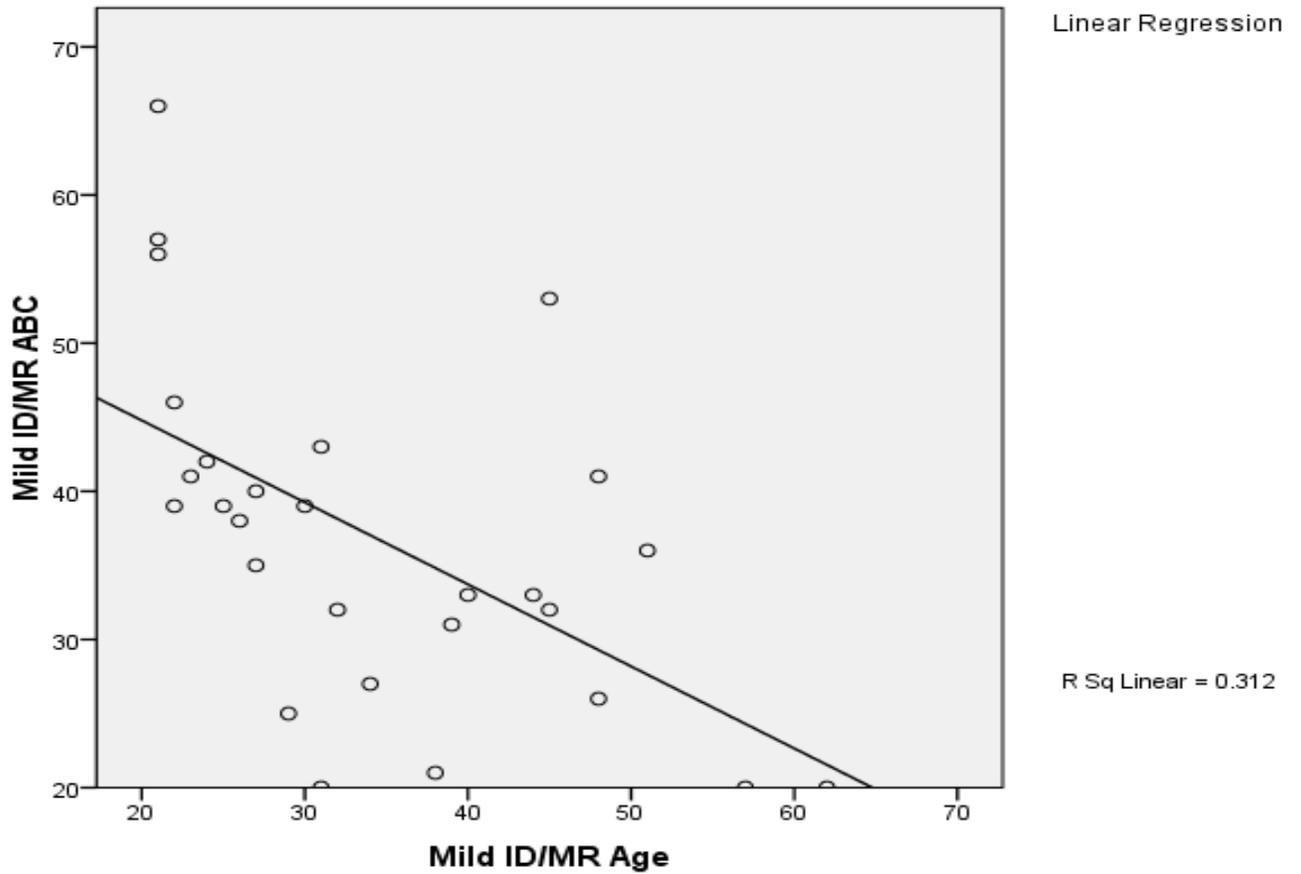


Figure 2

Regression-based Scatterplot Illustrating the Negative Relationship between Mild ID/MR Participant Years of Age and their Resultant Self-reported ABC Standard Score



Note: Mild ID/MR ABC = Resultant Mild ID/MR Individuals' Self-reported Standard score for the Adaptive Behavior Composite; Mild ID/MR Age = Participants with Mild ID/MR's Years of Age; R Sq Linear = Proportion of Variance in Mild ID/MR ABC Standard Scores that can be accounted for by Mild ID/ME Participant Years of Age

APPENDIX A

FACT SHEET TO GUARDIAN

Dear Guardian,

We are conducting a study to see how persons with mental retardation do on certain types of tests. As you may be aware, mental health professionals use many different types of tests to aid them in making decisions regarding treatment and eligibility for services for individuals with mental retardation. Some of the tests we use to determine someone's ability to be independent and to make healthy choices in a general clinical setting have not been studied well with people who actually have mental retardation. Therefore, we are trying to learn more about how individuals with mental retardation (in both residential and general community settings) do on these types of tests.

With your permission, the person for whom you serve as guardian may take part in our study, if or she chooses to do so. In this study, the person for whom you serve as guardian will be asked to take a few tests designed to measure areas of mental functioning, such as adaptive functioning and memory. The only possible risks to participation in this study are that the participant may become tired or irritated due to having to answer many questions. We believe that we have methods to deal with these concerns (e.g., breaks) should they arise in any of our meetings with participants. There are no serious risks in doing this study.

If you agree to allow us to contact your ward, we will explain the study to them and ask them if they would like to participate. If they say yes, then we will include them in the study. If they say no, we will not have further contact with them about this project. They will not be given extra services or have any services removed if they participate in this project. In fact, the project has no bearing on their treatment and all information obtained from this study will be kept completely private. For example, the name of the person for whom you serve as guardian will not be on any of the tests and all tests will be stored in a locked cabinet, in a private locked office at The University of Alabama.

We think that it is important for you to know that we are interested in averages, not individual scores. At the beginning of the study, the person for whom you serve as guardian will be given a number. Only the researchers will know this number. Any published or presented results will not have any information that could be used to identify the person for whom you serve as guardian. As part of this research, the researchers may need to know about prior intelligence test scores. They also will need to know about related medical information that W. D. Partlow Developmental Center is able to provide, including previous test scores, mental health diagnoses, and other medical problems. Again, this information will only be linked with a number, not the name of the person for whom you serve as guardian.

I have attached a copy of the consent form for you to read and review. I will contact you in approximately one week to follow up with you on your decision regarding allowing us to contact the person for whom you are guardian. If you prefer, you may contact me directly at 205-454-4484 – just ask for Bridget M. Doane.

I want to thank you in advance for your time and consideration in this matter and I look forward to speaking with you soon.

Sincerely,

Bridget M. Doane, M.A.
Department of Psychology
The University of Alabama

APPENDIX B

GUARDIAN CONSENT FORM

Research Study Information Statement: Consent to Participate in a Research Study (Guardian)

You are being asked to give your permission for your ward to take part in a research study. This study is called **Evaluation of a clinical assumption: Analysis of self-reported adaptive behaviors and acquiescent response style in adults with Mild Intellectual Disability/Mental Retardation**. This study is being done by Bridget M. Doane, M.A., (a doctoral student) and Karen L. Salekin, Ph.D. (a professor) at the University of Alabama.

This study is being partially funded by grants from the American Academy of Forensic Psychology (AAFP), the University of Alabama's Psychology Department, the University of Alabama Graduate Student Research Support Fund, and the University of Alabama Graduate Student Association Research Fund.

What is this study about?

As researchers at The University of Alabama, we want to see how individuals with mild intellectual disability/mental retardation (Mild ID/MR) score on tests of adaptive behavior, memory, and effort. To do this, we would like to contact your ward, the person for whom you serve as guardian, to ask them for their assent to participate in this study. We will first need your consent to contact this individual.

Why is this study important—What good will the results do?

Finding out how individuals with Mild ID/MR perform on various tests can help mental health professionals understand how to better diagnose and provide treatment and services to individuals with Mild ID/MR.

Why are you asking my ward to be in this study?

Your ward is being asked to participate in this study because he or she has been previously diagnosed with Mild ID/MR and is physically able to participate in the tests' administration.

How many people besides my ward will take part in this study?

About 35 other people with Mild ID/MR and their caregivers will be in this study.

What will my ward be asked to do in this study?

Your ward will be first be asked to complete an interview with a researcher that includes questions aimed at determining his or her adaptive abilities. Your ward will also complete an additional brief interview measure of his or her adaptive abilities. Finally, your ward will complete a brief memory test on a computer.

How much time will my ward spend being in this study?

The study will take approximately 1.5 hours to complete and we will allow all participants to take breaks. There will be one scheduled break, and all requested breaks will be granted.

Will being in this study cost me my ward anything?

There will be no direct cost to you or your ward. The only cost will be your ward's time in completing the interview and memory/effort test with the researcher. Participants will be given \$10.00 for helping us with this project.

Can the researcher take my ward out of this study?

If we meet with your ward and they appear to be having emotional difficulties or do not appear to understand the questions, we will end his or her participation in the study. Any of these conditions will prevent someone from participating in the study:

- (1) current showing symptoms of psychosis (e.g., hearing voices or seeing things that are not there) or mood problems (e.g., depression)
- (2) having a diagnosis of a pervasive developmental disorder other than mental retardation (e.g., Autism); and/or
- (3) other acute decompensating medical conditions (e.g., a dementia).

What are the benefits (good things) that may happen to my ward if he or she is in this study?

There is no direct benefit for your ward for participation in this study. The benefits are to science and society.

What are the benefits to scientists or society?

Your ward's data will provide psychologists with information that will tell us if the tests he/she completed can be used with individuals who have mental retardation. Today, some of these measures are not used with individuals with mental retardation, because some clinicians believe that individuals with mental retardation likely overestimate their abilities in many areas.

More evidence is needed to determine if such a belief is correct. Results from this study will have positive implications for assessments used to direct treatment, as well as in the legal system. It is important to note that these results will not impact your ward. He/She will not

receive additional services on the basis of his/her participation, nor will he/she have services removed.

What are the risks (dangers or harms) to my ward in this study?

There are no identifiable risks to this study except that your ward may feel some fatigue or frustration after being asked many questions. We will address the problem of fatigue by including one, 5 to 10 minute break, and informing your ward that he/she can take a break at anytime. He/she may stop testing for that day and start testing again on a different day.

If he/she becomes bothered by answering the test questions, the researcher will ask him/her if they he/she would like to take a break, would like to stop testing for that session, or if he/she would like to end his/her involvement in the study. The researcher will honor your ward's wishes. We do not think there are any other risks to participation in this study.

How will my ward's confidentiality (privacy) be protected? Is my ward's information going to be given to anyone other than the research team or the research review boards?

Your ward's name will not be put on any of the tests or forms. Instead, a number will be put on them. All information (i.e., test scores, medical record information) will be linked only to this number. Nobody will be able to identify who completed the forms. All medical records will be treated as "protected health information."

No one outside of the research team or the research review board will have access to your ward's information. Protected health information is any personal health information that can identify you. The data collected in this study includes age, race, sex, employment status, psychiatric diagnoses, current medication, type of setting in which the participant lives, and test scores. A decision to be in this study means that you agree to let us obtain your ward's information. The information collected for this study will be kept in a locked file cabinet, in one of the secure offices of Dr. Karen L. Salekin, at The University of Alabama.

What are the alternatives to being in this study? Does my ward have other choices?

Your ward's alternative/other choice is not to participate.

What are my ward's rights as a participant?

Taking part in this study is voluntary—It is your and your ward's free choice. Your ward may choose not to take part at all in this study. If he or she does start the study, he or she can stop at any time. All your ward has to do is to state that he/she no longer wants to stay in the study. At this point your ward's participation will stop. All of his/her data will be destroyed by a shredder at The University of Alabama. There will not be a penalty for choosing to withdraw from this study and your ward will still receive \$10 for his/her time. The choice to participate or not to participate is completely up to your ward. Leaving the study will not result in any penalty or loss of any benefits he or she would otherwise receive.

Who do I call if I have questions or problems?

If you have questions about the study right now, please ask them. If you or your ward has questions about the study later one, you may contact either of the investigators, but the primary contact person is Bridget M. Doane. For ease of identification, her information has been highlighted in bold in the text below.

Bridget M. Doane, M.A.
The University of Alabama
Box 870348
Tuscaloosa, Alabama 35487-0348
Phone Number: 205-454-4484

Karen L. Salekin, Ph.D.
The University of Alabama
Box 870348
Tuscaloosa, Alabama 35487-0348
Phone Number: 205-348-0679

If you have any questions about your or your ward’s rights as a research participant, you may contact Ms. Tanta Myles, The University of Alabama Research Compliance Officer, at (205)-348-8461 or 1-877-820-3066.

Statement of Consent:

This study has been explained to me. I have read the above information and have been provided with a copy of this form. I have had an opportunity to ask questions, and I have received answers. I know that my ward DOES NOT HAVE TO PARTICIPATE AND CAN CHOOSE TO TERMINATE AT ANY TIME. My signature below indicates my consent to allow the person for whom I serve as guardian to participate in the study.

This study has been explained to me and I would like permit my ward to be in this study. I have received a copy of this consent form to keep.

Guardian Signature: _____ Date: _____

Relationship to Participant _____

Permission Given For: _____

Signature of Investigator: _____ Date: _____

Witness: _____ Date: _____

APPENDIX C

SCRIPTS FOR INITIAL CONTACT

Written script used by the recruiting member of the research team to make initial contact with the potential participant with ID/MR who does not have a legal guardian

Hello, Mr./Ms. _____. This is _____ (*recruiter's name*). I am calling (or visiting) you to talk with you about the opportunity to participate in a research project that Dr. Karen L. Salekin and I are running through Partlow Developmental Center [*or other recruiting site*]. I spoke with Mr./Ms. _____, [*indication of relationship between potential participant and identified liaison and liaison's name; e.g., "Dr. Tammy Carroll, your programming coordinator at Partlow"*], and he/she gave me permission to call or come by and speak with you about the study - do you have a few minutes to talk with me? [*if yes, move on to script*] [*If no ...*] Can you give me a day and a time when you would be able to talk for a few minutes? [*If they say no, then the recruiter will thank them for their time and will terminate the conversation*].

Whenever the conversation occurs ...

We are conducting a study to see how people with mental retardation do on certain types of tests. These tests are sometimes used to help in making decisions about treatment and sometimes to figure out if a person has a problem with their memory, or if they have some other symptom that is bothering them.

During the study you will be asked questions about a variety of things, some of which you may already know and some about things that you will hear about for the first time. We think that it will take about one and a half hours to complete the study. We know that one and a half hours can feel like a long time, so we have already put in one break, but you can take a break at anytime during the meeting. Also, if you become too tired to complete the tests during one session, you can ask to stop and we will come back and finish on a different day.

You may be wondering what we do with the answers that you give us. Well, all of your answers to the questions will be written down of forms and then this information will be stored in a locked cabinet, in a locked office so that it will be kept private. Some time in the future, the information that you give us will be entered into a computer and we will use it to find out if the tests worked o.k. with you, and the other people who will be in this study. You cannot get hurt by participating in the study, but you may become tired or irritated because we have to ask so many questions. Again, you can always take a break if you need to or you can stop participating completely if you want to.

If you agree to be involved in this project, we will give you \$10.00 in cash. You will not be provided any feedback on how you did on the tests and the information does not affect any of the

services that you are currently obtaining from Partlow Developmental Center [*or other recruiting site*].

This is the brief version of the study. If you are willing, I would like to set up a time to meet with you to let you know more about this project, and then you can decide if you want to become involved. Is there a time and day that would be good for you and I to meet this/next week?

Written script used by the recruiting member of the research team to make initial contact with the potential participant with ID/MR who does have a legal guardian

Hello, Mr./Ms._____. This is _____ (recruiter's name). I am calling (or visiting) you to talk with you about the opportunity to participate in a research project that Dr. Karen L. Salekin and I are running through Partlow Developmental Center [*or other recruiting site*]. I spoke with Mr./Ms. _____, your guardian, and he/she gave me permission to call or come by and speak with you about the study - do you have a few minutes to talk with me? [*if yes, move on to script*] [*If no ...*] Can you give me a day and a time when you would be able to talk for a few minutes? [*If they say no, then the recruiter will thank them for their time and will terminate the conversation*].

Whenever the conversation occurs ...

We are conducting a study to see how people with mental retardation do on certain types of tests. These tests are sometimes used to help in making decisions about treatment and sometimes to figure out if a person has a problem with their memory, or if they have some other symptom that is bothering them.

During the study you will be asked questions about a variety of things, some of which you may already know and some about things that you will hear about for the first time. We think that it will take about one and a half hours to complete the study. We know that one and a half hours can feel like a long time, so we have already put in one break, but you can take a break at anytime during the meeting. Also, if you become too tired to complete the tests during one session, you can ask to stop and we will come back and finish on a different day.

You may be wondering what we do with the answers that you give us. Well, all of your answers to the questions will be written down of forms and then this information will be stored in a locked cabinet, in a locked office so that it will be kept private. Some time in the future, the information that you give us will be entered into a computer and we will use it to find out if the tests worked o.k. with you, and the other people who will be in this study. You cannot get hurt by participating in the study, but you may become tired or irritated because we have to ask so many questions. Again, you can always take a break if you need to or you can stop participating completely if you want to.

If you agree to be involved in this project, we will give you \$10.00 in cash. You will not be provided any feedback on how you did on the tests and the information does not affect any of the services that you are currently obtaining from Partlow Developmental Center [*or other recruiting site*].

This is the brief version of the study. If you are willing, I would like to set up a time to meet with you to let you know more about this project, and then you can decide if you want to become involved. Is there a time and day that would be good for you and I to meet this/next week?

APPENDIX D

PARTICIPANT ASSENT FORM

Research Study Information Statement: Assent to Participate in a Research Study

You are being asked to take part in a research study. This study is called **Evaluation of a clinical assumption: Analysis of self-reported adaptive behaviors and acquiescent response style in adults with Mild Intellectual Disability/Mental Retardation**. This study is being done by Bridget M. Doane, M.A., (a doctoral student) and Karen L. Salekin, Ph.D. (a professor) at the University of Alabama.

This study is being funded in part by grants from the American Academy of Forensic Psychology (AAFP), the University of Alabama's Psychology Department, the University of Alabama Graduate Student Research Support Fund, and the University of Alabama Graduate Student Association Research Fund.

What is this study about?

Bridget M. Doane, M.A. and Karen L. Salekin, Ph.D. want to know how people with mild mental retardation (or an intellectual disability) do on a few tests that are sometimes used by mental health professionals. These tests are sometimes used to help in making decisions about treatment and sometimes to figure out if a person has a problem with their memory or some other symptom that is bothering them. To do this, we are asking you to say yes to taking part in our study.

Why is this study important—What good will the results do?

This study will help us find out how people with mild mental retardation perform on various tests. This information can help mental health professionals understand how to better diagnose and provide treatments and services to people similar to you.

Why are you asking me to be in this study?

You are being asked to take part in this study because you have been given a diagnosis of mild mental retardation in the past and are physically able to complete the tests.

How many people besides me will take part in this study?

About 35 other people with mild mental retardation and their caregivers will be in this study.

What will I be asked to do in this study?

If you say yes and want to be in our study, you will sit with Bridget M. Doane and answer questions about your daily routine and the things that you like to do. You will also complete a memory test with her on the computer.

How much time will I spend being in this study?

We think that it will take about 1.5 hours of your time. We have already put in one break during the session but you can take a break at anytime. Also, if you become too tired to complete the tests during one session, you can ask to stop and we will come back and finish on a different day.

Will being in this study cost me anything?

There will be no direct cost to you. The only cost will be your time in answering the researcher's questions and completing the memory test on the computer. You will be given \$10.00 for helping us with this project.

Can the researcher take me out of this study?

If the researcher meets with you and the questions seem to be upsetting you or you do not understand them, she may decide to stop the study. Also, if you have having other medical problems that keep you from being able to answer the questions, she may decide to stop the study.

What are the benefits (good things) that may happen to me if he or she is in this study?

There is no direct benefit to you for participation in this study. You will not receive any extra services if you take part in the study. The benefits are to science and society.

What are the benefits to scientists or society?

Your data will help to tell us if the tests you completed should be used with people who have mental retardation. This information will then be used to help scientists decide what tests to use, which will lead to better assessments for people similar to you.

What are the risks (dangers or harms) to me if I am in this study?

The only risk that we can see is that you may get tired or bothered because you will be asked questions for 1.5 hours. Again, if you would like to take a break, all you have to do is ask and you will be given one. If you want to stop testing for the day and to start again on a different day, just say this to the person who is testing you and the meeting will stop. If you want to stop being in this study forever, just say so and we will stop.

How will my privacy be protected? Is my information going to be given to anyone other than the research team or the research review boards?

Your name will not be put on any of the tests or forms. We will only use numbers. No one will be able to tell who completed the forms and tests. Your information will only be seen by people on the research team or by a member of a research review board. Your medical files will be treated as “protected health information.” Protected health information is any personal health information that can identify you. The data collected in this study includes age, race, sex, employment status, psychiatric diagnoses, current medication, type of setting where you live, and test scores. A decision to be in this study means that you agree to let us obtain this information. After the study has ended, all of your information will be kept by a number (not your name) and even the research team will not know that it is yours.

Your information will be kept in a locked file cabinet, in one of the secure offices of Dr. Karen L. Salekin, at The University of Alabama.

What are the alternatives to being in this study? Do I have other choices?

Your alternative/other choice is not to participate.

What are my rights as a participant?

Taking part in this study is your free choice. You do not have to be in this study. If you do not want to take part in it just tell us and that will be fine. You may choose not to take part at all in this study. You can stop at any time. All you have to do is to tell the researcher you want to stop the study. If you stop, all of your data will be destroyed by a shredder at The University of Alabama. Nothing bad will happen to you if you stop the study. You will still receive \$10 for your time. The choice to take part in the study is completely yours.

Who do I call if I have questions or problems?

If you have questions about the study right now, please ask them. If you have questions about the study later on, you may contact either of the investigators, but the primary contact person is Bridget M. Doane. To make it easy, her information has been highlighted in bold below.

Bridget M. Doane, M.A.
The University of Alabama
Box 870348
Tuscaloosa, Alabama 35487-0348
Phone Number: 205-454-4484

Karen L. Salekin, Ph.D.
The University of Alabama
Box 870348
Tuscaloosa, Alabama 35487-0348
Phone Number: 205-348-0679

If you have any questions about your rights as a research participant, you may contact Ms. Tanta Myles, The University of Alabama Research Compliance Officer, at (205)-348-8461 or 1-877-820-3066.

Statement of Consent:

I know that I do not have to be in this study, but I want to be – what do I have to do now?

All you have to do is sign this form. By signing this form you are telling the research team that we have told you what you want to know and that you would like to be in this study. Also, by signing this form you are telling the research team that you understand that **YOU CAN CHOOSE TO STOP BEING IN THE STUDY AT ANY TIME YOU LIKE**. We will give you a copy of this form to take with you. Also, if it takes more than one day to complete this study, we will talk with you about the study again. Each time we will have you sign the form and we will give you a copy of it.

This study has been explained to me and I know that I do not have to do it. I would like to be in this study. I have received a copy of this consent form to keep.

My name is: _____

Signature of Informed Consent by Participant: _____

Signature of Investigator: _____ Date: _____

APPENDIX E

PARTICIPANT CONSENT FORM

Research Study Information Statement: Consent to Participate in a Research Study

You are being asked to take part in a research study. This study is called **Evaluation of a clinical assumption: Analysis of self-reported adaptive behaviors and acquiescent response style in adults with Mild Intellectual Disability/Mental Retardation**. This study is being done by Bridget M. Doane, M.A., (a doctoral student) and Karen L. Salekin, Ph.D. (a professor) at the University of Alabama.

This study is being funded in part by grants from the American Academy of Forensic Psychology (AAFP), the University of Alabama's Psychology Department, the University of Alabama Graduate Student Research Support Fund, and the University of Alabama Graduate Student Association Research Fund.

What is this study about?

Bridget M. Doane, M.A. and Karen L. Salekin, Ph.D. want to know how people with mild mental retardation (or an intellectual disability) do on a few tests that are sometimes used by mental health professionals. These tests are sometimes used to help in making decisions about treatment and sometimes to figure out if a person has a problem with their memory or some other symptom that is bothering them. To do this, we are asking you to say yes to taking part in our study.

Why is this study important—What good will the results do?

This study will help us find out how people with mild mental retardation perform on various tests. This information can help mental health professionals understand how to better diagnose and provide treatments and services to people similar to you.

Why are you asking me to be in this study?

You are being asked to take part in this study because you have been given a diagnosis of mild mental retardation in the past and are physically able to complete the tests.

How many people besides me will take part in this study?

About 35 other people with mild mental retardation and their caregivers will be in this study.

What will I be asked to do in this study?

If you say yes and want to be in our study, you will sit with Bridget M. Doane and answer questions about your daily routine and the things that you like to do. You will also complete a memory test with her on the computer.

How much time will I spend being in this study?

We think that it will take about 1.5 hours of your time. We have already put in one break during the session but you can take a break at anytime. Also, if you become too tired to complete the tests during one session, you can ask to stop and we will come back and finish on a different day.

Will being in this study cost me anything?

There will be no direct cost to you. The only cost will be your time in answering the researcher's questions and completing the memory test on the computer. You will be given \$10.00 for helping us with this project.

Can the researcher take me out of this study?

If the researcher meets with you and the questions seem to be upsetting you or you do not understand them, she may decide to stop the study. Also, if you have having other medical problems that keep you from being able to answer the questions, she may decide to stop the study.

What are the benefits (good things) that may happen to me if he or she is in this study?

There is no direct benefit to you for participation in this study. You will not receive any extra services if you take part in the study. The benefits are to science and society.

What are the benefits to scientists or society?

Your data will help to tell us if the tests you completed should be used with people who have mental retardation. This information will then be used to help scientists decide what tests to use, which will lead to better assessments for people similar to you.

What are the risks (dangers or harms) to me if I am in this study?

The only risk that we can see is that you may get tired or bothered because you will be asked questions for 1.5 hours. Again, if you would like to take a break, all you have to do is ask and you will be given one. If you want to stop testing for the day and to start again on a different day, just say this to the person who is testing you and the meeting will stop. If you want to stop being in this study forever, just say so and we will stop.

How will my privacy be protected? Is my information going to be given to anyone other than the research team or the research review boards?

Your name will not be put on any of the tests or forms. We will only use numbers. No one will be able to tell who completed the forms and tests. Your information will only be seen by people on the research team or by a member of a research review board. Your medical files will be treated as “protected health information.” Protected health information is any personal health information that can identify you. The data collected in this study includes age, race, sex, employment status, psychiatric diagnoses, current medication, type of setting where you live, and test scores. A decision to be in this study means that you agree to let us obtain this information. After the study has ended, all of your information will be kept by a number (not your name) and even the research team will not know that it is yours.

Your information will be kept in a locked file cabinet, in one of the secure offices of Dr. Karen L. Salekin, at The University of Alabama.

What are the alternatives to being in this study? Do I have other choices?

Your alternative/other choice is not to participate.

What are my rights as a participant?

Taking part in this study is your free choice. You do not have to be in this study. If you do not want to take part in it just tell us and that will be fine. You may choose not to take part at all in this study. You can stop at any time. All you have to do is to tell the researcher you want to stop the study. If you stop, all of your data will be destroyed by a shredder at The University of Alabama. Nothing bad will happen to you if you stop the study. You will still receive \$10 for your time. The choice to take part in the study is completely yours.

Who do I call if I have questions or problems?

If you have questions about the study right now, please ask them. If you have questions about the study later one, you may contact either of the investigators, but the primary contact person is Bridget M. Doane. To make it easy, her information has been highlighted in bold below.

Bridget M. Doane, M.A.
The University of Alabama
Box 870348
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Karen L. Salekin, Ph.D.
The University of Alabama
Box 870348
Tuscaloosa, Alabama 35487-0348
Phone Number: 205-348-0679

If you have any questions about your rights as a research participant, you may contact Ms. Tanta Myles, The University of Alabama Research Compliance Officer, at (205)-348-8461 or 1-877-820-3066.

Statement of Consent:

I know that I do not have to be in this study, but I want to be – what do I have to do now?

All you have to do is sign this form. By signing this form you are telling the research team that we have told you what you want to know and that you would like to be in this study. Also, by signing this form you are telling the research team that you understand that **YOU CAN CHOOSE TO STOP BEING IN THE STUDY AT ANY TIME YOU LIKE**. We will give you a copy of this form to take with you. Also, if it takes more than one day to complete this study, we will talk with you about the study again. Each time we will have you sign the form and we will give you a copy of it.

This study has been explained to me and I know that I do not have to do it. I would like to be in this study. I have received a copy of this consent form to keep.

My name is: _____

Signature of Informed Consent by Participant: _____

Signature of Investigator: _____ Date: _____

APPENDIX F

DCP CONSENT FORM

Research Study Information Statement: Consent to Participate in a Research Study (Informant/Caregiver)

You are being asked to take part in a research study. This study is called **Evaluation of a clinical assumption: Analysis of self-reported adaptive behaviors and acquiescent response style in adults with Mild Intellectual Disability/Mental Retardation**. This study is being done by Bridget M. Doane, M.A., (a doctoral student) and Karen L. Salekin, Ph.D. (a professor) at the University of Alabama.

This study is being partially funded by grants from the American Academy of Forensic Psychology (AAFP), the University of Alabama's Psychology Department, the University of Alabama Graduate Student Research Support Fund, and the University of Alabama Graduate Student Association Research Fund.

What is this study about?

Bridget M. Doane, M.A. and Karen L. Salekin, Ph.D. want to know how people with mild mental retardation (or mild intellectual disability) do on a few tests that are sometimes used by mental health professionals. These tests are sometimes used to help in making decisions about treatment and sometimes to figure out if a person has a problem with their memory or some other symptom that is bothering them. To do this, we are asking you to say yes to taking part in our study. We need your help by answering questions related to your care recipient's adaptive behaviors. In addition, you will be given a memory measure as a point of reference with which we can compare your care recipient's performance.

Why is this study important—What good will the results do?

Finding out how people with mild mental retardation/intellectual disability (Mild ID/MR) perform on various tests can help mental health professionals understand how to better diagnose and provide treatments and services to them.

Why are you asking me to be in this study?

You are being asked to take part in this study because you have been identified as a caregiver for an individual who has been diagnosed with Mild ID/MR. We have identified you as someone who has known and had contact with your care recipient for at least 20 waking hours per week for at least three total months.

How many people besides me will take part in this study?

About 35 other caregivers and 35 individuals with Mild ID/MR (care recipients) will be in this study.

What will I be asked to do in this study?

If you say yes and want to be in our study, you will sit with Bridget M. Doane (the researcher) and answer questions about your care recipient's daily routine and the things that he or she likes to do. You will also complete a brief memory test on a computer. The results of this test are simply for comparison to your care recipient's performance.

How much time will I spend being in this study?

We think that it will take about 1.5 hours of your time. We have already put in one break during the session but you can take a break at anytime. Also, if you become too tired to complete the tests during one session, you can ask to stop and we will come back and finish on a different day.

Will being in this study cost me anything?

There will be no direct cost to you. The only cost will be your time in answering the researcher's questions and completing the memory test on the computer. You will be given \$10.00 for helping us with this project.

Can the researcher take me out of this study?

If the researcher meets with you and the questions seem to be upsetting you or you do not understand them, she may decide to stop the study. Also, if you have having other medical problems that keep you from being able to answer the questions, she may decide to stop the study.

In addition, any of these conditions will prevent someone from participating in the study:

- (1) current showing symptoms of psychosis (e.g., hearing voices or seeing things that are not there) or mood problems (e.g., depression)
- (2) having a diagnosis of a pervasive developmental disorder other than mental retardation (e.g., Autism); and/or
- (3) other acute decompensating medical conditions (e.g., a dementia).

What are the benefits (good things) that may happen to me if he or she is in this study?

There is no direct benefit to you for participation in this study. The benefits are to science and society.

What are the benefits to scientists or society?

Your data will help to tell us if the tests you completed should be used with people who have Mild ID/MR. Your data will provide psychologists with information that will tell us if the tests

that you and your care recipient completed can be used with individuals who have mental retardation.

Results from this study will have positive implications for assessments used to direct treatment, as well as in the legal system. It is important to note that these results will not impact you or and your care recipient. Your care recipient will not receive additional services on the basis of your or his/her participation, nor will he/she have services removed.

What are the risks (dangers or harms) to me if I am in this study?

The only risk that we can see is that you may get tired or bothered because you will be asked questions for 1.5 hours. Again, if you would like to take a break, all you have to do is ask and you will be given one. If you want to stop testing for the day and to start again on a different day, just say this to the person who is testing you and the meeting will stop. If you want to stop being in this study forever, just say so and we will stop.

How will my privacy be protected? Is my information going to be given to anyone other than the research team or the research review boards?

Your name will not be put on any of the tests or forms. We will only use numbers. All information (i.e., test scores, medical record information) will be linked only to this number. No one will be able to tell who completed the forms and tests. Your information will only be seen by people on the research team or by a member of a research review board. All your care recipient's medical records will be treated as "protected health information." Protected health information is any personal health information that can identify someone.

The data collected in this study includes your age, race, sex, employment status, previous work and personal experience with individuals with intellectual disability/mental retardation, and your relation to and your care recipient as well as and your care recipient's psychiatric diagnoses, current medication, residential setting, and test scores. A decision to be in this study means that you agree to let us obtain as much of this information as you can provide. This information will not be used for any purpose other than for this study. The information collected for this study will be kept in a locked file cabinet, in one of the secure offices of Karen L. Salekin, Ph.D., at The University of Alabama.

What are the alternatives to being in this study? Do I have other choices?

Your alternative/other choice is not to participate.

What are my rights as a participant?

Taking part in this study is your free choice. You do not have to be in this study. If you do not want to take part in it just tell us and that will be fine. You may choose not to take part at all in this study. You can stop at any time. All you have to do is to tell the researcher you want to stop the study. If you stop, all of your data will be destroyed by a shredder at The University of Alabama. Nothing bad will happen to you if you stop the study. You will still receive \$10 for your time. The choice to take part in the study is completely yours.

Who do I call if I have questions or problems?

If you have questions about the study right now, please ask them. If you have questions about the study later one, you may contact either of the investigators, but the primary contact person is Bridget M. Doane. To make it easy, her information has been highlighted in bold below.

Bridget M. Doane, M.A.
The University of Alabama
Box 870348
Tuscaloosa, Alabama 35487-0348
Phone Number: 205-454-4484

Karen L. Salekin, Ph.D.
The University of Alabama
Box 870348
Tuscaloosa, Alabama 35487-0348
Phone Number: 205-348-0679

If you have any questions about your rights as a research participant, you may contact Ms. Tanta Myles, The University of Alabama Research Compliance Officer, at (205)-348-8461 or 1-877-820-3066.

Statement of Consent:

This study has been explained to me. I have read the above information and have been provided with a copy of this form. I have had an opportunity to ask questions, and I have received answers. I know that I DO NOT HAVE TO PARTICIPATE AND CAN CHOOSE TO TERMINATE AT ANY TIME. My signature below indicates my consent to participate in the study.

This study has been explained to me and I know that I do not have to do it. I would like to be in this study. I have received a copy of this consent form to keep.

My name is: _____

Signature of Informed Consent by Participant: _____

Relationship to Care Recipient _____

Signature of Investigator: _____ Date: _____

<p><i>Years of Experience with ID populations</i></p> <p><i>What type of experience?</i></p>	<p>_____ years</p> <hr/> <hr/> <hr/> <hr/>
<p><i>Types of settings where you have seen Participant with ID/MR</i></p>	

	___ FSIQ
<i>Diagnoses</i>	<p>1. _____</p> <p>2. _____</p> <p>3. _____</p> <p>4. _____</p>
<i>Current Level of Care</i>	<p><input type="checkbox"/> Inpatient Facility</p> <p><input type="checkbox"/> Outpatient program</p> <p><input type="checkbox"/> Residential Treatment Program</p>

APPENDIX I

VINELAND-II DOMAIN & SUBDOMAIN DESCRIPTIONS

Adapted from Table 1.1 in the Vineland-II manual (Sparrow, Cicchetti, & Balla, 2005, p.3).

Domains/Subdomains	Content
Communication Domain	
Receptive	Listening, paying attention, and understanding
Expressive	Uttered speech; use of words and sentences to obtain and supply information
Written	Reading, writing, and composition
Daily Living Skills Domain	
Personal	Eating, dressing, and personal hygiene
Domestic	Performance of household tasks
Community	Time and money management, telephone and computer usage, and skills for employment
Socialization Domain	
Interpersonal Relationships	Interpersonal interactions
Play and Leisure Time	Engagement in play and leisure
Coping Skills	Responsibility and sensitivity to others
Motor Skills Domain	
Gross	Movement and coordination of arms and legs
Fine	Manipulation of objects using hands and fingers
Adaptive Behavior Composite	
	Composite of adaptive domains

APPENDIX J

VINELAND-II SAMPLE QUESTIONS & PROMPTS

Examples of General Questions and Prompts for Use with the Vineland-II

Expressive Subomain:

Tell me about [your/Mr./Ms. _____'s] memory for doing things he/she/you are asked to do (e.g., chores or putting away supplies).

Tell me about [your/Mr./Ms. _____'s] ability to listen to others talk (tell stories; like in class or in front of a special speaker; church).

How long is [your/Mr./Ms. _____'s] able to listen to those types of talks?

What about following instructions from others (like from staff, teacher, or group leader)?

Ability to understand figures of speech (Button your lip)? / What does "Button your lip" mean? Can you tell me any others like that?

Receptive Subdomain:

Tell me about [your/Mr./Ms. _____'s] ability to express himself/herself/yourself.

How do/does [you/Mr./Ms. _____] ask for something when he/she/you want(s) something?

What kind of personal information (e.g. telephone number, room number, or postal address) do/does [you/Mr./Ms. _____] know?

How well is/are [you/Mr./Ms. _____] able to stay on topics that he/she/you and others talk about? (Do/Does [you/Mr./Ms. _____] ever tangent off topic? How often?)

Has/Have [you/Mr./Ms. _____] described any goals (to you) before? Short-term: (I want potatoes for dinner)/Long term: (I want to save my money and buy a bike)? Tell me some of your goals.

Tell me about [your/Mr./Ms. _____'s] ability to give others directions (for doing things).

Written Domain:

Tell me about [your/Mr./Ms. _____'s] writing ability. What types of things do/does [you/Mr./Ms. _____'s] write? (e.g., sentences, paragraphs, essays, etc.). How long are the paragraphs?

Tell me about [your/Mr./Ms. _____'s] ability to spell.

Tell me about [your/Mr./Ms. _____'s] ability to proofread your/her/his work.

What types of things do/does [your/Mr./Ms. _____] read? What grade-level?

Do/Does [you/Mr./Ms. _____'s] mail things? How often? How did you/he/she do it? (wrote addresses, asked for or got postage?)

Do/Does you/he/she write business letters?

Personal Subdomain:

Tell me about your/Mr./Ms. _____'s daily routine. What do you do in am/pm?

Using this starting question, examiner will use probes to explore the following areas:

Ability to care for self.(eating; toileting) teeth brushing; bathing

Finds restrooms

Dressing

What do/does [you/Mr./Ms. _____] when you/he/she gets sick or needs medical attention?

Probe for information regarding knowledge of First aid; Calling 911 in an emergency; medication management/Who makes doctor's appointments

Domestic Subdomain:

Using daily routine question from above, will tap the following areas using probes:

Hot objects

Chores (clean room, put plate away, clean up)

Cooking/meal planning

Washing clothes

Tools and maintenance

Community and Interpersonal Subdomains:

Tell me about [your/Mr./Ms. _____'s] friendships? Is there a best friend? How many? What are they like? What types of things do/does [you/Mr./Ms. _____] do with your/her/his friends? Do they ever take advantage of you/her/him? Do/does you/Mr./Ms. _____ talk with friends on the telephone?/usage or email or internet; computer skills?

Regarding Friendships: do things for others; taken advantage of; reasonable demands; encouragement; likes and dislikes of others; embarrassing things in public; cooperation; bored subject change; dates)

Do/Does [you/Mr./Ms. _____] have a job? What do/does she do? Is it a paid job?

Will use appropriate probes to determine the following abilities:

Clock Time

Money counting/management/checking account/credit card

Days of the week; crosses the street

Ordering at a restaurant

Television viewing

Curfews

Alone travel (details)

Knows about the right to complain when he/she receives poor service.

Play and Leisure Time Subdomain:

What types of games/sports do/does [you/Mr./Ms. _____] like to play?

Quality of social interactions/permission to take things/opening doors for others

Going out w/ friends: adult supervision? Activity planning

Coping Skills Subdomain:

Tell me about [your/Mr./Ms. _____] Manners (table; with friends)

What do you do when you have done something wrong like broken a friend's radio? How do/does [you/Mr./Ms. _____] generally apologize? All the time?

What do/does [you, Mr./Ms. _____]do when you/he/she want(s) something? (Impulse control)

Keeping secrets (at least one day) / Responsibility for actions

Social caution (avoids dangerous or exploitive relationships)

APPENDIX K

IRB APPROVAL

IRB# 08-017 - R1
UNIVERSITY OF ALABAMA INSTITUTIONAL REVIEW BOARD FOR THE PROTECTION OF HUMAN SUBJECTS
REQUEST FOR APPROVAL OF RESEARCH INVOLVING HUMAN SUBJECTS

I. Identifying information

Principal Investigator: Bridget M. Doane, M.A.
Second Investigator: Karen L. Salekin, Ph.D.
Third Investigator:
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College: Arts & Sciences
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Title of Research Project: Evaluation of a Clinical Assumption: Analysis of Self-Reported Adaptive Behaviors and Acquiescent Response Style in Adults with Mild Intellectual Disability/Mental Retardation

Date Printed: July 24, 2009

Funding Source: UA Department of Psychology, UA Graduate School, AAFP Dissertation Grant

Type of Proposal: ___New ___X_Revision ___X_Renewal ___Completed ___Exempt
Attach a renewal application
Attach a continuing review of studies form
Please enter the original IRB # at the top of the page

UA faculty or staff member signature: [Signature]

II. NOTIFICATION OF IRB ACTION (to be completed by IRB):

Type of Review: ___X_Full board ___Expedited

IRB Action:

___Rejected Date:
___Tabled Pending Revisions Date:
___Approved Pending Revisions Date:

X Approved—this proposal complies with University and federal regulations for the protection of human subjects

Approval is effective until the following date: 9/24/2011

Items approved: X Research protocol: dated
X Informed consent: dated
___ Recruitment materials: dated
___ Other: dated

Approval signature [Signature] Date 1-25-10