IDENTIFYING FACTORS ASSOCIATED WITH FRIENDSHIP IN INDIVIDUALS WITH MENTAL RETARDATION

A Dissertation

Presented in Partial Fulfillment of the Requirements for
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Graduate School of The Ohio State University

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ABSTRACT

Maintaining friendships has been linked to quality of life and mental health status for individuals with mental retardation and developmental disabilities (MR/DD). However, many people with MR/DD exhibit social difficulties and have very few or no friends. In most cases in which they do maintain friendships, their friends also have MR/DD. Despite this, MR/DD-friendship research predominantly has focused on relationships of people with a disability to non-disabled community members. Consequently, little is actually known about friendships in which both individuals have intellectual limitations. The purpose of the research reported here was to improve the understanding of consumer-to-consumer friendships and to initiate the development of a questionnaire that measures the constituent parts of those relationships. This investigation incorporated data from previous research, a consensus among family members and experts in the field of MR/DD obtained through the Delphi method, and factor analysis of questionnaires administered to caregivers of consumer friendship pairs. One potential benefit of this research is that by developing a scale that identifies components of friendship behavior, individuals with social deficits or problem relationships can receive targeted interventions that address their difficulties. Such an application could improve the chances that those with few or no friends can develop and maintain friendships, thereby improving their quality of life.
Dedicated to

Kate & Marleyla
ACKNOWLEDGMENTS

From the beginning of this investigation, it has amazed me how many caregivers were willing to volunteer their efforts to learn more about this topic. Because of the study methodology, these individuals remain anonymous, but their input is greatly appreciated. I also thank my friends Cindy and Claudia for their tireless support in preparing survey packets and helping enter data. A special thanks also goes to the thousands of individuals with MR/DD whose relationships formed the basis for the findings reported here.

I also am grateful to my committee members for their support and guidance that made this study significantly better than originally proposed. Charles, Betsey, and especially Steve – you all have been so helpful throughout the process. One piece of advice from which I benefited was seeking outside financial support, which resulted in my ability to conduct this study the way I wanted to. The funding was provided by the Alumni Grants for Graduate Research and Scholarship and the Nisonger Center.

Finally, and most importantly, I would like to thank my family. Little Marleyla has added new joy to my life that I did not know could exist. Kate has been my main support and has demonstrated a willingness to stick out the (too-many) years of graduate school with little complaint. At the same time, their companionship and good humor helps me keep life’s joys in proper perspective on a daily basis. You’re my favorites.
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CHAPTER 1
INTRODUCTION AND LITERATURE REVIEW

1.1 Background and Statement of Problem

In the United States, there are over four million people with mental retardation and developmental disabilities or MR/DD (Larson et al., 2001; U.S. Census, 2000). Commonly referred to as consumers, individuals with MR/DD interact with others on a daily basis. It is well-documented that consumers often experience difficulties in these interactions, and relationship problems are not uncommon (Bebko et al., 1998; Goldstein & Morgan, 2002; Hill, Rotegard, & Bruininks, 1984; Kellett, Beail, & Newman, 2005). Despite this, many do have friends. Some friendships form between consumers and others who do not have mental retardation (Amado, 1993), but the majority of friends of people with MR/DD also have intellectual disabilities (Cheseldine & Jeffree, 1981; Hill, et al., 1984; Knox & Hickson, 2001; Landesman-Dwyer, Berson, & Romer, 1979; Ralph & Usher, 1995). Friendships in which both individuals have MR/DD take root in a variety of settings including school (Guralnick & Groom, 1985), work (Gilson & Gilson, 1998), recreational settings (Heyne, 1997), and within their own households (Wiltz, 2003).

Friendship has been considered a key component of a better life for thousands of years (Aristotle, 330 B.C.E./1951; Bolotin, 1979). Modern researchers have linked
friendship to improved quality of life (QOL) in elderly people (Newsom & Schulz, 1996; Silverstein & Parker, 2002), seminary students (Craddock, 1996), people with schizophrenia (Gaite et al., 2002) and multiple sclerosis (Aronson, 1997), as well as individuals with MR/DD (Barber & Hupp, 1993; Baxter, 1997; Haring, 1991; Knox & Hickson, 2001; Newton, Olson, Horner, & Ard, 1995; Schalock & Kiernen, 1990). In general, when an individual has positive peer relationships, his or her QOL improves. On the other hand, when peer relationships are strained, a person’s life is negatively impacted. For example, utilizing an MR/DD sample, Lunsky and Benson (2001) found a significant correlation between a commonly-used measure of consumer QOL (Schalock & Keith, 1993) and support from one’s social network including friends ($r = .23$, $p > .05$). They also reported a negative association between QOL and level of consumer loneliness ($r = -.28$, $p < .05$).

Loneliness is a key issue for individuals with MR/DD since many have very few or no friends (Bebko et al., 1998; Cheseldine & Jeffree, 1981; Lunsky & Benson, 1999; Hill et al., 1984). A recent investigation of 3630 individuals with MR/DD showed that only 51% reported having friends (Gardner & Carran, 2005). Not having friends can have negative psychological implications (Lunsky & Benson, 2001; Stainback & Stainback, 1987), such as increased rates of loneliness and depression (Laman & Reiss, 1987; Reiss & Benson, 1985). On the other hand, having at least some friends has been identified as a possible protective factor against developing psychological disorders for people with MR/DD (Bebko et al., 1998; Cohen & Wills, 1985; Lunsky & Benson, 1999).
Despite its potential impact on quality of life and mental health, little is known about consumer friendships because of a shortage of empirical investigations (Bogdan & Taylor, 2001; Guralnick & Groom, 1985; Kasari & Bauminger, 1998; Landesman-Dwyer, et al., 1979; Stainback & Stainback, 1987). The scarcity of research using samples with MR/DD extends to friendships in children (Guralnick & Groom, 1985), adolescents (Zetlin & Murtaugh, 1988), and adults (Barber & Hupp, 1993; Kaufman, 1984). Empirical investigations are needed in order to gain a better understanding of consumer friendships. Greater knowledge about the topic of friendship behavior may then be utilized to improve the lives of the many individuals with MR/DD who have relationship difficulties.

1.2 Purpose:

Prior research on consumer peer relationships has tended to examine a small number of friendship elements at a time including some that only focused on a single aspect of peer relations (Kasari & Bauminger, 1998). For example, Wiltz and Reiss (2003) investigated roommate relations and concluded that similarity was an important component of their getting along. Although other data were presented, the focus of the report was to draw attention to this one aspect of relationships.

The purpose of the proposed research is to gain a more comprehensive understanding of the multifaceted nature of consumer-to-consumer friendships. A secondary purpose is to initiate the development of an assessment instrument that measures the constituent parts of friendship. This instrument could help consumers
having relationship difficulties by assessing the various components of their friendship behavior that are problematic. Caregivers could then target interventions accordingly. Increasing the possibility of forming friendships may lead to decreases in consumer loneliness and improvements in quality of life.

1.3 Social Development and Friendships in People with MR/DD:

The onset of mental retardation usually occurs prior to birth, but must take place before one’s 18th birthday for diagnosis (APA, 1994). Possibly as a result of the presence of the disability during childhood, it is common for people with MR/DD to experience delays in their social development (Kasari & Bauminger, 1998; Matson & Fee, 1991). This has significant implications for their friendship-building abilities.

Social development among people without disabilities has been the focus of considerable research (Erwin, 1993; Sroufe, Cooper, & DeHart, 1992). Less is understood about friendship building among individuals with MR/DD. Typical social development is described below, followed by a description of social development in people with MR/DD and a review of research that is most relevant to consumer friendships.

1.3.1 Normal Social Development

At birth, a human baby is thought to possess predispositions that enable newborns to take part in social interactions very early on in life (Sroufe et al., 1992). For example, immediately after birth infants are automatically able to communicate psychological and
physiological needs through crying. Throughout life, individuals continue to develop biologically, cognitively and emotionally, which in turn is linked to stages of social development (Cairns, 1986). According to Bandura (1979), social learning takes place within the context of a continuous interaction between behavioral, environmental, and cognitive factors. Through experience, observation, and self-regulation (i.e. cognition), children learn how to interact with others and apply these lessons to their own relationships as they grow.

In addition to communication through crying, overt social behavior begins immediately after birth with the bonding that occurs between a mother and child (Ainsworth, 1991). Within the first six months of infancy, mutual exchanges begin to take place between infants and others, which are associated with children’s increased control of attention and coordination (Sroufe et al., 1992). Aggression and anti-social behaviors start to emerge in some individuals by early childhood (Wahler & Dumas, 1986). Prosocial behaviors, such as sharing and altruism, also begin to develop in this period, as do rudimentary peer relationships (Sroufe et al., 1992). Another important building block in socialization is empathy, which children begin to develop in early childhood and continue to refine as they mature (Erwin, 1993). For example, early on empathy may be expressed by one child crying when another is hurt. Acknowledgement of another individual’s difficulties can be comforting or even validating to the person having problems. As one develops further, more sophisticated empathic understanding can lead a person to realize that sometimes it is better not to overtly acknowledge another’s plight because it might be embarrassing (Erwin, 1993).
By the time children reach adolescence, they have generally developed relationships with peers that become central to their social world (Fine, 1981). While refining their understanding and use of previously acquired social attributes, preadolescents and adolescents continue to develop socially as they prepare themselves for adulthood. For example, preadolescents start to make comparisons of themselves to others and begin to engage in group behavior, while adolescents become more intimate with friends through self-disclosure, loyalty, and keeping confidences (Sroufe et al., 1992).

Many of the social lessons learned in one’s development through adolescence are believed to be applied to other relationships in adulthood (Kenny & Barton, 2003). For example, those who form stable attachments earlier in life tend to more-easily build strong relationships as they grow older (Ainsworth, 1991). One notable social development that the vast majority of individuals experience is finding a romantic partner, which is often followed by having children of one’s own (Azar, 2003). The strong parental bond that both mothers and fathers form with their children has been well-documented, and it brings the cycle of social development full circle (Ainsworth, 1989).

Parenting children is not the final stage in social development, however. Ainsworth (1989) has described adult social development in more detail and reports that as individuals mature, they typically have one or more enduring friendships with peers. Sibling relations usually last a lifetime as well, and they sometimes include assumption of caregiving roles, especially if a brother or sister becomes disabled or dies prematurely.
One of the final stages of social development that is fairly common is becoming a grandparent (Brown & Roodin, 2003). Grandparents are a salient reminder of the continuity of family life and can provide a safe haven during family crises. They also tend to delight in the companionship of their developing grandchildren and provide leadership as time-honored role models.

1.3.2 Social Development and Individuals with MR/DD

Differences between the social development of those with and without MR/DD, while apparent at a young age, are not yet well understood (Goldstein & Morgan, 2002; Kasari & Bauminger, 1998). However, researchers are beginning to recognize the cumulative nature of delays in social development. According to Warren, Yoder, and Leew (2002), communication difficulties, which are common in infants with mental retardation, are compounded by poor interactions between child and caregiver. This can then lead to further social impairments. According to this model, a child without social delays who learns to initiate communication triggers changes in his or her social environment. For example, the child’s parent might become more attentive and more purposeful in communication. This, in turn, can lead to accelerated improvement in the child’s further social developments. These bi-directional and reciprocal exchanges between child and caregiver occur rapidly with cumulative advantage for those with normal development and accelerated impairments for those with delays. Early social achievements lay the groundwork for subsequent social development while delays prompt further impairments.
Although the evidence is incomplete, researchers are beginning to confirm some aspects of this framework. For example, as would be predicted, typically-developing children tend to receive substantially more language input from caregivers than do those with disabilities (Warren et al., 2002). If correct, the above model would lead to the prediction that young children with communication difficulties, such as those with MR/DD, who receive less language stimulation from parents would experience further compounded delays. These social and communication difficulties could also adversely affect bonding to parents, and early parental bonding has been related to the ability of an individual to form friendships later in life (Ainsworth, 1991; Schneider, Atkinson, & Tardif, 2001). This cascading set of events, put in motion at an early age, is one reason that early intervention directed at social development is advocated for very young children with intellectual disabilities (Warren et al., 2002). The goal of these interventions is to interrupt the accumulation of social delays in order to reduce or prevent the social difficulties that are common among adults with MR/DD.

Whether as a direct result of intellectual limitations or because of the cumulative nature of developmental deficits described above, it is widely known that individuals with MR/DD bond with fewer friends than do their peers without cognitive challenges (Bebko et al., 1998; Goldstein & Morgan, 2002; Hill et al., 1984). Difficulties forming friendship bonds early in life might be expected to manifest themselves later as well, which could result in greater difficulty with other attachments such as romantic relations (Ainsworth, 1989).
Interest in sex and romance is a normal part of the lives of individuals with MR/DD (Reiss & Havercamp, 1998), but society historically has been inclined to shield individuals from sexual relations (Aunos & Feldman, 2002). Consequently, marriage and having children has tended to be rare among consumers. Indeed, although statistics are scarce, the available evidence suggests that people with mental retardation are much less likely to become married than others in the population. In fact, as recently as 1997 many states actually had laws forbidding it (Pietrzak, 1997). The history of how the legal system deals with parenting among individuals with MR/DD has been even more draconian. During the twentieth century many states initiated involuntary sterilization laws and the U.S. Supreme Court upheld them with Justice Oliver Wendell Holmes once stating that “three generations of imbeciles are enough” (Wehmeyer, 2003, pg. 57).

In the latter part of the twentieth century, attitudes began to change regarding sexuality and parenthood among individuals with intellectual limitations. Increasingly, caregivers are assuming a more supportive role by helping individuals learn the appropriate expression of their desires while trying to avoid exploitation (Lumley & Scotti, 2001). Most individuals with mild mental retardation indicate that they would prefer to marry and raise children, but only a small minority actually do so (Aunos & Feldman, 2002; Drew, Hardman, & Logan, 1996). According to one estimate, there are approximately 33,000 parents with mental retardation in the United States (Ingram, 1992) representing less than one percent of the population of people with MR/DD.

The limited access that individuals with MR/DD have to the social outlets of spouses and children only underscores the importance of building and maintaining stable
friendships with peers. As individuals without disabilities progress through adulthood, their attention tends to increasingly center on their own growing families, leaving friends in a role of lesser importance. Because those with MR/DD tend not to form their own families, their peer relationships continue to play a central social role throughout their lives.

1.4 The Possibility of Friendship

Given their social delays and well-documented problems with social skills (Goldstein & Morgan, 2001; Matson & Fee, 1991), some have questioned whether individuals with mental retardation are even capable of maintaining friendships (Landesman-Dwyer, et al., 1979; MacAndrew & Edgerton, 1966). Some studies have, in fact, shown that people with MR/DD often have no friends (Bebko et al., 1998; Cheseldine & Jeffree, 1981; Lunsky & Benson, 1999; Gardner & Carran, 2005). Especially prevalent is the notion that people with more-severe intellectual impairment might not be capable of making friends. Some research has supported the opposite claim, however, suggesting that friendship is possible among individuals with severe intellectual limitations.

MacAndrew and Edgerton (1966) addressed the issue with a detailed description of an extraordinary relationship between two men with severe mental retardation living in an institution. The IQ of each man was measured in the range of 31-40 (about four standard deviations below average IQ), and each also had other disabilities; one could not see and the other had epilepsy and cerebral palsy. Although not a requirement of their
living situation, these men spent nearly all their time together and engaged in behavior that clearly indicated friendship. For example, even though others had difficulty understanding their speech, the two would sit together, talk, and laugh for hours on end. Their relationship was deeper than simply having fun times together, though. Each also helped the other whenever needed. The man who could see, for example, made sure other consumers did not take food from his blind friend, and he helped him with cleaning (e.g. missed spots) as well. In this friendship, helping behavior was reciprocal. The blind consumer helped his friend with CP in dressing, especially with difficult buttoning and shoelace tying. These friends also shared with one another. For example, if one were given a snack, he would give part of it to the other. If the friend were not present, the item to be shared would be saved until the two met later. Finally, although both men sometimes displayed aggression toward others, their relationship was characterized by a lack of conflict and fighting.

The above account was not a common peer relationship at the institution – in fact it was uncommon enough to be the topic of a journal article – but it did provide early evidence that friendship can exist even among those with severe cognitive impairments. Although not the topic of a great deal of research, some additional evidence has been reported that indicates that those with very low intelligence can form friendships.

Landesman-Dwyer, et al. (1979) studied the social behavior of 208 people with MR/DD living in 18 group homes and found that “some friendship pairs consisted of individuals who were very limited in communication or social skills” (p.578). Participant behavior was observed and coded every 15 minutes over a two-day period. On average,
62 observations were recorded per individual. As might be expected, some social behaviors covaried with intellectual ability. Those with higher levels of intelligence, for example, tended to spend more time socializing when in a peer group. On the other hand, the investigators found that individuals with profound mental retardation engaged in social behavior only slightly less than those with higher IQ’s. These results suggest that while individuals with lower intelligence may desire social activity at similar levels as others, their more-severe cognitive limitations may restrict their ability to engage in social behavior for longer time periods.

Wiltz (2003; Wiltz & Reiss, 2003) studied friendships and compatibility in 93 consumer roommate pairs. Compatibility was highly related to friendship scores, and no difference in mental retardation level was found between compatible and incompatible roommates. A closer examination of the data showed that some roommate pairs with low intellectual functioning were compatible to one another and were friends. In one case, two caregivers completed a questionnaire for a pair of consumers with severe/profound mental retardation who had lived with one another for two years. Each staff rater agreed that the pair “understand one another well,” “help one another out when needed,” and “enjoy spending time together.”

The examples above illustrate that although many people with MR/DD lack friends (Bebko et al., 1998; Gardner & Carran, 2005) and may face developmental barriers to friendship building (Goldstein & Morgan, 2001), it is possible for consumers to develop and maintain friendships. The rest of this investigation is dedicated to uncovering more about the nature of friendship among consumers. The first section
below reports the findings of a pilot study. Following the summary of the pilot, literature is reviewed that is relevant to friendships among people with MR/DD. The initial goal of the pilot was to utilize data collected previously in order to determine the feasibility of uncovering factors underlying of friendship. This was an early step in the research that needed to occur prior to initiating the larger-scale study that is reported later. A second objective of the pilot was to initiate the identification of potential friendship factors and to provide a starting point in determining what possible friendship factors to explore.

1.5 Pilot – Factor Analysis of Data Collected Previously:

The primary purpose for conducting the pilot study was to determine whether friendship factors could be found using an informant-rating questionnaire. Using a self-report questionnaire is sometimes considered inappropriate for a sample of individuals with mental retardation because of their intellectual limitations, so it has become common practice to use informant-rating scales instead (Reiss & Havercamp, 1998; Wiltz, 2003). On the other hand, rating scales have their own difficulties including lower inter-rater reliability (Achenback, McConaughy, & Howell, 1987). Since the initial proposal for the larger-scale investigation of friendship factors included the use of an informant-rating scale, it was necessary to establish beforehand that it would be feasible to find multiple factors using questionnaires in that format.

Data for the pilot were collected for a previous study on roommates with MR/DD (Reiss & Wiltz, 2003), which utilized an informant-rating questionnaire called the Roommate Friendship Scale or RFS (Wiltz, 2003). This 28-item instrument measures
how well roommates get along with one another (see Appendix A). Each question is measured on a five-point Likert-type scale ranging from SD = Strongly Disagree to SA = Strongly Agree. The RFS was designed as an index of liking with items intended to differentiate between compatible and incompatible roommates. The intent was never to determine the factors underlying friendship, and no factor analysis of the roommate friendship data had been performed prior to the pilot. Because the RFS does contain items relevant to different aspects of friendship, it seemed possible that multiple factors could be identified.

In order to develop the RFS, available college roommate compatibility scales and some friendship scales were reviewed. They included the Roommate Rapport Scale (Carey, Hamilton, & Shanklin, 1986b), the Roommate Rapport Scale Short Form (Carey, Stanley, Werring, & Yarbrough, 1988), the Friendship Qualities Scale (Bukowski, Hoza, & Boivin, 1994), the Social Satisfaction Questionnaire (Fleming, Perkins, Lovejoy, & Collins, 1991), The Intimate Friendship Scale (Sharabany, 1994), the Exchange-Orientation Scale for Friends (Murstein & Azar, 1986), the Barrett-Lennard Relationship Index (Barrett-Lennard, 1963), as well as items from Seashore’s Group Cohesiveness Index (Wheaton, 1974), and a scale designed to measure romantic love that included some liking items (Rubin, 1970). In addition, several scales designed for use with children were examined, including the Matson Evaluation of Social Skills with Youngsters, or MESSY (Matson, Rotatori & Helsel, 1983), the Peer Network and Dyadic Loneliness Scale (Hoza, Bukowski, & Beery, 2000), as well as the Teacher-Child Rating
Scale (Hightower, et al., 1986). With the exception of the last scale, which had only a few friendship items, all of these questionnaires were in a self-report format.

After evaluating the available questionnaires for items relevant to roommate liking, the Roommate Rapport Scale (Carey et al., 1986b) and the Friendship Qualities Scale (Bukowski et al., 1994) were selected as basic models for creating a new rating instrument to best differentiate between compatible and incompatible roommates. Item topics included free time activity, conflict and fighting, and respect and liking. The study author wrote all RFS items. The RFS has demonstrated a stable internal structure ($\alpha = .97$), adequate test-retest reliability ($r = .87; p < .01$), and the ability to differentiate between criterion groups [$M_A = 66.74; M_B = 34.74; t(91) = 7.56, p < .001$ (two-tailed), $d = 1.61$] (Wiltz, 2003).

**Pilot Study Participants:** Staff informants rated the relationships of 127 housemate pairs who lived in government-subsidized housing operated by residential service providers (See Table 1.1 below for additional information on the sample). Each roommate relationship was rated by a staff member who had worked with the individuals for a minimum of six months ($M = 3.0$ years). Twelve residential providers were contacted based on the author’s familiarity with them, and eleven agreed to participate in this study. No incentives were offered other than feedback of study results. Staff raters completed questionnaires about the participants without knowing the purposes of the study. The results of the ratings were kept anonymous and identified only by code in order to protect consumer confidentiality.
### Table 1.1: Roommate Sample Demographics and Intellectual Functioning*

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<tr>
<td>Mean Age</td>
<td>39</td>
</tr>
<tr>
<td>Males</td>
<td>67%</td>
</tr>
<tr>
<td>Females</td>
<td>33%</td>
</tr>
<tr>
<td>Caucasian</td>
<td>85%</td>
</tr>
<tr>
<td>African American</td>
<td>14%</td>
</tr>
<tr>
<td>Other Race</td>
<td>1%</td>
</tr>
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* Several percentages do not add to 100% because some informants omitted some ratings.

**Pilot Results:** Using SPSS and CEFA statistical software, multiple factor solutions were considered. For each analysis, maximum likelihood extraction was used with oblique rotation (Browne, 2001; Cattell, 1978; Gorsuch, 1983). After examining solutions from one, two, three, four, and five factors, the three- and four-factor solutions displayed adequate fit to the model and could be interpreted (Browne & Cudeck, 1992). The five-factor solution appeared to be overfactored and was not interpretable. The three-factor solution was easiest to interpret with few items loading on multiple factors. These factors were labeled: (1) Socializing and Fun, (2) Prosocial Behavior, and (3) Conflict and Fighting.
The pilot outlined above indicates that it is possible to empirically determine multiple factors underlying consumer friendships utilizing an informant-rating scale. In the sections of this paper that follow, additional research on consumer friendships will be reviewed. First, friendships among people with MR/DD will be compared to the peer relations of those without disability. Then, relationships where both individuals have mental retardation will be considered. Finally, studies that describe various elements of friendship are reviewed. These elements are particularly salient to learning more about the potentially multifaceted nature of consumer friendship.

1.6 Friendships among People with MR/DD Compared to Those Without Disability

Researchers have shown that peer relations among people with MR/DD are different than friendships among individuals with normal intellectual functioning. Heiman (2000) studied the friendships of 310 students with mild intellectual disabilities as well as 265 students without disabilities. Confidentiality laws prevented the researchers from obtaining IQ scores, but teachers reported that IQ scores for the mildly disabled group ranged from about 55 to 75. This is consistent with the diagnostic criteria for mild mental retardation (APA, 1994). All students were administered a Hebrew adaptation of the Friendship Quality Questionnaire (Parker & Asher, 1990 as cited in Heiman, 2000), which consists of six open-ended questions regarding the student’s opinions and experiences with friendship. Students without disabilities completed the questionnaire alone, while those with disabilities were administered the questionnaire in an interview format. Results showed that children with intellectual disabilities were
more likely to feel lonely than their non-disabled peers, and they were more likely to turn to people within their homes for emotional support. Children without disabilities were more likely to share secrets and be more intimate with their friends than were children with disabilities.

Zetlin and Murtaugh (1988) studied friendship patterns of 32 adolescents with mild intellectual disabilities and 32 with normal intelligence. The disability group consisted of students with IQ’s below 85 (range = 58-84, M = 73). The non-disabled group was randomly selected from among the rest of the student body. Each student’s social interactions were observed for five-minute periods at least one time per week for a full school year. During this observation period, students were also interviewed about their daily schedules and social activities. Results showed that the participants with intellectual limitations tended to have fewer friendships, and their friendships were more conflict-ridden and less stable than their non-disabled peers. Stability was operationally defined as maintaining the same friend for at least six months. Students with disabilities also rarely made plans to see friends outside of school. Of those individuals who had jobs, only 11% of the adolescents with disabilities made friends at work, while 92% of those without disabilities who were employed found friends at work. Like Heiman (2000), the results of this study showed that the friendships of those with disabilities tended to be more superficial with little actual knowledge about their friends’ lives.

Barber and Hupp (1993) conducted structured interviews with 20 people with MR/DD and seven individuals without disabilities. Participants were asked to provide a list of current peer relationships and where they met each peer. The results showed that
about 3/4 of the non-disabled group met friends outside the home, such as at work or within the community, whereas only 1/4 to 1/3 of the group with MR/DD found friends outside the home. They concluded that although the participants with MR/DD took part in many activities outside their home, converting acquaintances to friends had not occurred as easily as with the non-disabled participants.

The studies above indicate that people with MR/DD tend to have fewer friends (Zetlin & Murtaugh, 1988) and experience higher levels of loneliness than those without disability (Heiman, 2000). A lack of friends has been linked to depression in people with MR/DD. As mentioned earlier, Reiss and Benson (1985) studied the association between social support – which includes friendship – and depression \(M_{\text{depressed}}=3, M_{\text{no-psychopathology}}=10.1, F(2,28)=17.71, p < .01\). The measure of social support included the following items: “spends time with friends,” “seems close to parents,” and “spends a lot of time alone.”

The connection between loneliness, not having friends, and depression underscores the importance of conducting research to learn more about friendship in people with MR/DD. Investigators have found that consumers tended to have more superficial relationships to peers with less intimate knowledge about their friends’ lives than do people without disabilities (Heiman, 2000; Zetlin & Murtaugh, 1988). This could be related to impairments in social development discussed earlier (Warren et al., 2002). More so than in peer relations of people without disability, researchers have found that people with MR/DD tend to meet their friends at home (Barber & Hupp, 1993), and they are more likely to turn to people within their homes for emotional
support (Heiman, 2000). This could be related to consumers’ well-documented difficulties in forming friendships. As a result, a general consensus is emerging among families, service providers, and researchers that the components of consumer friendship need to be studied (Richardson & Schwartz, 1998).

To date, some research has been conducted on the friendships of people with MR/DD, but most has focused on number, quality, and where peers meet rather than defining the important attributes of friendship. One challenge to gaining a better understanding of consumer-to-consumer friendships is that most MR/DD friendship research has focused on relationships with non-disabled friends (Kasari & Bauminger, 1998; Knox & Hickson, 2001; Ralph & Usher, 1995). Several reasons for this have been cited. Perhaps the most important is that the ability of people with MR/DD to establish friendships with non-disabled peers is a central issue in inclusive programs, particularly in schools (Guralnick, Connor, & Hammond, 1995; Ralph & Usher, 1995). Furthermore, parents of children with MR/DD believe that their sons and daughters are more likely to learn appropriate social skills from non-disabled peer-models (Guralnick et al., 1995). Another reason to emphasize these friendships is that relationships to non-disabled community members have been linked to improved QOL (Hughes, Hwang, Kim, Eisenman, & Killian, 1995; Schalock, Keith, Hoffman, & Karan, 1989). Given the high priority placed on improving QOL and on inclusion in normal schools, it is not surprising that significant research attention has been paid to the friendships of people with MR/DD to their non-disabled peers (Knox & Hickson, 2001; Ralph & Usher, 1995).
Investigating friendships in which one individual has MR/DD and the other does not is applicable to some settings in which people with and without disabilities interact. For example, such research could shed light on social interactions in inclusive schools, between consumers and their non-disabled neighbors, or between people living and working in residential facilities. However, for the purpose of understanding the constituent parts of consumer-to-consumer friendships, research in which both friends have MR/DD is most pertinent and therefore will be reviewed in more depth. These investigations cover important elements of friendship and interpersonal interaction that could be related to factors of friendship.

1.7 Consumer-to-Consumer Friendship

Landesman-Dwyer, et al. (1979) studied the social behavior of 208 people with MR/DD. One outcome measure was the time spent with different peer groups. This was referred to as the “intensity” of relationship behavior. Results showed that the consumers spent more than twice as much time with other residents (28% of observed periods) as they did with staff members (12%) or with visitors (8%), so the intensity of relationship behavior with other consumers was higher than with staff members. Study results also showed a significant gender difference in social behavior with more intense relationships occurring in group homes with mostly female residents.

Hill, et al. (1984) studied the social interactions of 2,271 residents of state-run and privately-run facilities for people with MR/DD. The method of data collection consisted of field interviews with residential staff. Results showed that about half of the consumers
did not have any social relationships. Of those who did maintain relationships, most were with others with disabilities or with staff members at the facility. One weakness of this report was a lack of methodological detail, particularly with regard to the sampling procedures. For example, there is little description provided about the staff raters including how many participated, how many clients each person rated or how long (or how well) they actually knew their clients. On the other hand, the facilities that provided data were randomly selected from nationwide databases and the individuals within the facilities also were selected at random. Therefore, the results can possibly be viewed as nationally representative at the time of data collection.

Knox and Hickson (2001) studied the meanings of close friendships among four people with MR/DD. This research provided a participant perspective on peer relationships in which the individuals were viewed as experts on their own experiences and collaborators in the research project (see Bradley, Agosta, & Kimmich, 2001). The investigators conducted two in-depth interviews with each participant. The results showed that although non-handicapped people were included within the participants’ network of friends, all those identified as “close friends” also had MR/DD. Close friendships were an important part of these individuals’ lives. According to the participants, the characteristics of close friendship included sharing common interests, helping each other, and providing reciprocal support to one another. These and other important elements of friendship will be discussed in greater depth below. The sample size in this study was small, and it was not randomly selected, so generalizing the findings to all people with MR/DD is not possible.
Results from the studies reviewed thus far support the previously-discussed ideas that people with MR/DD often lack friends altogether (Hill, et al., 1984) and that when they do have friends, these individuals usually also have MR/DD (Knox and Hickson, 2001). The following studies pertain to the elements of friendship and focus on relationships in which both peers are consumers. The intent was to continue to explore potential friendship factors.

1.7.1 Elements of Friendship

Although there is considerable diversity among people, it is generally accepted that nearly everyone considers at least one other person to be a friend. Since individuals differ considerably in their personalities as well as their social skills, it seems likely that there are multiple pathways to friendship formation. On the other hand, there do seem to be some individual characteristics that lend themselves particularly well to creating friendships, while other characteristics may be obstacles to gaining friends. Some individuals are able to form the bond of friendship quite easily. They may be referred to as being “friendly” and some say that “they have never known a stranger.” Others have more difficulty forming friendships and may be considered “loners” or even “unfriendly.” Such common wisdom is based on anecdotal experience that indicates that there are certain individual characteristics that are conducive to creating friendship. Researchers investigating peer relationships have identified individual characteristics that appear to facilitate friendship. Several of these are discussed below.
1.7.1.1 Sociability. As previously discussed, human social behavior begins soon after birth with crying and bonding to parents and continues throughout the life cycle (Sroufe et al., 1992). However, there appear to be considerable individual differences in the degree to which people enjoy social contact (Kasari & Bauminger, 1998; Reiss, 2000; Reiss, Wiltz, & Sherman, 2001). Attachment theorists have linked interest in interpersonal relationships with childhood experiences of bonding to parents (Ainsworth, 1991; Schneider et al., 2001). Attachment theory holds that a person who as a child formed secure and appropriate attachments to parents is more likely to be a self-confident adult who can effectively tailor behavior in social situations. According to this theory anxiously attached children are more at risk for later interpersonal difficulties because of their experience with social uncertainties (Belsky & Cassidy, 1994). Others have suggested an interplay between a genetically-determined trait to enjoy socializing and social reinforcement from others (Bebko et al. 1998; Reiss, 2000). Regardless of its nature and/or nurture related origin, it should come as no surprise that consumers who are sociable tend to have more friends than those who are less interested in socializing.

Studies indicating that sociability is an element of friendship: Kaufman (1984) studied the friendship patterns of 42 adults with MR/DD. For this study, fieldworker observations and ratings were used, as well as interviews with the participants and with their parents. For data analysis, all information from the above sources was condensed into short biographies for each individual. Next, decision rules were developed to rank the degree of sociability for each person. Satisfaction was also ranked for each individual based on reports of how satisfied the individual was with various aspects of his
or her life. Although the trait of sociability was considered an important component of friendship, being sociable did not necessarily lead to life satisfaction. Some highly sociable people were not satisfied in their lives or with their relationships. However, non-sociable people did have fewer friendships, which other researchers have related to potential psychological difficulties (Lunsky & Benson, 2001; Stainback & Stainback, 1987). Although rich in description, this study is limited by its relative lack of empirical rigor. For example, the ranking rules for dimensions of sociability and satisfaction appear to be based more on common sense than on any sound methodology.

Newcomb, Bukowski, and Patee (1993) found further support to the notion that sociability is associated with friendship in a meta-analysis of 41 studies of children’s peer relationships. The purpose of this study was to provide a quantitative review of peer relationships in children in various groups, including children with cognitive disabilities. Two conclusions from the meta-analysis were that popular children tended to be highly sociable, and children who enjoyed less socializing were more likely to be rejected by their peers.

1.7.1.2 Helpfulness. Behaviors related to helpfulness, such as sharing and altruism, start to develop in early childhood (Kasari & Bauminger, 1998; Sroufe et al., 1992). Some individuals gain an unusual amount of satisfaction by engaging in helpful or nurturing behaviors (Reiss, 2000). There are even careers devoted to helping others including the many different types of public servants, secretaries, research assistants, and reference librarians. Many world religions also prioritize helping others through charity
and other good works. For example, Mother Theresa, a Catholic nun in India, was famous for helping the poor. People who enjoy helping others may also make friends more easily than those who do not enjoy helping others (Richardson & Schwartz, 1998), and some relationships develop specifically because one of the individuals enjoys expressing his or her enjoyment of nurturing (Grenot-Scheyer, Staub, Peck, & Schwartz, 1998). Bebko et al. (1998; Sroufe et al., 1992) suggest that as children mature, they start to initiate prosocial behaviors such as being helpful and that children who are more helpful tend to also be more popular and have more friends.

**Studies indicating that helpfulness is an element of friendship:** Heiman (2000) studied the meaning of friendship in 310 children with mild intellectual disabilities and 265 students without cognitive limitations. The methodology of this study was discussed previously in greater detail. Results indicated that the participants considered friendship to be closely related to helpfulness. In fact, over 50% of the sample endorsed the statement that “one who helps” is one meaning of “good friend” (pg. 5). It is important to note that this result was not unique to individuals with cognitive disabilities, since over 50% of the comparison group of non-disabled children also associated helping behavior to friendship.

In the Knox and Hickson (2001) study in which participants were interviewed twice, results showed that helpfulness was considered to be an important component of friendship. One person said of his good friend that, “we help each other.” Another said that friends help her “and I’m helpful to them too.” (pg. 282). This study was not
quantitative in nature, and there were no statistical analyses to determine the significance of the results.

Zetlin and Murtaugh (1988) studied friendship patterns of 32 adolescents with mild cognitive limitations and 32 without disabilities. Some details of this study were described earlier. Each student’s social interaction was observed for five-minute periods at least one time per week for a full school year. During this observation period, students were also interviewed about their daily schedules and social activities. Results showed that over half of the students without a handicap and about one third of the students with a disability were empathic to problems being experienced by a close friend. The authors distinguished between showing concern for peers and actually offering help or acting in ways to benefit peers. An example of a friend helping another was that a vision-impaired student was helped to class by a friend. Not surprisingly, participants in both groups exhibited actual helping behavior less often than simply showing concern for peers (29% for non-disabled and 19% for adolescents with disability). Statistical significance was not reported.

1.7.1.3 Aggression. Aggression tends to be a stable trait in some people that develops in early childhood and often lasts a lifetime (Wahler & Dumas, 1986). Individuals who are aggressive have a tendency to physically or emotionally harm other people in close proximity to them. Potential friends are likely to find the harmful behavior in such interactions aversive, which can undermine the ability of aggressive individuals to make friends (Salisbury & Palombaro, 1998; Stainback & Stainback,
Aggression has also been related to poor social skills (Richardson & Schwartz, 1998) and to social rejection (Newcomb et al., 1993). Aggression is considered one of the most pervasive behavior problems in people with MR/DD (Reiss, 1994), which may contribute to the difficulty people with MR/DD have making friends as compared to non-disabled peers (Heiman, 2000; Zetlin & Murtaugh, 1988). Grenot-Scheyer et al. (1998) consider aggression to be so detrimental to relationships that they regard low aggression to be a necessary prerequisite to the formation of friendships.

**Studies indicating that aggression hinders friendship:** Guralnick and Groom (1985) studied 33 preschool children with mild or moderate MR/DD. All children took part in small group activities (mean = 7.9 children) for 2.5 hours per day, five days per week. In addition, part of each day was designated a free play time period, in which children could access a wide variety of toys and play equipment. It was during this free play period that observations took place. Two trained observers coded behavior for each child who was observed for 80 minutes over a period of 13 weeks. Several observation scales were adapted for use in this study, with data indicating that the trained observers were recording their ratings reliably. Results showed that aggression was associated with low play activity, and high levels of aggression were highly correlated with a child’s tendency not to engage in any play activities.

More recently in a sample of 93 housemate pairs, Wiltz (2002) found a significant correlation between aggression and low friendship scores \( r = .5, \ p < .001 \). Aggression was measured using a scale from the Reiss Profile (Reiss & Havercamp, 1998), and friendship was measured using the 28-item Roommate Friendship Scale with questions
on liking, trust, and spending time with one another (Wiltz, 2003). The lowest friendship scores were found when both housemates were highly aggressive followed by either roommate having high aggression. Roommate dyads in which neither individual was rated as highly aggressive had the highest friendship scores.

1.7.1.4 Social Skills. In addition to cognitive limitations, both the DSM and American Association on Mental Retardation (AAMR) diagnosis of mental retardation require that the individual must exhibit significant limitations in adaptive behaviors, such as social skills (APA, 1994; Luckasson et al., 2002). Social skills deficits have been linked to difficulty in forming friendships (Bebko, et al., 1998; Danforth & Drabman, 1990; Kasari & Bauminger, 1998) and psychopathology such as depression (Benson, Reiss, Smith, & Laman, 1985), which in turn may be related to isolation from social support (Reiss & Benson, 1985). In some cases, social skills training is used to reduce social isolation (Haring, 1991). A slightly different point of view posits that exposure to a variety of social contexts and the experience of developing and maintaining interpersonal relationships precedes the acquisition of social skills (Heiman, 2000; Richardson & Schwartz, 1998; Zetlin & Murtaugh, 1988). Regardless of whether social skill acquisition precedes or follows the formation of friendships, good social skills probably help maintain positive relationships (Richardson & Schwartz, 1998).

One difficulty in determining the specific social skills associated with friendship is that social skills themselves are defined in many ways (Marchetti & Campbell, 1990). McGinnis and Goldstein (1997), for example, developed a curriculum for elementary
school children teaching basic friendship-making skills. They included introducing oneself, beginning and ending conversations, asking a favor, sharing, apologizing, and so on. Within the broad scope of social skills referred to in MR/DD research are basic daily living skills, such as the ability to dress oneself (Cheseldine & Jeffree, 1981), the ability to control problem behavior (Haring, 1991), the ability to follow rules and obey laws (Luckasson et al., 2002), and communication skills (Gasker, 1991; Zetlin & Murtaugh, 1988). Because the purpose of the proposed research is to determine factors of consumer friendship, only those social skills that have been associated with positive peer relationships are discussed.

**Studies indicating that social skill is an element of friendship:** Cheseldine and Jeffree (1981) studied the social skills of 214 teenagers with MR/DD by administering The Pathways to Independence Checklist to parents. Participants’ levels of MR/DD were not reported, but they were drawn from “a complete range of handicap” (p.51), and included 37% with Down Syndrome, 37% with non-specific brain damage, with the rest having one of several categories of disability including autism and microcephaly. The Pathways Checklist provided information regarding skills in three domains: (1) social skills pertaining to the individual’s acceptability as a friend (e.g. table manners, toileting and grooming, and language), (2) game and hobby skills (e.g. picture recognition and the ability to count), and (3) ability to navigate the environment (e.g. mobility, eating out, and money skills). The majority of the individuals had simple skills such as the ability to dress and undress, toilet independently, or recognize pictures. However, on more complex tasks, the individuals showed a considerable deficit in skills. For example, only
46% could count to twelve, and only 10% were able to order a meal by themselves. Most importantly, only 41% were able to use appropriate language that was understandable to others. The authors point out that of the skills measured, poor communicative ability in particular could be a hindrance to forming friendships. Compounded with the other skills that many or most of the sample lacked, the ability of these individuals to make friends appeared to be significantly limited. Limitations to this study included the lack of a control group or any randomization procedure, which restrict the generalizability of these results. Additionally, no significance levels for any results were reported. Instead, only percentages of the sample with or without a particular skill were indicated. Finally, no psychometric data were provided for The Pathways to Independence Checklist.

As mentioned earlier, Guralnick and Groom (1987) conducted a study in which they constructed eight play groups with eight children in each group. Each group included two children with mild cognitive delays (four years old), three age-matched, and three developmentally-matched (three years old) children. Observational and peer rating data were collected on each child over the course of a four-week period. The children with disabilities were significantly more likely to engage in solitary play, were the least interactive socially, and were rated the least popular. In other studies, individuals with cognitive limitations tended to be of low status and have a poor reputation among peers (Newcomb et al., 1993). In this study, the authors concluded that since the children were unacquainted at the beginning of the study, a social deficit and not reputational factors appeared to be responsible for the results. A limitation to this conclusion, however, is that social skills were not measured directly.
Newton, Olson, Horner, and Ard (1995) studied the relationship between social skills and the stability of peer relationships among 15 people with intellectual disabilities living in community-based apartments. This study was described in greater detail previously. The results indicated that an individual’s level of social skill was associated with the stability of his or her friendships. The association was significant, but not very strong. The authors pointed out that it is likely that in addition to social skills, other factors probably play a role in the stability of peer relationships. However, it was beyond the scope of this study to uncover those factors. The investigators concluded that more research is needed to understand social stability so people with disabilities might gain more durable social networks, which could enhance their quality of life.

1.7.2 Elements of Friendship – A Focus on Interpersonal Interaction

As outlined above, there appear to be some individual characteristics that contribute to some people making friends more easily than others. No matter how “friendly” a person is, however, no friendship takes place with only one individual. Additionally, many people – even those who lack the individual elements listed in the previous section of this paper – have at least someone whom they refer to as a “friend.” Missing thus far in the discussion of friendship is the interactive process that takes place between multiple individuals. Many different types of individuals form friendships, not just those who possess traits that favor friendship building. The following section focuses on elements of interpersonal interaction in friendship building.
1.7.2.1 Reciprocity. More so than other relationship types, friendships place a strong emphasis on give and take. Reciprocity refers to this give and take in relationships and is considered by many to be an essential component to friendship (Grenot-Scheyer, et al., 1998; Kasari & Bauminger, 1998; Stainback & Stainback, 1987). It may be acceptable for some relationships to be imbalanced, such as caregiver-client where one primarily provides support and the other mostly receives aid, but in order to be considered a friendship, some balance in terms of reciprocity is needed (Richardson & Schwartz, 1998). Bebko, et al. (1998) define friendship as both reciprocal and stable. They hold that reciprocity and turn-taking emerge in childhood, which sets the foundation for friendships later in life. Children who lack the opportunity to learn how to navigate reciprocal exchanges may have difficulty establishing and maintaining friendships in the future (Richardson & Schwartz, 1998).

Studies indicating that reciprocity is an element of friendship: According to Zetlin and Murtaugh (1988), friendships develop when young people learn about the reciprocal nature of satisfying human needs. They believe that the first step is for an individual to act prosocially toward another, which builds trust. The next step toward friendship is when others act similarly in return. This reciprocation of prosocial acts and trust building is the foundation of deep friendship. As previously described, these authors studied the relationship patterns of 32 mildly learning handicapped students and 32 students without handicaps through participant observation. They observed considerable reciprocal friendship behavior in both groups. For example, friends visited each other’s homes and shared intimate secrets with one another. A limitation to this
reported observation is that investigating reciprocal acts was not the primary focus of the study, and only anecdotal evidence without a quantitative or statistical component was presented.

In the Knox and Hickson (2001) study explained earlier that assessed four adults with intellectual disability, one participant reported that an invitation to watch music videos and eat pizza would be reciprocated at a later date by his friend. Another participant reported that she and her friend trade invitations for coffee at their respective homes. Each felt that reciprocity was an integral part of the maintaining their social interaction and friendship. A limitation of this study was that there was no control group of non-friends from which comparisons could be made.

1.7.2.2 Similar or Opposites? A Question of Compatibility. In addition to reciprocity, another important aspect of relationships is whether people prefer friends with similar or complementary traits. This has been a topic of debate for centuries. Aristotle (330 B.C.E./1951), for example, wrote that there are “numerous differences of opinion about the matter. Some think of friendship as a kind of likeness . . . [and say] like seeks like, birds of a feather, and so on. Others, on the contrary, declare . . . that opposites tend to unite [and] discordant elements produce the fairest harmony” (pg. 237). According to Aristotle, not all friendships are made of similar or complementary types. However, he did describe a “perfect friendship [in those whose actions are] identical with or similar to his own” (pg. 240), essentially endorsing the view that sameness attracts in close peer relationships. Plato also endorsed the birds of a feather point of view and even suggested that God forms friendships by leading similar people together (Bolotin, 1979).
The debate has continued with some endorsing the idea that people with similar characteristics are more likely to be friends (Byrne, 1971; Duck, 1994; Newcomb, 1956; Reiss, 2000) and others who believe that complementary characteristics are the key to forming friendships (Seyfried, 1977; Winch, 1958).

Similarity Theory is based on the notion that people prefer the company of others like themselves because they engage in activities that both find rewarding (Byrne, 1971; Duck, 1994; Newcomb, 1956; Reiss, 2000). This theory holds, for example, that a person who prefers to keep things in order and hates a mess will prefer the company of other people who are also neat and tidy. When in each other’s company, two individuals such as these avoid messes and, according to the similarity theory, their relationship will tend to prosper because the need to keep order is met for both. Likewise, two individuals who do not value orderliness and prefer to have messy surroundings will have a positive relationship according to the similarity theory. When together, both individuals will be comfortable with their disorganized surroundings.

The similarity theory also holds that two people who are very different from one another will tend to have poor relationship quality. If a neat and orderly person, for instance, spends time with a disorganized and messy person, neither person is likely to be satisfied by the interaction. The neat person will perceive his or her surroundings to be too messy, while the disorganized person will experience more organization and order than he or she prefers.

Complementary Theory represents the idea that “opposites attract.” This theory holds that individuals with different but complementary traits prefer the company of each
other because they each meet the other’s needs (Seyfried, 1977; Winch, 1958). A common example of complementary individuals who have a mutually satisfying relationship is a pair in which one is dominant and the other is submissive (Berscheid & Walster, 1969). In such a case, the dominant person prefers the company of individuals who are submissive because, by spending time with a submissive person, his or her need for dominance will more likely be satisfied. Similarly, the submissive person who prefers not to dominate will be satisfied by being in the company of a dominant individual who takes charge. If the dominant person were to spend time with another dominant person, the complementary theory holds that neither person’s need to dominate will be sufficiently satisfied. They will have to share the dominant role that each prefers.

Similarly, two submissive people will not be attracted to one another because one or the other will have to take charge or be dominant in decision-making. Since neither prefers to do this, their relationship will suffer because neither’s need to be submissive is met.

The debate between whether similar or complementary individuals tend to be friends has taken place for over two millennia (Aristotle, 330 B.C.E./1951; Newcomb, 1956; Reiss, 2000). Below, several studies are considered that evaluated these theories and how they relate to relationships in general. This is followed by a brief review of studies that utilized samples of individuals with MR/DD.

Studying testing Similarity versus Complementarity. In a test of which theory best applies to friendship, Izzard (1960) compared 30 pairs of best friends to a control group of 30 randomly-paired students on the Edwards’ Personal Preference Schedule (Edwards, 1954 as cited in Izzard, 1960) which measures needs similar to those defined by Murray
The best friends group was drawn from a larger sample of high school and college students by asking individuals to rank order their friends. Group members were selected if they both rated the other in the first position on the list. The control group was randomly selected from a list of incoming college students and was parallel to the friends group in gender and number. In support of the similarity theory, the investigator showed that the best friends group had significantly more similar personality profiles than the control group. The need for deference is particularly appropriate for a direct comparison of the competing theories. Under the similarity theory, matched needs for deference more likely would be found in the friends group, but under the complementary theory matched deference would be more likely in the control group. Izzard’s (1960) results showed that individuals with a matched need for deference were more likely in the friends group than the strangers group.

Pierce (1970a, 1970b) also directly compared the similarity and complementary theories. In this investigation, 54 male roommate pairs were administered the Jackson Personality Research Form (Jackson, 1967 as cited in Pierce, 1970a) and a roommate satisfaction questionnaire. Among the measured variables were the needs for dominance and abasement. These psychological needs lend themselves particularly well to a direct comparison of the two competing theories of interpersonal attraction. The results of this study favored the similarity theory with respect to both the needs for dominance and abasement. Many other investigations, such as college roommate studies, provide support for the similarity theory (Carey, Hamilton, & Shanklin, 1986a; Carli, Ganley, & Pierce-Otay, 1991; Jones, McCaa, & Martecchini, 1980; Pierce, 1970a).
Similarity Theory and MR/DD. In general, both theories and investigations of consumer friendships favor similarity theory over complementary theory. For example, studies consistently have shown that the more similar the developmental ability of individuals with MR/DD, the more likely they will become friends (Kasari & Bauminger, 1998). Bebko, et al. (1998) consider common interests and experiences to be key components of friendship in children with MR/DD. Fiske and Haslam (1998) hold that individuals in peer relationships tend to focus on commonalities and disregard differences. Stainback and Stainback (1987) maintain that common interests often lead to friendship, and people with MR/DD need to share their experiences and interests with others in order to be friends.

MR/DD Similarity Studies: Cheseldine and Jeffree (1981) studied the friendship patterns of 214 teenagers with MR/DD by interviewing their parents. The methodology and sampling were described in greater detail previously. The investigators found that of those who had a special friend, most were of similar age and handicap. However, few details were reported on the extent of similarity or how “special friend” was actually defined. Further, the study was conducted at a time when community integration was not as high a priority as it is currently, which could limit the extent to which teenagers had the opportunity to interact with non-handicapped peers.

In the Landesman-Dwyer et al. (1979) study described earlier, the investigators identified 16 peer friendships in 8 group homes from a larger sample of 208 participants. “Friendship” was operationally defined as pairs who spent over 10% of their time together over a two-day observation period (average of 21%). They found that friends
tended to have similar interests such as sports activities, games, and working together at the same jobs. Often the similarities were highly preferred activities. Another characteristic that was quite similar with friends was their language competency (as rated by staff members and observers). Limitations to these findings include the arbitrary definition of friends as those spending 10% of their time together and no control group for comparisons of similarity.

In the Wiltz (2002) study of 93 housemate pairs, personality was measured using the Reiss Profile MR/DD (Reiss & Havercamp, 1998), which is a standardized, 100-item instrument that measures personality constructs including the need for social contact, helpful intentions, and vengeance/aggression. Friendship was measured using The Roommate Friendship Scale, which is a 28-item instrument with questions on free time activity, conflicts and fighting, and respect and liking (Wiltz, 2003). Results showed a significant association between personality similarity and friendship scores. This study was retrospective in that all housemates had lived together for a period of time at the time of data collection.

1.8 A New Study on Consumer-to-Consumer Friendships:

At this point, research on consumer friendships is incomplete (Bogdan & Taylor, 2001; Goldstein & Morgan, 2002; Stainback & Stainback, 1987), but as outlined above, investigators have reported findings that suggest there are multiple factors that underlie friendship behavior in people with MR/DD. These include sociability (Kaufman, 1984), helpfulness (Heiman, 2000), social skills (Newton, et al., 1995), reciprocity (Knox &
and similarity (Wiltz, 2002). In addition, interpersonal conflict or aggression appears to hinder friendships (Guralnick & Groom, 1985; Wiltz, 2002). Until now, most research has examined limited numbers of friendship elements at a time (Kasari & Bauminger, 1998), and no attempts have been made to determine multiple factors underlying the concept of friendship. Given the difficulty many consumers have acquiring friends (Bebko et al., 1998; Cheseldine & Jeffree, 1981; Hill et al., 1984), and the potential impact this can have on mental health (Bebko et al., 1998; Cohen & Wills, 1985; Laman & Reiss, 1987; Lunsky & Benson, 1999; Reiss & Benson, 1985) and quality of life (Hughes et al., 1995; Schalock et al., 1989), research is needed to more-comprehensively understand consumer friendship.

The study reported here was intended to investigate those factors that underlie consumer friendships. Toward that end, a multiple-step study was undertaken in an attempt to obtain a more-comprehensive understanding of consumer-to-consumer friendship behavior. The first steps involved integrating information from the pilot investigation, other consumer friendship research, and the opinions of caregivers (Campbell & Cantrill, 2001; Delbecq, Ven de Ven & Gustafson, 1975) in order to gain a more complete understanding of the content domain of consumer friendship. The information from these sources was subsequently incorporated into a questionnaire, which was then used to rate hundreds of consumer-to-consumer relationships. The final steps were to factor analyze these data. This included both exploratory and confirmatory analyses. All research was consistent with the ethical requirements of the Human
Subjects Committee at The Ohio State University, and the methodology was approved by the committee.
CHAPTER 2

METHOD

This study was an investigation of latent variables underlying consumer-to-consumer friendships. As described in greater detail below, data collection took place in multiple steps. In the first two steps, a qualitative method of data collection was utilized in an attempt to capture a wide range of potential factors underlying friendship. Such qualitative research can effectively be used in combination with quantitative methods to broaden the understanding and context of the issues under study (Cook & Campbell, 1979). The information gathered in the first steps subsequently was used to develop a questionnaire that was utilized in later data-collection steps. With this instrument, data were collected from a variety of service providers in over half the counties in Ohio. The sample included over 1000 relationship pairs, which was randomly split for exploratory and confirmatory factor analyses.

2.1 Step One – Exploring a wider Content Domain of Consumer Friendship

The purpose of the initial step of this investigation was to identify as many potential factors of friendship as possible. Uncovering a wide-ranging set of factors requires that the content domain covered by scale items must be broad as well (Anastasi
Basically the intent was to cast a wide net in the first step, then follow a data-driven approach in later steps to empirically pare down the list of factors. Three independent sources of information were examined in order to expand the content domain. The first resource was a data set from a roommate study described earlier in this report. The second source was reviewed research on consumer friendships, and the third was original data collected from MR/DD professionals and family members. As previously noted, data from the roommate study were submitted to an exploratory factor analysis, which yielded three factors providing a starting point for the current study. They were: (1) socializing and fun, (2) prosocial behavior (primarily reciprocation and help), and (3) conflict. Each of these factors has been cross-validated by other research on consumer friendship (Guralnick & Groom, 1985; Heiman, 2000; Kaufman, 1984; Knox & Hickson, 2001; Wiltz, 2002).

The questionnaire used in the roommate study was modeled after college roommate scales and included several key aspects of roommate relationships, so it was not surprising that more than one factor was found. However, the purpose of the scale was to identify compatible and incompatible roommates. It was not developed specifically to uncover multiple aspects of friendship, so it seemed likely that other factors also exist. In order to identify factors that were not part of the roommate scale, other research on consumer friendships was reviewed earlier in this report.

The research reviewed earlier in this document added two additional aspects of consumer friendship to the expanding list of potential factors. The first was consumer similarity. Researchers have shown an association between similarity, such as personality and interests, and friendship in people with MR/DD (Cheseldine & Jeffree,
emerging from the literature review was social skills. Of particular interest to understanding consumer friendships are factors that, more so than in friendships of normally-developing individuals, are associated with peer relations among people with mental retardation. Social skills commonly have been linked to the ability of consumers to form friendships (Newton et al., 1995). Additionally, social skill deficits are common in individuals with MR/DD (Matson & Fee, 1991), which may play a role in why consumers often lack friends (Warren et al., 2002). No items referencing similarity or social skills were included in the roommate study scale.

As indicated above, the first two sources of information yielded five potential friendship factors. In order to expand the content domain further, one additional information resource was utilized. Using the Delphi Method (Delbecq et al., 1975), individuals with a wide variety of experience in the field of MR/DD were asked their opinions about consumer friendship using an open-ended questionnaire followed by another with more structure.

The Delphi Method has been used for over forty years to obtain reliable consensus opinion data on a variety of issues (Campbell & Cantrill, 2001; Dalkey & Helmer, 1963). It is a technique that was developed to aggregate the opinions of experts without gathering the group in one place (Delbecq et al., 1975) and has the advantage of eliminating the psychological pressures potentially present in face-to-face committee approaches (Welty, 1972). For example, since all individual input is kept anonymous
(Campbell & Cantrill, 2001), participants are free to express differing opinions and the dominance or passivity of group members does not overshadow their contribution.

2.1.1 Delphi Participants:

Twenty-two individuals familiar with the investigator, each with a minimum of two year’s experience with people who have MR/DD, were asked to complete a questionnaire on consumer friendship. Of those who agreed to participate, 20 returned the questionnaire (91%). These included individuals who identified themselves as parents (2), siblings (2), friends (3), an aunt (1), teachers (3), psychologists (3), behavior specialists (5), administrators (3), social workers (2), a volunteer (1), a legal guardian (1), and staff members in residential (3), recreation (2), and workshop (2) settings.* Participants’ ages ranged from 27 to 57 years (M = 43), and the amount of time they had known at least one consumer ranged from 2.5 to 45 years (M = 19). The sample included 18 people who identified themselves as white or Caucasian (90%), with the remaining two identifying themselves as African American (10%). Seven were male (35%), and 13 were female (65%). After the completion of the first round, a second questionnaire was administered to the same 20 participants, and 19 returned it (95%).

2.1.2 Delphi Technique Methodology and Results

The first questionnaire consisted of two open-ended questions requesting the participants’ opinions on friendship (see Appendix B). Question one asked for the “essential characteristics” of friendship. In order to generate a wide variety of responses,
participants were instructed that these friendship characteristics were not exclusively pertaining to people with MR/DD. That was the purpose of the second question, which asked what was “unique or particularly important to friendship behavior for people with MR/DD.” After data from this questionnaire were analyzed, a second survey instrument was developed (see Campbell & Cantrill, 2001; Delbecq et al., 1975).

The second questionnaire consisted of all relevant items generated from responses to the first questionnaire (see Appendix C). Exceptions included repeated items and some commentary that would not fit a questionnaire format. The intent of asking two questions in the first questionnaire was to find as many aspects of friendship as possible and to place some additional emphasis on aspects of friendship specific to individuals with MR/DD. Most of the items generated from question one pertained to people with MR/DD as well, so for the purposes of the second questionnaire, these original two questions were collapsed. A total of 100 items resulted from the first round of Delphi data collection.

Prior to constructing the second Delphi questionnaire, the items obtained from the first instrument were clustered together to form approximate factors. The reason for this was multifaceted. First, one purpose for initiating the Delphi Study was to find the best items for the final study questionnaire (see step two). Because there was significant overlap among many of the items obtained from the first part of the Delphi Study (e.g. “common interests” and “shared interests”), one goal was to find the wording that was particularly salient to respondents. Therefore, in the second questionnaire they were

* Total is greater than 20 because some participants identified themselves in more than one category.
asked to rank order the friendship concepts within each cluster based on what they felt best characterized consumer friendship. This assisted in selecting which friendship concepts would be carried over to the next step of the study. Another reason for clustering the items was to find out if the respondents considered the clusters to be “essential elements” of consumer friendship. At the end of the questionnaire, participants rank ordered the clusters and were asked to add potential clusters that might have been overlooked. None of these objectives could have been accomplished without grouping the items into clusters for the second questionnaire.

In order to improve the validity of how the items were grouped, three individuals – including the study author – independently evaluated all 100 items and separated them into potential clusters. The three cluster structures were similar to one another with many of the differences only trivial in nature. For example, a cluster called “similarity” on one list was referred to as “shared interests, values, or traits” on another. Using the three lists, the author determined the final groupings. The result was seven clusters. In addition, there were eight items that did not seem to fit into any cluster, but they were retained because no items were deleted from the first round of data. For example, there was an item about whether friendship is possible for people with severe/profound mental retardation that may well be relevant to the study topic, but does not fit into any of the underlying characteristics of friendship. The clusters were Similarity, Trust, Reciprocity, Helping, Social Skills, Liking & Fun, and Having Access to Friends.

The second questionnaire was then constructed using all 100 items from the first, and they were grouped according to the clusters described above. For each item,
respondents were asked whether they (1) agreed with, (2) disagreed with, or (3) were not sure whether the concepts were “an important characteristic of consumer-to-consumer friendship” (Delbecq et al., 1975). They also were asked to rank up to five items in each cluster from most to least important friendship characteristic and were told “some items seem about the same – your ranking at the end of each section will clarify which ones make the most sense to you.”

Analysis of data from the second questionnaire indicated that there was a clear consensus among respondents that each of the seven clusters was an important aspect of consumer-to-consumer relationships. For each cluster, there was an item stating “this cluster (name of cluster) seems like an essential element of friendship.” Four of seven clusters had no ratings of “disagree” and there was a maximum of only two respondents disagreeing with any single cluster. Some individual items within clusters had higher levels of disagreement, and this along with the item rankings was used to assist in developing the questionnaire in step two below. Although Delphi studies often incorporate more than two rounds of data collection, an acceptable variation is to stop after the second round if sufficient consensus has been reached or enough information has been collected (Delbecq et al., 1975). Because there were strong majorities favoring the inclusion of each of the seven clusters as essential characteristics of consumer friendship, data collection was discontinued, which concluded step one of this investigation.
2.2 Step Two – Developing a Data Collection Questionnaire

The purpose of this step of the investigation was to utilize information described above in order to develop a questionnaire that could be used to collect relationship data (see Appendix K). The first task was to eliminate items from the Roommate Friendship Scale, or RFS (Wiltz, 2003), that did not factor in the original analysis. Of the 28 items, four failed to factor and were not retained. The remaining 24 RFS items were then reworded to reflect general friendship as opposed to roommate relations. For example, the RFS item “These roommates have fun with each other” was changed to “these individuals have fun with each other.” As with the RFS, the new instrument was in an informant-rating format because individuals with mental retardation often cannot read well, so they cannot reliably complete self-report inventories (Reiss, 1990; Wiltz, 2003). As with the RFS, each item on the questionnaire was measured on a five-point Likert-type scale ranging from SD = Strongly Disagree to SA = Strongly Agree.

The RFS, with its three preliminary factors – socializing and fun, prosocial behavior, and conflict and fighting – provided a starting point for the general friendship questionnaire. New items were then written in order to capture possible friendship factors that are not included in the RFS. The first two additional factors added were similarity and social skills. As outlined in Step One above, these potential factors emanated from previous studies on friendship among consumers and were cross-validated in the Delphi Study, which added two additional potential factors: access to friends (including staff or family support) and trust. The prosocial factor from the roommate data included reciprocation and help. It was split into separate clusters in the
Delphi Study, which led to a potential of eight factors: *liking and fun, conflict and fighting, similarity, social skills, access/support, trust, reciprocity*, and *help*.

The new scale consisted of 85 items with nine to twelve items per potential factor (see Appendix K), which is consistent with the RFS. As stated previously, 24 items were converted from the RFS, so 61 additional items were written. Many new items were directly related to responses from the Delphi Study. Because the Delphi items were most often simple bullet points, they needed to be slightly reworded to make sense in a questionnaire format. This meant taking a concept, such as “Ability to Compromise,” and converting it to “When they need to, they have the ability to compromise.” The end goal in writing new items was to capture the content domain of each potential factor as broadly as possible. An attempt was made to avoid item repetition, and Delphi rankings were considered when an item needed to be eliminated because it was too similar to another item. On the other hand, a second priority was to find multiple ways to describe the concepts within each potential factor. For example, item content for the potential factor *similarity* included common interests, similar values, being “peas in a pod,” as well as that the individuals might be total opposites. In order to facilitate variety in item wording, special attention was paid to how participants in the Delphi study referred to key aspects of friendship. Some examples included individuals being “up front” with one another or having a “magical element” that attracts individuals to one another. Finally, five items were added from the Delphi Study that were not part of any cluster, but seemed relevant to an exploratory analysis of friendship.
One notable difficulty with constructing the new scale was clarifying the concept of reciprocity. Because all the items reference a relationship, many of them describe friendship concepts in a reciprocal fashion. For example, items not in the potential reciprocity factor included “these individuals trust each other,” “they tease one another a lot,” and so on. Items for the potential reciprocity factor focused on give and take, equality within the relationship, and treating each other the way they want to be treated in return. The advantage to using a quantitative approach like factor analysis is that the data collected may be able to answer the question of whether reciprocation is actually separate from other factors of friendship or instead if it is a more basic, underlying concept required for friendship to actually take place. For example, if reciprocity items factor separately, that would indicate that it is indeed a separate concept. If the items became part of another factor, such as social skills, it could indicate that it is a subservient concept to another factor. Another alternative might be that the items fail to factor altogether, which might indicate that reciprocation is linked to multiple factors and does not represent a distinct friendship element.

At the conclusion of step two of the investigation, a questionnaire was developed that included items on all the potential friendship factors. No factor labels or any other identifiers were affixed to the items, and they were shuffled throughout the questionnaire with no two items from any of the factors appearing consecutively. Questionnaire construction had included quantitative and qualitative methods to expand the content area of consumer friendship as broadly as possible. Subsequent steps involved narrowing the concept of friendship in order to obtain a parsimonious understanding of its structure in
people with mental retardation. The luxury of factor analysis is that decisions follow the data. The number and nature of factors found were empirical questions that factor analysis would help answer.

2.3 Step Three – Obtaining a Suitable Sample

In the state of Ohio there are 88 counties, each of which has a county board of mental retardation. All county boards were contacted in order to solicit their participation in this study. In order to maximize the rate of response, a number of strategies were employed that have demonstrated the ability to improve the chances that individuals return mailed surveys (Dillman, 2000). These included making multiple contacts with each potential data source, using actual postage stamps for letters to each county as well as on return envelopes for completed questionnaires, having all correspondence personalized (i.e. not “Dear Superintendent”), having professionally-printed questionnaires in a user-friendly booklet format, and giving each respondent an Ohio State University pen as a token incentive. Finally, a $100 lottery was offered with the proceeds benefiting the individuals with MR/DD in the winner’s county. It was suggested that the money go for a pizza party or to a consumer recreation fund if that existed. According to Dillman (2001), having such lotteries and offering token incentives – the best being ball-point pens – can significantly increase response rate.

In order to obtain a diverse sample, the entire state of Ohio was targeted for data collection, and agencies were specifically asked to include different types of people for inclusion in the sample. It was requested that they find individuals of all levels of mental
retardation, try to obtain a racially diverse group, and consider three different relationship
types – close friends, casual friends or acquaintances, and individuals known to dislike
one another (see Appendix I). The reason to sample subjects with wide variability on the
measure of interest – in this case levels of friendship – was to avoid a restricted range,
which can undermine statistical procedures (Anastasi & Urbina, 1997).

Some exclusionary criteria were also put in place for data collection. First, the
participants needed to be at least 18 years of age. This was a requirement of Ohio State
University’s Human Subjects Committee as part of their agreement to exempt the study
from needing to obtain informed consent. Staff informants were also limited to a
maximum of three relationship ratings to minimize the effect any one staff member might
have on the results (see Table 2.2 for staff member demographics). The other two criteria
were that the consumers being rated needed to know one another at least six months prior
to data collection and that staff raters knew both individuals for at least six months.
These restrictions were in place in order to improve the quality of data. For example, it is
unlikely that a staff member who just met two individuals could accurately describe their
relationship in detail.

The first task in obtaining the sample was to find contact information for each
county board. This information was downloaded from the Ohio Department of Mental
Retardation website (http://odmrdd.state.oh.us/CountyBoardsDoc/countyboards1.htm).
Then an E-mail message was sent to the county board superintendents informing them
that they would soon receive letters outlining a state-wide study on friendship (see
Appendix D for message content). This E-mail also included some basic information
about the study and provided an internet address (http://nisonger.osu.edu/friendship) where more information on the study could be accessed (see Appendix G to view study information made available on the internet). A few days later, a letter was sent to each superintendent. Each letter was personalized, on Ohio State University letterhead, and individually signed in blue ink to further indicate that the correspondence was individualized (see Appendix E for letter contents). A sample questionnaire also was enclosed with the letter, and there was a brief summary of the study methodology with emphasis on ease of participation and assurance of client confidentiality:

“We hope that you or someone else in your agency can help us by distributing questionnaires like this one to staff members who work with people with MR/DD. Each questionnaire only takes about 20 minutes to complete, and they come with stamped envelopes, so the person who distributes them does not need to do anything else. This small amount of time, when pooled with the efforts of hundreds of others, can have a profound impact on our understanding of consumer friendship. Participation in this study is completely voluntary and confidential. In fact, no names are ever collected, so everything is kept anonymous.”

Finally, the letter stated that a phone call would follow in about a week in order to discuss the possibility of participating in the investigation. Phone contact was then attempted with each superintendent in order to solicit his or her help in collecting data
(see Appendix F for telephone script). Contacting the county boards was divided into three sets in order to make the task of contacting 88 agencies more manageable. An alphabetical listing of the counties was divided into sets of 30, 30, and 28. Once a first round of phone calls was completed for a set, E-mail messages were sent to superintendents of the second set, and so on.

In some cases, the above three contacts were all that was needed prior to sending questionnaires to a representative of the county board. However, most of the time additional E-mail contact or, more often, telephone calls were required. For example, in some cases, the superintendent delegated the role of data contact to a subordinate. In addition, some agencies requested additional clarification on what their role would be relative to the purposes of the study. Four county boards also requested short research proposals prior to their taking part. In one county, the data contact requested that staff members be addressed personally in a presentation format. Correspondence between the study author and data contacts consisted of 167 E-mail messages, 164 mailings, and 436 telephone contacts including conversations and voice mail messages (see Appendix M for a complete summary of agency contacts).

A total of 70 counties (80%) responded to the solicitation to take part in the study. A response was noted if the superintendent was reached by telephone, returned a phone call or E-mail message, or had a representative do so and a decision was made to participate or not. No response referred to county agencies in which the above criteria were not met. Of the 70 responding counties, 63 agreed to take part in the study (90%). Although it was not always clear why an agency preferred not to take part, sometimes a
reason was given. These included staffing shortages and disagreeing with the study methodology. In two cases, county boards that agreed to take part never determined how many questionnaires they were willing to complete, and eventually none were sent.

When an agency agreed to participate and determined how many questionnaires they were willing to complete, a packet was sent to the individual in the agency who was acting as the data contact. Each packet contained a brief letter (see Appendix H), a short summary of how data collection would work (see Appendix I), the questionnaires, and the incentives. In the letter, the data contact was reminded that there was a $100 lottery in which every returned survey acted as an entry. Each questionnaire was enclosed in an unsealed envelope that had a 37-cent and 23-cent stamp already affixed to it. Additionally there was an Ohio State University pen with a sticker that stated “Thank you, this pen is yours to keep!” As previously indicated, these measures were in place to maximize rate of return (Dillman, 2000).

Of 63 Ohio county boards of MR/DD to which questionnaires were sent, 58 returned at least some (92%). The five counties that did not return any are shown in italics on table 2.1 below. A total of 1728 questionnaires were distributed and 1124 were returned completed (65%). In a small number of cases, the data contact indicated that he or she had over estimated the number and returned blank questionnaires. These were not counted as returned, but were instead considered unsent, and the number sent to that county was revised downward. These also did not count as entries for the lottery (please see Table 2.1 on page 56 for a summary of agency participation).
<table>
<thead>
<tr>
<th>County</th>
<th>Participating Questionnaires Returned/Distributed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adams</td>
<td>(14/50)</td>
</tr>
<tr>
<td>Fairfield</td>
<td>(8/12)</td>
</tr>
<tr>
<td>Lorain</td>
<td>(40/46)</td>
</tr>
<tr>
<td>Allen</td>
<td>(40/40)</td>
</tr>
<tr>
<td>Fayette</td>
<td>(15/15)</td>
</tr>
<tr>
<td>Madison</td>
<td>(0/20)</td>
</tr>
<tr>
<td>Ashtabula</td>
<td>(15/15)</td>
</tr>
<tr>
<td>Franklin</td>
<td>(200/219)</td>
</tr>
<tr>
<td>Marion</td>
<td>(22/50)</td>
</tr>
<tr>
<td>Athens</td>
<td>(36/42)</td>
</tr>
<tr>
<td>Fulton</td>
<td>(3/5)</td>
</tr>
<tr>
<td>Mercer</td>
<td>(8/10)</td>
</tr>
<tr>
<td>Auglaize</td>
<td>(8/15)</td>
</tr>
<tr>
<td>Gallia</td>
<td>(9/10)</td>
</tr>
<tr>
<td>Montgomery</td>
<td>(61/100)</td>
</tr>
<tr>
<td>Belmont</td>
<td>(9/10)</td>
</tr>
<tr>
<td>Geauga</td>
<td>(5/20)</td>
</tr>
<tr>
<td>Morgan</td>
<td>(10/10)</td>
</tr>
<tr>
<td>Brown</td>
<td>(14/15)</td>
</tr>
<tr>
<td>Guernsey</td>
<td>(8/10)</td>
</tr>
<tr>
<td>Muskingum</td>
<td>(7/12)</td>
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<tr>
<td>Butler</td>
<td>(62/100)</td>
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<tr>
<td>Hamilton</td>
<td>(27/30)</td>
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<tr>
<td>Noble</td>
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</tr>
<tr>
<td>Carroll</td>
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</tr>
<tr>
<td>Hancock</td>
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</tr>
<tr>
<td>Paulding</td>
<td>(9/20)</td>
</tr>
<tr>
<td>Champaign</td>
<td>(6/15)</td>
</tr>
<tr>
<td>Hardin</td>
<td>(24/31)</td>
</tr>
<tr>
<td>Perry</td>
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<tr>
<td>Clark</td>
<td>(36/114)</td>
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<tr>
<td>Harrison</td>
<td>(2/2)</td>
</tr>
<tr>
<td>Preble</td>
<td>(14/15)</td>
</tr>
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<td>Clermont</td>
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<tr>
<td>Henry</td>
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</tr>
<tr>
<td>Holmes</td>
<td>(9/25)</td>
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<tr>
<td>Scioto</td>
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<tr>
<td>Crawford</td>
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<tr>
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<td>Darke</td>
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<tr>
<td>Lake</td>
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<tr>
<td>Tuscarawas</td>
<td>(8/11)</td>
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<tr>
<td>Defiance</td>
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</tr>
<tr>
<td>Lawrence</td>
<td>(14/15)</td>
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<tr>
<td>Vinton</td>
<td>(5/10)</td>
</tr>
<tr>
<td>Delaware</td>
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</tr>
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<td>Licking</td>
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</tr>
<tr>
<td>Warren</td>
<td>(12/18)</td>
</tr>
<tr>
<td>Erie</td>
<td>(10/10)</td>
</tr>
<tr>
<td>Logan</td>
<td>(10/10)</td>
</tr>
<tr>
<td>Washington</td>
<td>(4/4)</td>
</tr>
</tbody>
</table>

Table 2.1: Participating Ohio Counties (number of questionnaires returned/distributed)
The final steps of this study, which are detailed below, were to submit data to exploratory and confirmatory factor analyses. Prior to these analyses, the researcher randomly split the total sample into two groups for those procedures. As part of this process some questionnaires were deleted because of problems with the data and others were eliminated because of exclusionary criteria (e.g. consumers who were under 18 years old). Of the 1124 returned questionnaires, a total of 1035 (92%) were used for the final analyses. Twenty-six (2%) were excluded because the rater skipped a page in the questionnaire booklet, and four (0.4%) were deleted because of an obvious pattern to the data (e.g. all items rated 3 for N/A). Four more (0.4%) were eliminated because one or both individuals in the relationship was under age 18, and 11 (1%) were not retained because either the relationship between individuals or between staff and the individuals had existed for less than six months. Finally, 44 questionnaires were excluded because the relationship was rated by two separate staff members. In these cases, the determination on which questionnaire to retain was determined by coin flip. The remaining 1035 relationship pairs were then randomly divided into two samples using SPSS software. The first sample consisted of 516 pairs and was used for the exploratory analysis. The other group had 519 dyads, which was utilized for the confirmatory analysis.

As stated previously, some staff members rated more than one relationship pair. Because the questionnaires did not include staff names it was not possible to determine the exact number of staff members who took part in data collection. However, an estimate was possible because some identifying information was collected including
current job, how long the individual had worked in the field of MR/DD, and basic
demographics such as age, sex, and race. Using this information, it was estimated that
approximately 106 staff members completed two questionnaires, and 60 informants rated
three friendship pairs. This meant that a total of about 809 staff members completed the
1035 questionnaires for this study (see Table 2.2 below for additional information).

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Mean Years in MR/DD</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 – 77</td>
<td>14.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mean Age</th>
<th>Parents</th>
</tr>
</thead>
<tbody>
<tr>
<td>43.0</td>
<td>30</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Males</th>
<th>Siblings</th>
</tr>
</thead>
<tbody>
<tr>
<td>22%</td>
<td>25</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Females</th>
<th>SSAs (case managers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>78%</td>
<td>211</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Caucasian</th>
<th>Other Administrators</th>
</tr>
</thead>
<tbody>
<tr>
<td>87.6%</td>
<td>76</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>African American</th>
<th>Residential Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.4%</td>
<td>79</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other Race</th>
<th>Vocational Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.6%</td>
<td>346</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Range of Years in MR/DD</th>
<th>Recreation Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>.5 – 63</td>
<td>85</td>
</tr>
</tbody>
</table>

Table 2.2: Staff Informant Demographics

2.4 Step Four – Exploratory Factor Analysis

2.4.1 Step Four Participants:

The participants were 1032 individuals (516 dyads) with mental retardation
receiving services in the state of Ohio. On average, these individuals were 42 years old,

---

1. number of informant roles > 809 because some endorsed more than one
and they were about evenly divided between male and female. The racial background of the group was about 87% Caucasian and 11% African American (see Table 2.2 below for more demographic detail and for information on intellectual functioning of the sample). The size of this sample exceeds the minimum requirements for factor analysis reported by MacCallum, Widaman, Zhang, & Hong (1999). In the proposal for this study, a sample size of 100 to 200 pairs was targeted based on the pilot study, which consisted of a sample of roommates. For this preliminary investigation, communalities were mostly in the medium to high range (over half were above .60), and factor loadings were generally high, so recovery of factors was not likely to require an extremely large sample, which MacCallum, et al. considered greater than 400. A larger sample than expected was obtained due to the high rate of volunteerism from the agencies recruited to participate in this investigation.

<table>
<thead>
<tr>
<th>Age Range</th>
<th>18 – 88</th>
<th>Mild MR</th>
<th>45%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Age</td>
<td>41.5</td>
<td>Moderate MR</td>
<td>40%</td>
</tr>
<tr>
<td>Males</td>
<td>53%</td>
<td>Severe or Profound MR</td>
<td>11%</td>
</tr>
<tr>
<td>Females</td>
<td>47%</td>
<td>Speaks and Reads</td>
<td>43%</td>
</tr>
<tr>
<td>Caucasian</td>
<td>87%</td>
<td>Speaks/Cannot Read</td>
<td>41%</td>
</tr>
<tr>
<td>African American</td>
<td>11%</td>
<td>Uses Some Words</td>
<td>10%</td>
</tr>
<tr>
<td>Other Race</td>
<td>2%</td>
<td>Cannot Speak</td>
<td>6%</td>
</tr>
</tbody>
</table>

Table 2.3: Exploratory Factor Study Demographics and Intellectual Functioning

2. Level of MR/DD does not add to 100% because 4% of informants were “not sure.”
2.4.2 Step Four Data Analysis

The data were factor analyzed utilizing SPSS and CEFA software. First, a correlation matrix was obtained using SPSS. Then the data were submitted to an exploratory factor analysis using CEFA software, which was specifically designed for this application (Browne, Cudeck, Tateneni, & Mels, 1998). For the analysis, maximum likelihood extraction with oblique rotation was selected. Maximum likelihood was used because its central concern is estimating population parameters from sample statistics (Gorsuch, 1983), which has led some to consider it superior methodologically (Cattell, 1978). After factors were extracted, they were rotated to “simple structure” in order to make them interpretable (Floyd & Widaman, 1995). Oblique as opposed to orthogonal rotation was selected because the factors are assumed to be at least somewhat related, and it is generally accepted that oblique rotation is more appropriate in most practical applications (Browne, 2001).

Determining the number of factors was accomplished using several methods. The goal is that the factors are interpretable – they need to make sense and be parsimonious. There are several empirical methods that assisted in this determination of factors. First the eigenvalues were examined. An eigenvalue represents the variance explained by a factor, and one rule of thumb, called the Kaiser-Guttman criterion, is to retain factors with eigenvalues greater than one. Although imperfect in determining the number of factors alone, this along with other methods, such as determining the number of variables loading on a factor and examining a scree plot, can lead a researcher to an informed decision on the number of factors (Floyd & Widaman, 1995). In addition, there are
several measures of fit that assisted in finding the appropriate number of factors. These included the Root Mean Square Error of Approximation or RMSEA and the Test of Close Fit (Browne & Cudeck, 1992).

2.5 Step Five – Confirmatory Factor Analysis

2.5.1 Step Five Participants

The participants were 1038 (519 dyads) individuals with mental retardation receiving services in the state of Ohio. On average, these individuals were 41 years old, and they were about evenly divided between male and female. The racial background of the group was about 88% Caucasian and 10% African American (see Table 2.3 below for more demographic detail and for information on intellectual functioning of the sample).

<table>
<thead>
<tr>
<th>Age Range</th>
<th>19 – 73</th>
<th>Mild MR</th>
<th>44%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Age</td>
<td>39</td>
<td>Moderate MR</td>
<td>40%</td>
</tr>
<tr>
<td>Males</td>
<td>49%</td>
<td>Severe or Profound MR</td>
<td>12%</td>
</tr>
<tr>
<td>Females</td>
<td>51%</td>
<td>Speaks and Reads</td>
<td>42%</td>
</tr>
<tr>
<td>Caucasian</td>
<td>88%</td>
<td>Speaks/Cannot Read</td>
<td>41%</td>
</tr>
<tr>
<td>African American</td>
<td>10%</td>
<td>Uses Some Words</td>
<td>11%</td>
</tr>
<tr>
<td>Other Race</td>
<td>2%</td>
<td>Cannot Speak</td>
<td>6%</td>
</tr>
</tbody>
</table>

Table 2.4: Confirmatory Factor Study Demographics and Intellectual Functioning

3 Level of MR/DD does not add to 100% because 4% of informants were “not sure.”
The purpose of the previous two factor analyses was to determine the number and nature of potential friendship factors (exploratory factor analysis). For this analysis, which is confirmatory in nature, prior hypotheses were employed regarding the factor structure, which were based on the results from the previous exploratory analyses. Confirmatory factor analysis is a method for assessing the construct validity of the factors identified in an exploratory analysis, and it is considered an actual hypothesis test of the proposed factor structure (Floyd & Widaman, 1995; Gorsuch, 1983). Maximum likelihood extraction and oblique rotation were selected for reasons stated previously (Browne, 2001; Cattell, 1978; Gorsuch, 1983).

Prior to analyzing the data, decisions needed to be made regarding the items that would be retained for the confirmatory analysis. In some cases, items loaded on more than one factor in the initial analysis, which is permitted in factor analysis, but it makes interpretation of factors more difficult. In rare instances, an item loaded on a factor, but did not seem to fit the underlying friendship concept. Finally, factors contained differing numbers of items, ranging from seven to thirty two. This is not uncommon in factor analysis. As one progresses from one factor to two, then three, and so on, new factors peel off the original factor. Sometimes a factor splits into two. This leaves some factors with more items than others. Rather than retain all the original questions, large-item factors from the exploratory analysis were reduced.

In general, factors with too many components also perform poorly in confirmatory factor analysis because of problems with shared variance. Therefore, researchers tend to prefer factors with no more than five to eight items (Floyd &
Widaman, 1995). In addition, if it is possible to measure a friendship concept with fewer rather than more items, the parsimonious method is generally preferred. Reducing the size of some of the larger factors needed to take place prior to the confirmatory factor analysis in order to empirically test the updated factor structure with optimized accuracy.

Item reduction was performed systematically by incorporating quantitative assessments of item fit as well as subjective judgments about interpretability and redundancy of content. First, factor loadings were examined with the intent of retaining items with relatively high numbers. In general, items with higher loadings more strongly represent a factor, so retaining these was a priority. Next, items that did not seem to fit within the general concept of a factor were dropped. For example, an item about communication that was originally hypothesized to be an aspect of social skills instead loaded on the conflict factor. It was one of the lowest loadings among the items and did not seem to fit the concept represented by the others, so it was dropped. Another consideration was examining items with high loadings on two or more factors. These were eliminated because although factor analysis allows item overlap, there were enough items in different factors, so there was no need to retain overlapping items. Having each item represent only one factor also simplifies interpretation. A final judgment about item retention was made based on semantic redundancy. Sometimes multiple items within a factor were similar. In order to more-broadly cover the content domain of a factor, it is necessary to retain items with diverse subject matter even if some items with higher loadings are dropped in favor of other items. For example on the prosocial factor, there were several items describing how some individuals help each other. While the concept
of helping does make sense within this factor, it would have been over-represented had all the helping items been retained. Other items in the factor included taking turns, apologizing, thanking one another, and compromise. Having variation on what constitutes prosocial behavior was prioritized over having the highest-loaded items. The decision was made to retain helping within the factor, but to reduce the number of helping items even though some lower-loading (non-helping) items would be retained instead. In the end, two helping items were kept, and three others were eliminated. Since retaining items with high factor loadings was still a priority, this played a role in deciding which helping items were dropped. After examining the five helping items, it was decided that those with the two highest-loadings were not overly redundant, so they were retained.

2.5.2 Step Five Data Analysis

For the confirmatory analysis, the reduced data set was factor analyzed utilizing the computer program RAMONA, which is part of SYSTAT software. Items selected for the analysis were entered into a computer along with specific factors to which it was hypothesized they belonged. In the confirmatory analysis, items are not free to factor independently the way they do in the exploratory procedure. Instead, they are forced into a pre-existing factor structure that is based on previous analysis. This is the hypothesized factor structure that is tested in confirmatory factor analysis. If the resulting factors are considered statistically acceptable, the structure is confirmed. The output provided by
SYSTAT software included how well the data fit the common factor model, and the test of fit was the RMSEA (Browne & Cudeck, 1992).
CHAPTER 3
RESULTS

3.1 Exploratory Factor Analysis

Using the Kaiser-Guttman criterion, an examination of eigenvalues greater than one indicated ten possible factors (Floyd & Widaman, 1995). The scree plot, which is considered a more-refined method of estimation, indicated about six factors (Floyd & Widaman, 1995) (see scree plot in Appendix J). Considering the number of factors on which at least three items loaded, as many as eight factors were present. Measures of fit consistently improved by adding factors, so a closer examination of interpretability was needed to determine a parsimonious number of common factors (Browne & Cudeck, 1992).

Factor loading matrices were examined ranging from two factors to ten. The two-factor matrix indicated a general friendship factor with many unrelated items and a conflict factor. Wood, Tataryn, and Gorsuch (1996) have shown that under-factoring is a substantial problem that should be avoided in factor analysis because the factors that collapse make the structure overly complex and difficult to interpret. In this example, items as varied as receiving support from staff, similarity of individuals, and prosocial behavior such as helping out when needed were part of a single factor.
Next, a succession of matrices were examined each with more potential factors. The three-factor matrix yielded the following factors: a general friendship factor that still retained multiple components, conflict, and similarity. The four factor solution added liking. The five-factor solution included the four previous friendship traits, but split the general factor into two general factors. This solution was difficult to interpret. The analysis at this point continued to seem under-factored.

The six factor solution included the following factors (1) conflict, (2) prosocial behavior, (3) similarity, (4) bonding or connection, (5) access to friends/caregiver support in the relationship, and (6) liking. The seven factor solution split access/support into two factors. There was no obvious reason for the split (e.g. family versus staff support might make sense). The seven factor solution appeared to be the first that might be over-factored. The eight factor solution retained the split in support and added another factor that was difficult to interpret. The nine and ten factor solutions were increasingly difficult to understand, and each had a factor with only two items, which violates one established rule of thumb in factor analysis (Floyd & Widaman, 1995).

An important goal of factor analysis is to find a parsimonious solution. However, a conflict that arises for researchers is that measures of fit generally improve by adding factors regardless of whether an over-factored solution is interpretable, “leading to the temptation to include meaningless parameters that are employed only to give an impression of goodness of fit” (pg. 230, Browne & Cudeck, 1992). In the sequence of factor structures described in the previous paragraph, the model fit consistently increased in tandem with the number of factors. The RMSEA consistently improved by becoming
lower even as adding parameters past the six-factor solution yielded less-interpretable results. See Table 3.1 below.

<table>
<thead>
<tr>
<th>Number of Factors</th>
<th>RMSEA</th>
<th>90% Confidence I.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>0.066</td>
<td>(0.064 - 0.067)</td>
</tr>
<tr>
<td>3</td>
<td>0.061</td>
<td>(0.059 - 0.062)</td>
</tr>
<tr>
<td>4</td>
<td>0.057</td>
<td>(0.056 - 0.058)</td>
</tr>
<tr>
<td>5</td>
<td>0.053</td>
<td>(0.052 - 0.055)</td>
</tr>
<tr>
<td>6</td>
<td>0.050</td>
<td>(0.048 - 0.051)</td>
</tr>
<tr>
<td>7</td>
<td>0.048</td>
<td>(0.046 - 0.049)</td>
</tr>
<tr>
<td>8</td>
<td>0.046</td>
<td>(0.045 - 0.048)</td>
</tr>
<tr>
<td>9</td>
<td>0.045</td>
<td>(0.043 - 0.046)</td>
</tr>
<tr>
<td>10</td>
<td>0.044</td>
<td>(0.042 - 0.045)</td>
</tr>
</tbody>
</table>

Table 3.1: Increasing Number of Factors and Improvement in Fit

Striking a balance between finding multiple factors, parsimony, and acceptable model fit, the best result was a six-factor solution. This solution yielded a Root-Mean-Square-Error-of-Approximation (RMSEA) point estimate of .050. Included with CEFA software is a test of “not close fit,” which was rejected. This means that the six factor model was a close fit to the data. In addition, a general rule of thumb for RMSEA indicates that .1 or higher is considered unacceptable, .08 or lower is reasonable fit, and about .05 or less indicates close fit (Browne & Cudeck, 1992). The RMSEA 90%
confidence interval for the six-factor model was .048 - .051 also indicating a close fit to the model. The six factors are listed in Table 3.2 below along with a representative item. The entire six-factor matrix is found in Appendix L.

<table>
<thead>
<tr>
<th>Name of Factor</th>
<th>Representative Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Conflict</td>
<td>Sometimes they get into fights</td>
</tr>
<tr>
<td>2. Prosocial Behavior</td>
<td>When they need to, they have the ability to compromise</td>
</tr>
<tr>
<td>3. Similarity</td>
<td>They have a lot in common</td>
</tr>
<tr>
<td>4. Connection/Bonding</td>
<td>They miss one another when they are apart</td>
</tr>
<tr>
<td>5. Access/Support</td>
<td>This relationship is strongly supported by staff (or family)</td>
</tr>
<tr>
<td>6. Liking</td>
<td>These individuals have fun with each other</td>
</tr>
</tbody>
</table>

Table 3.2: The Six Factor Solution

3.2 Confirmatory Factor Analysis:

As described in the methods section, some items from the exploratory analysis were retained while others were eliminated. After this reduction, a total of forty-two items (of the original 85) comprising six hypothesized factors were submitted to a confirmatory analysis. Each factor included five to eight items, which is considered ideal for confirmatory analysis (Floyd & Widaman, 1995). The RMSEA for this solution was .064 with a 90% confidence interval of .061 to .067. Because confirmatory factor
analysis forces factors instead of searching for the best possible factor solution, the fit is
generally expected to be somewhat lower than in exploratory factor analysis. Utilizing
the previously mentioned fit criteria, the six-factor solution represents a reasonable fit to
the common factor model (Browne & Cudeck, 1992).
CHAPTER 4
DISCUSSION

This investigation utilized a novel approach to learn about friendships among people with mental retardation. Integrating both qualitative and quantitative components, the present study offers a more comprehensive description of the underlying factors of friendship for this population than has been previously reported. Furthermore, using large independent samples of data, a robust factor structure was obtained and subsequently confirmed utilizing an empirical, data-driven approach.

4.1 On the Possibility of Friendship

People with cognitive limitations often have difficulty developing friendships, and many have very few or no friends (Bebko et al., 1998; Goldstein & Morgan, 2002). In the past, some questioned whether it was even possible for such individuals to maintain friendships (Landesman-Dwyer, et al., 1979; MacAndrew & Edgerton, 1966). The study reported here provides some indication that this belief has changed, at least among caregivers. Specifically, the support staff and family members who were participants in the Delphi portion of this study were asked their opinions on an anonymous questionnaire. One item asked if they thought friendship is possible for
people with MR/DD, and 100% endorsed this item. Related to this point, the majority of county boards of mental retardation that were contacted indicated that the study had merit, and 90% were willing to participate. If caregivers at these agencies believed that people with MR/DD were incapable of forming friendships, it seems unlikely that a majority of them would be willing to volunteer their time to study the topic.

A related question is whether friendship is possible among individuals with the most severe intellectual limitations. Friendships include complicated interactions, and it seems plausible that some minimum cognitive ability is needed to navigate relational intricacies. Furthermore, individuals in the severe and profound ranges of mental retardation often have considerable difficulty with communication, which could impact social interactions. Because of the established links between friendship, psychopathology, and quality of life (Lunsky & Benson, 2001; Stainback & Stainback, 1987), whether friendship is possible for individuals with the lowest levels of cognitive functioning is relevant to their best care practices. The consequences of not having friends can negatively impact an individual, so it becomes incumbent upon caregivers to attempt to facilitate close peer relationships whenever possible. On the other hand, if such relationships were not possible for individuals with the most severe levels of mental retardation, there would be no need for caregivers to act. The key is whether friendships are possible for individuals in this group.

Findings from this study suggest that close peer relations do exist among people with severe cognitive impairments. This is reflected in caregiver belief as well as data collected on actual relationships. When asked the question anonymously, ninety-five
percent of the Delphi participants agreed that friendship is possible for individuals with severe or profound mental retardation; the other five percent were unsure.

More significant than caregiver opinion on whether such friendships are hypothetically possible, empirical evidence indicates that they do exist. Many friendships were reported in which at least one individual had severe cognitive limitations, and 66 questionnaires were completed that reported a relationship in which both individuals were in the severe/profound range of mental retardation. Of these pairs, 24 (36%) were considered by the informant raters to be “close friends,” 28 (42%) were rated “casual friends,” and 14 (21%) reportedly disliked each other. Because the sample was not randomly selected, there is no way to know whether this ratio of friends to non-friends is representative of people at this level of mental retardation, but the data do indicate that even close friendships are possible among individuals with severe/profound MR/DD.

4.2 Underlying Factors of Consumer Friendship

4.2.1 Relating Factors to Previous Research

The primary purpose of this investigation was to better understand consumer-to-consumer friendship and to elaborate on the potentially multifaceted nature of these relationships. Prior to this study, investigators linked specific variables to the ability of some consumers to form and maintain friendships. The results of these studies pointed to certain characteristics of individuals that are associated with having friends. As noted earlier, these included low aggression, (Guralnick & Groom, 1985), sociability
(Kaufman, 1984), *social skills* (Newton et al., 1995), and *helpfulness* (Heiman, 2000). In other studies, relationship traits (i.e. not the individuals, but rather the pair together) were linked to consumer friendship. These variables were *similarity* (Wiltz & Reiss, 2003) and *reciprocity* (Zetlin & Murtaugh, 1988).

The study reported here focused on traits in the relationship instead of at the level of the each consumer. However, most of the individual characteristics that previously were linked to friendship are related in some way to the friendship factors uncovered in the present study. For example, Guralnick and Groom (1985) found that aggressive children played less with peers than did non-aggressive children. A related relationship factor identified in this investigation was called *conflict*. It included items about arguments, holding grudges, and deceiving one another.

Similarly, other friendship factors from this investigation seem related to individual traits previously associated with having friends. Kaufman (1984) found that sociable people tended to have more friends than those considered non-sociable. Two relationship factors identified in this investigation are related to sociability. One is *liking*, which includes having fun together and joking around. The other is *connection/bonding*, which includes missing each other when the individuals are apart and spending more time together if they could. These two relationship characteristics are conceptually distinct from one another and factored separately, but both have elements of socializing in them.

The final friendship factor from this investigation that relates to previous research on individual traits was labeled *prosocial behavior*. It incorporates many social skills as well as helpfulness. As noted earlier, previous researchers included many different
components within the concept of social skills (Marchetti & Campbell, 1990) including some that seemingly had little to do with friendship behavior (Haring, 1991; Luckasson, 2002). On the other hand, some social skills – such as ability to communicate – seemed quite relevant to positive peer relations. Although it was listed separately from social skills in the earlier review, helpfulness might be considered a social skill itself in that it relates to interactions and can be learned. In this investigation, items from the prosocial behavior factor included helping each other, having the ability to compromise, taking turns, and saying I’m sorry and thank you.

The relationship traits that previous research linked with gaining friends were also addressed in the current study. Similarity of roommate personality traits, for example, has been found to predict compatibility in people with MR/DD (Wiltz & Reiss, 2003). In this study, a similarity factor was found that included similar values, interests, and life experiences. Another relationship trait that researchers have identified as an important part of consumer friendship was not part of the factor structure identified in this investigation.

4.2.2 Reciprocity

Previous authors have indicated that reciprocity is an essential element of friendship (Kasari & Bauminger, 1998; Stainback & Stainback, 1987), but this study failed to identify it as a separate factor. As stated previously in the Method section, there was some uncertainty as to whether reciprocity would factor separately, especially because many items from other potential factors related to reciprocal concepts (e.g. “they
like *one another* a lot,” “these individuals trust *each other,*” etc.). Despite this possibility, an attempt was made to empirically determine whether a reciprocity factor could be found. Items specifically written for the potential reciprocity factor focused on give and take, equality within the relationship, and individuals treating each other the way they want to be treated in return. These items did not correlate well with other factors (e.g. it might have made sense if they had become part of prosocial behavior), and they did not separate into their own latent variable even in the nine- and ten-factor solutions.

It may be that reciprocity is simply an inherent part of consumer friendship. Perhaps a friendship requires some degree of a “two-way street,” whereas a “one-way street” should be classified as something else. In effect, a friendship would not occur with only one person or with only one person’s active involvement. Most of the other factors can be expressed in reciprocal terms (see Table 4.3), so it may be that reciprocity is part of each factor rather than its own distinct concept.

<table>
<thead>
<tr>
<th>Conflict with one another</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstrating <em>prosocial</em> behavior toward each other</td>
</tr>
<tr>
<td>Similarity to one another</td>
</tr>
<tr>
<td>Bonding with each other</td>
</tr>
<tr>
<td>Liking each other</td>
</tr>
</tbody>
</table>

It is unclear how *access/support* could be expressed reciprocally, possibly because it is external to the individuals and their relationship.

Table 4.1: Friendship Factors Expressed in Reciprocal Terms
4.2.3 Access/Support – A Newly Identified Friendship Factor

In addition to the five elements of friendship already described, there was one factor identified in this study that has not previously been reported by researchers and seems unique to peer relations among people with MR/DD. It is labeled *access/support*. This scale includes caregiver assistance in maintaining the relationship, living near one another, and having a chance to spend free time together. Because it relates to the proximity to possible friends and the support received by caregivers, it is not an intrinsic part of the relationship between two individuals. Instead, it is external to the friendship because it involves issues outside of the control of the individuals themselves.

Unlike most people’s friendships, consumers often need support in their relationships in order to maintain them. For example, individuals with MR/DD may not be able to use a telephone, most do not have the ability to drive, and planning can also be difficult when one has intellectual limitations. The importance of caregiver support was demonstrated by one item in particular. Of the 85 items included in the study questionnaire, the one with which informant raters agreed most strongly was “These individuals got to know each other because of the services that they were receiving.” None of the other 84 items averaged a score of four on the five-point scale (4 = agree, 5 = strongly agree), but the mean for this item was 4.3, which indicates a fairly strong endorsement by raters.

Ironically, this item was not part of any factor including *access/support*. This is probably because responses with little variance perform poorly in factor analysis since they generally do not correlate with any other items. Regardless of this point, the high
level of endorsement for this item suggests that many individuals with mental retardation become acquainted with potential friends through the services they receive. Finding and confirming a factor relevant to support of caregivers also is consistent with the American Association on Mental Retardation’s (AAMR) official definition of mental retardation, which includes the need for support from caregivers (Luckasson et al., 2002). In effect, AAMR holds that if an individual with low intellectual abilities is able to function well independently, he or she probably does not meet the diagnostic criteria for mental retardation.

4.3 Initial Development of a Friendship Questionnaire

A secondary purpose of this research was to initiate the development of a general friendship scale that includes composite scores corresponding to each friendship factor. As described below, additional psychometric analysis is needed, but the questionnaire is near completion. Pending further analysis, the friendship questionnaire consists of six relationship scales with a total of 42 items.

4.3.1 Potential Applications of the Friendship Questionnaire

One potential use for such a measurement instrument is to apply it to individuals with multiple problem relationships. For example, individuals who have many poor relationships might find that there is something specific about their friendship behavior that undermines their ability to form close bonds with others. Assessing such an individual’s unsatisfactory relationships could detect issues to be targeted for
intervention. For instance, individuals whose relationships consistently yield low scores for prosocial behaviors could be taught how to develop certain skills in order to improve their chances of developing friendships.

Another application could be to use the friendship questionnaire to assess a particular relationship. This might identify particular interpersonal issues that need to be addressed in order to improve the relationship between two specific individuals. For example, if conflict were identified as a problem area, this could be the target of intervention. Sometimes individuals with relational problems simply enter social skills training regardless of their actual incompatibilities. If their problem is assessed and it is that they experience too much conflict, that should be the target of any intervention. These types of assessments and focused interventions have the potential to improve the chances that those who have problems with relationships might overcome their difficulties and form bonds with others. Maintaining friendships, in turn, can protect the individual against developing psychological disorders (Bebko et al., 1998; Cohen & Wills, 1985; Lunsky & Benson, 1999) and improve his or her quality of life (Schalock & Keith, 1993).

4.3.2 Preliminary Reliability Analysis.

The underlying factors for a consumer friendship scale have been established with this study. The most pressing need at this point is to refine the questionnaire with reliability and validity testing. Some initial testing was possible with the current sample, which is reported below.
The first psychometric testing that was conducted was an assessment of internal consistency. Sometimes considered the most important marker of reliability for assessment instruments for people with MR/DD (Reiss, 1994), internal consistency was measured using Cronbach’s Alpha. The results of the six scales are in Table 3.4 below.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Number of Items</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conflict</td>
<td>8</td>
<td>.94</td>
</tr>
<tr>
<td>Prosocial Behavior</td>
<td>8</td>
<td>.94</td>
</tr>
<tr>
<td>Similarity</td>
<td>8</td>
<td>.87</td>
</tr>
<tr>
<td>Connection/Bonding</td>
<td>6</td>
<td>.95</td>
</tr>
<tr>
<td>Access/Support</td>
<td>5</td>
<td>.67</td>
</tr>
<tr>
<td>Liking</td>
<td>7</td>
<td>.96</td>
</tr>
<tr>
<td><strong>Median</strong></td>
<td></td>
<td><strong>.94</strong></td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td></td>
<td><strong>.89</strong></td>
</tr>
</tbody>
</table>

Table 4.2: Internal Consistency of the Six Scales (N = 1035 pairs)

With the exception of the access/support factor, all the reliability coefficients are within acceptable limits. One reason for the lower internal consistency score for the access/support factor generally improves as related items are added, and those scales with few items tend to perform poorly (Anastasi & Urbina, 1997). As stated previously, one reason that there may be that it has fewer items than the rest. Internal consistency were fewer items for access/support was that endorsement was very high for some items that seemed to fit. This resulted in items that did not factor. With too little item
variance, it is unlikely that they would correlate to anything including the items in the factor to which they seemingly belonged. The best example of this was the item “These individuals got to know each other because of the services that they were receiving.” This item not only failed to factor with access/support, but when added to the other five questions in the scale it significantly lowered the alpha coefficient.

These preliminary results indicate that the scales of friendship are internally consistent and therefore reliable. More testing is needed including other types of reliability analysis. Test-retest reliability and inter-observer agreement should both be assessed in order to determine whether this instrument is reliable.

4.3.3 Preliminary Validity Assessment.

Prior to completing the 85 items that were utilized for the factor analysis portion of this study, informants were asked questions about the individuals they were rating. This included basic demographic information, how long they had known each other, whether they live and/or work together, etc. The first of these items instructed the rater to indicate with a check whether the two individuals

_____ are “close friends” (they like each other a lot)
_____ are “casual friends” (acquainted, but not close friends)
_____ dislike each other
The primary reason to collect this information was as a reminder to responding
caregivers that there was a preference to include some of each group in order to learn
about all types of relationships, not just close friendships. In order to avoid a restricted
range, which adversely affects statistical analyses, it is best to attempt to obtain
variability on the measures of interest (Anastasi & Urbina, 1997). A side effect of asking
this question was that it provided a simple validity check for the friendship scales. If
individuals were considered “close friends” for example, we would expect the scale
scores to be different than if they disliked each other. As shown in Table 3.5 below, this
was the case.

<table>
<thead>
<tr>
<th></th>
<th>Conflict*</th>
<th>Prosocial</th>
<th>Similarity</th>
<th>Bonding</th>
<th>Support</th>
<th>Liking</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Close Friends</td>
<td>30</td>
<td>31</td>
<td>30</td>
<td>23</td>
<td>17</td>
<td>30</td>
<td>162</td>
</tr>
<tr>
<td>Casual Friends</td>
<td>27</td>
<td>27</td>
<td>26</td>
<td>17</td>
<td>15</td>
<td>25</td>
<td>137</td>
</tr>
<tr>
<td>Dislike Each Other</td>
<td>15</td>
<td>16</td>
<td>21</td>
<td>9</td>
<td>13</td>
<td>12</td>
<td>87</td>
</tr>
<tr>
<td>Pearson r</td>
<td>.62**</td>
<td>.75**</td>
<td>.53**</td>
<td>.83**</td>
<td>.37**</td>
<td>.84**</td>
<td>.83**</td>
</tr>
</tbody>
</table>

* Conflict was recoded for consistency – high scores correspond to low conflict
** (p ≤ .001, two-tailed)

Table 4.3: Raw Scale Scores and Level of Friendship

As demonstrated in Table 3.5, there is a “dose-dependent” relationship between
each scale score – as well as the total friendship score – and the level of friendship. That
is, the raw score item totals increase as the relationship progresses from dislike to close
friends. Examining the dose dependency more closely, scores of 0, 1, and 2 were
assigned for dislike each other, casual friends, and close friends respectively. In each case, as well as for the total friendship score, significant correlations resulted. These measures provide initial support that the scale scores and total friendship score might be valid indices of friendship. More study is needed to further support their validity. For example, roommates currently living together could be compared to incompatible roommates who were separated due to conflict.

A final note on the validity of the friendship scale as it now stands concerns the inclusion of the access/support items. The main two purposes of this study were somewhat different, so the interpretation and utilization of the results might also be different. The first intent of the study was to learn about the multifaceted nature of friendship in people with mental retardation. As described previously, a six-factor structure resulted, which included access/support. The second purpose of the study was to initiate the creation of a new questionnaire that might be used to quantify relationship strengths and weaknesses.

Considering the first goal of the study, the six identified factors represent some face validity as to the nature of friendship. It seems intuitive that liking, minimal conflict, bonding, prosocial behaviors such as helping, similarity, and having access to friends including support by caregivers would all contribute to consumer friendship. It also seems plausible that lacking any one of these factors could potentially reduce the chances of forming or maintaining friendships.

For the second study goal of using a questionnaire to quantify relationship strength, however, it may be best to only include the five factors that have been identified
as intrinsic to the relationship. Higher levels of these five all seem likely to improve the chances of friendship, so scale scores would potentially correspond with level of friendship. For example, it makes sense that friendship would increase as a pair has less conflict, demonstrates more prosocial behavior toward each other, is more similar to one another, bonds to one another, and likes each other.

This is where the friendship factor extrinsic from the relationship itself seems to make less sense than do the others. How much access or support one receives may have little bearing on level of friendship. For example, the item “Staff or family members assist them in their relationship in many ways” may be relevant to whether individuals have access to one another as potential friends, but it seems less able to index strength of a relationship. Receiving support from others may facilitate a friendship, but more might not be that much better. Given the lower reliability and validity scores and the lack of face validity for including it on an index of friendship strength, it may be better to exclude the scale for the purpose of an instrument designed to assess friendship strength. This determination will be made after the psychometric analyses are completed.

4.4 Limitations

One limitation to this study is that the methodology did not include a random component in sampling. Instead, the top priority was to obtain as large and diverse a sample as possible. Additionally, some decisions about participation were made by agencies assisting in data collection. For example, although data contacts were encouraged to select a variety of relationship pairs, some selected only a small number
from among their clients, and how they selected them was their choice. The lack of randomization limits the generalizability of the findings.

On the other hand, a large and fairly diverse sample was obtained from throughout the state of Ohio. All 88 County Boards of MR/DD were contacted to recruit subjects. One advantage to working with these agencies is that nearly every person with MR/DD in Ohio who is receiving any type of publicly funded service is funneled through the county board system. Significantly, a majority of counties – both rural and urban – contributed to the pool of participants. Furthermore, about equal numbers of men and women participated, they were racially diverse, and there were participants representing all levels of mental retardation.

The percentage of questionnaires that were returned also was high. Of the agencies to which questionnaires were sent 86% returned at least some, and 65% of the questionnaires that were distributed were returned. According to one rule-of-thumb a response rate of 50% is considered adequate, 60% is good, and 70% is very good (Babbie, 1995). These response rate guidelines were developed for studies in which a random sample was originally obtained, and they indicate the degree to which a sample can be considered representative of a population.

For this investigation, response rate was tracked primarily in order to obtain a sufficient number of participants for the exploratory and confirmatory analyses. By tracking the response, agencies that were slow to return questionnaires or failed to do so could be contacted. As previously stated, there was no random sampling procedure. In addition, it was not a direct mail survey. Instead, packets of questionnaires were mailed...
to individuals who made decisions on who would be part of the sample, then they
distributed the questionnaires further. Therefore, even though the response rate might be
considered acceptable and the sample was large and diverse, generalizing the findings to
other groups can only be performed with caution.

A second limitation to this investigation was the use of informant rating
questionnaires as opposed to self-report inventories. Information obtained directly from
individuals about their own relationships might be more accurate than collecting data by
asking caregivers, and rating scales tend to have lower reliabilities than self-report
inventories (Achenback, McConaughy, & Howell, 1987). Additionally, some people
object to informant rating methodology because the participants themselves do not
actively participate. For example, one county board superintendent who was asked to
participate declined on these grounds.

The main reason to utilize informant ratings is that obtaining accurate information
directly from individuals with mental retardation is very difficult (Reiss, 1990; Wiltz,
2003). In the sample for this study, for example, a majority of the participants were
unable to read. Instead of limiting the sample to only those with the highest academic
abilities, this investigation was able to integrate individuals across the span of intellectual
functioning. Some instruments utilize an interview format when individuals cannot read,
but this introduces many sources of bias that are well documented among people with
MR/DD, such as social desirability and expectancy effects (Reiss, 1994).
4.5 Conclusion

This study established that it is possible to empirically study friendships and their underlying constructs among individuals with mental retardation, and it included individuals with a wide range of intellectual abilities. Learning more about what constitutes friendship is the first step in helping this underserved group overcome their well-documented problems with social interactions. The next step is to continue psychometric testing of the questionnaire developed as part of this study. Once finalized, this assessment instrument can be applied to individuals who have problem relationships or have difficulty making friends by assisting caregivers in targeting interventions to appropriate relational components. Improving the chances that an individual develops or maintains friendships can, in turn, minimize psychopathology and improve life’s quality.
APPENDIX A

ROOMMATE FRIENDSHIP SCALE (Wiltz, 2003)

For the following questions about this roommate pair, please use this key:

SD (Strongly Disagree): this phrase is not at all characteristic of the person
D (Disagree): this phrase does not characterize the person well
N (Neutral): do not know, not applicable
A (Agree): this phrase somewhat characterizes the person
SA (Strongly Agree): this phrase is definitely characteristic of the person

1. These roommates have fun with each other
2. They spend nearly all of their free time together.
3. These individuals help one another out when needed.
4. If this roommate pair has a problem, they will often work it out on their own.
5. These roommates confide in each other.
6. These roommates miss one another when they are apart.
7. Sometimes they get into fights.
8. These roommates will help one another when one has a problem.
9. They do fun things together.
10. When one of these individuals does a good job at something, the other is happy for him/her.
11. These roommates act cold and distant toward one another.
12. These roommates have confidence in one another.
13. They are open, honest, and genuine with each other.
14. If this person or his/her roommate does something that bothers the other, they easily make up.
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>15.</td>
<td>Sometimes one of these roommate does something for the other, or makes him/her feel special.</td>
</tr>
<tr>
<td>16.</td>
<td>This roommate pair shows one another respect.</td>
</tr>
<tr>
<td>17.</td>
<td>These roommates hold grudges easily against one another.</td>
</tr>
<tr>
<td>18.</td>
<td>These individuals understand one another well.</td>
</tr>
<tr>
<td>19.</td>
<td>This person and his/her roommate disagree about many things.</td>
</tr>
<tr>
<td>20.</td>
<td>These roommates cooperate with one another.</td>
</tr>
<tr>
<td>21.</td>
<td>They enjoy spending time together.</td>
</tr>
<tr>
<td>22.</td>
<td>If other people were bothering one of these roommates, the other would help.</td>
</tr>
<tr>
<td>23.</td>
<td>If these roommates have a fight or argument, they can say “I’m sorry” and everything will be alright.</td>
</tr>
<tr>
<td>24.</td>
<td>These roommates are happiest when they are together.</td>
</tr>
<tr>
<td>25.</td>
<td>These roommates have a lot of interpersonal conflict.</td>
</tr>
<tr>
<td>26.</td>
<td>If one of these roommates forgot lunch or needed a little money, the other roommate would loan it.</td>
</tr>
<tr>
<td>27.</td>
<td>These roommates like to joke around with each other.</td>
</tr>
<tr>
<td>28.</td>
<td>They like one another a lot.</td>
</tr>
</tbody>
</table>
APPENDIX B

DELPHI QUESTIONNAIRE 1 ITEMS

Item 1:

General Friendship Question (MR/ DD & Non-MR/ DD)
What do you think are the “essential characteristics” of friendship? (You may list, number, or write out your answer, etc.)

Item 2:

Consumer-to-Consumer Friendship Question
What do you think is unique or particularly important to friendship for people with MR/DD? Please keep in mind that we are most interested in friendships in which both people are consumers.
(Again, you may list, number, or write out your answer, etc.)
APPENDIX C

DELPHI QUESTIONNAIRE 2
Information about You:

Although you already answered these questions, it would be helpful if you could repeat it a second time.

1. How long have you known at least one individual with MR/DD? ____________

2. How would you describe yourself in relation to individuals with MR/DD? (please check all that apply)
   - Parent
   - Sibling
   - Residential Staff
   - Psychologist
   - Recreation Staff
   - Behavior Specialist
   - Other**
   *(Please write in space below)*

3. You are Male / Female (please circle)

4. Your age: ____________

5. Your cultural or racial background: (please check)
   - African American / Black
   - Hispanic
   - Caucasian / White

Your Opinion on

General Instructions:

1. Assume BOTH individuals have mental retardation

2. Please decide whether you agree or disagree that an item represents an important characteristic of consumer-to-consumer friendship
   - Agree A
   - Disagree D
   - Not Sure NS

3. At the end of each section, please rank up to 5 items (left column) as to how important you think they are to friendship (1 = top rank, then 2 and so on)

   Please indicate whether you agree or disagree that each item is an important characteristic of consumer friendship

   **EXAMPLES**
   - Similar height
   - Work as a bus boy
   - The two below do not seem to be characteristics of consumer-to-consumer friendship (D circled)
   - The two below do seem like components of friendship (A circled)
   - Enjoy time together
   - Like each other

Starting with #1, please rank up to 5 items from most to least important friendship characteristic (left column)

Your Input:

(some items seem about the same — your ranking at the end of each section will clarify)

Please indicate whether you agree or disagree that each item is an important characteristic of consumer friendship

**SIMILARITY**

<table>
<thead>
<tr>
<th>Item</th>
<th>Agree</th>
<th>Disagree</th>
<th>Not Sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared experiences</td>
<td></td>
<td>A D NS</td>
<td></td>
</tr>
<tr>
<td>Shared interests</td>
<td></td>
<td>A D NS</td>
<td></td>
</tr>
<tr>
<td>Shared activities</td>
<td></td>
<td>A D NS</td>
<td></td>
</tr>
<tr>
<td>Similar levels of intelligence</td>
<td></td>
<td>A D NS</td>
<td></td>
</tr>
<tr>
<td>Sharing funny moments (shared sense of humor)</td>
<td></td>
<td>A D NS</td>
<td></td>
</tr>
<tr>
<td>Shared social style - informal vs. formal</td>
<td></td>
<td>A D NS</td>
<td></td>
</tr>
<tr>
<td>Shared needs or interests</td>
<td></td>
<td>A D NS</td>
<td></td>
</tr>
<tr>
<td>Shared experiences of emotional events (commiserating, celebrating)</td>
<td></td>
<td>A D NS</td>
<td></td>
</tr>
<tr>
<td>Same interest - hobbies, sports, topics</td>
<td></td>
<td>A D NS</td>
<td></td>
</tr>
<tr>
<td>Shared values</td>
<td></td>
<td>A D NS</td>
<td></td>
</tr>
</tbody>
</table>

This cluster (SIMILARITY) seems like an essential element of friendship A D NS

Starting with #1, please rank up to 5 items from most to least important friendship characteristic (left column)

Page 6

Page 7

Page 8

Page 9
### SOCIAL SKILLS
- Ability to communicate: A  D  NS  NS
- Good communication: A  D  NS  NS
- Communication on a regular basis: A  D  NS  NS
- Sense of humor: A  D  NS  NS
- Listening skills: A  D  NS  NS
- Interpersonal skills: A  D  NS  NS
- Patience: A  D  NS  NS
- Ability to compromise: A  D  NS  NS
- Understand boundaries and have: A  D  NS  NS
- Ability to learn recreational opportunities: A  D  NS  NS
- Knowledge of devices to communicate (phone): A  D  NS  NS
- Have skills to resolve conflicts: A  D  NS  NS
- Demonstrate understanding without: A  D  NS  NS
- Tolerance: A  D  NS  NS

This cluster (SOCIAL SKILL) seems like an essential element of friendship: A  D  NS  NS

Starting with #1, please rank up to 5 items from most to least important friendship characteristic (left column).

### LUXING & FUN
- That "magical element" that attracts one person to another: A  D  NS  NS
- Caring for one another: A  D  NS  NS
- Both parties smile when they hear the other person's name: A  D  NS  NS
- Pleasure: A  D  NS  NS
- Willingness to accept differences: A  D  NS  NS
- Building one another up: A  D  NS  NS
- Respectful of likes and differences: A  D  NS  NS
- Play/Fun: A  D  NS  NS
- It feels right: A  D  NS  NS
- Someone that knows you inside out: A  D  NS  NS
- Acceptance: A  D  NS  NS
- Like to be together: A  D  NS  NS
- Enjoying the other person's company: A  D  NS  NS
- Attraction: A  D  NS  NS
- Enjoyable times spent together: A  D  NS  NS
- Liking the other person: A  D  NS  NS
- Mutual respect, high regard: A  D  NS  NS
- Someone you can talk to: A  D  NS  NS

This cluster (LUXING & FUN) seems like: A  D  NS  NS

Starting with #1, please rank up to 5 items from most to least important friendship characteristic (left column).

### HELPING
- Caring about the health, happiness, and: A  D  NS  NS
- Helping one another: A  D  NS  NS
- Willingness of both parties to help each: A  D  NS  NS
- Offering one's possessions to help or: A  D  NS  NS
- Someone to go to for help if needed: A  D  NS  NS
- Support: A  D  NS  NS
- Support in times of need: A  D  NS  NS
- Support for each other: A  D  NS  NS
- Demonstrating affection when the friend is hurting: A  D  NS  NS
- Offering time and resources: A  D  NS  NS
- Helping to understand something: A  D  NS  NS
- Nurture: A  D  NS  NS
- The need to take care of someone: A  D  NS  NS

This cluster (HELPING) seems like an essential element of friendship: A  D  NS  NS

Starting with #1, please rank up to 5 items from most to least important friendship characteristic (left column).

### HAVING ACCESS TO FRIENDS
- Having support staff who encourage: A  D  NS  NS
- While not necessary for friendship to: A  D  NS  NS
- Having the opportunity to socialize with: A  D  NS  NS
- Time together: A  D  NS  NS
- Friendships are determined by external services (staff, etc.): A  D  NS  NS
- Family support & encouragement: A  D  NS  NS
- Having access to friendships is a key: A  D  NS  NS
- Assistance in discovering potential: A  D  NS  NS
- Contact/exposure: A  D  NS  NS
- Helping with transportation: A  D  NS  NS
- Consumers have limited choice in friends because of restricted opportunities: A  D  NS  NS

This cluster (ACCESS) seems like an essential element of friendship: A  D  NS  NS

Starting with #1, please rank up to 5 items from most to least important friendship characteristic (left column).

(Please turn page and continue)
Please indicate whether you agree or disagree that each item is an important characteristic of consumer friendship.

TRUST
- Trustworthiness
- Honesty
- Loyalty
- "Up front" with each other
- "Always there" for one another
- Respectful
- Reliable

This cluster (TRUST) seems like an essential element of friendship.

Starting with #1, please rank up to 5 items from most to least important friendship characteristic (left column).

Please indicate whether you agree or disagree that each item is an important characteristic of consumer friendship.

OTHER
- Feeling of safety
- Personal growth
- Making sure rights are not violated
- Learning by example
- Consumers are more concerned with

Selectivity
- Friendship is not possible for people
- Friendship is not possible for people with severe/profound mental

Page 32: No ranking this section

Page 33

You are almost finished.

- Please rank all of the following categories of friendship starting with 1 (top rank), then 2 and so on.

  ___ SIMILARITY
  ___ TRUST
  ___ RECIROPCITY
  ___ HELPING
  ___ SOCIAL SKILLS
  ___ LIKING & FUN
  ___ HAVING ACCESS TO FRIENDS
    (often with staff or family support)
    ___ OTHER
    ___ OTHER

(Please turn page to write your comments)

Page 34

Your Comments (optional):

Please use the space provided below to write any comments you have on any items, especially those you marked "NS" (not sure). Also, please indicate any aspects of friendship you feel are missing.

Page 35

For further information, please contact:
James Wiltz
The Nisonger Center at Ohio State University
614-292-5132 – or – wiltz.2@osu.edu

Thank you again for your participation!
APPENDIX D

CONTENT OF E-MAIL MESSAGE SENT TO COUNTY SUPERINTENDENTS

Dear Mr./Ms. {Superintendent Name}

In a few days you will receive in the mail a request to assist in a statewide study on friendship and individuals with MR/DD. I am writing in advance because many people prefer to know ahead of time that they will be contacted.

As you probably already know, people with MR/DD often have social difficulties, which have been linked to mental health problems and lower quality of life. The purposes of the study are (1) to better understand consumer friendship and (2) to apply the results directly to helping consumers overcome social problems.

When you receive my letter, please take a few minutes to review the details of the study. Thank you for your time and consideration. It is only with the generous help of people like you that this research can be successful. Please don't hesitate to contact me if you have any questions or you can visit the study webpage at:
http://nisonger.osu.edu/friendship

Thanks again,

-- Jim

*****************************************************************************

James Wiltz
Friendship Study Coordinator
The Nisonger Center at Ohio State University
614-292-5132
wiltz.2@osu.edu
http://nisonger.osu.edu/friendship

*****************************************************************************
APPENDIX E

CONTENT OF LETTER TO SUPERINTENDENTS OF OHIO COUNTY BOARDS

Date

Superintendent
(County Name) County Board of MR/DD
Address

Dear Mr./Ms.,

We are researchers at Ohio State University who are studying friendships among people with MR/DD. Although it is common knowledge that people with MR/DD have difficulty making and keeping friends, few studies have actually been conducted on the topic. By learning more about friendships, we eventually hope to be able to target interventions to help consumers gain more friends and improve their lives.

A sample questionnaire is included with this letter. We hope that you or someone else in your agency can help us by distributing questionnaires like this one to staff members who work with people with MR/DD. Each questionnaire only takes about 20 minutes to complete, and they come with stamped envelopes, so the person who distributes them does not need to do anything else. This small amount of time, when pooled with the efforts of hundreds of others, can have a profound impact on our understanding of consumer friendship. Participation in this study is completely voluntary and confidential. In fact, no names are ever collected, so everything is kept anonymous.

Please consider whether you and your agency are willing to be a part of this research. In about a week, you will receive a telephone call to discuss this research further. In the meantime, if you have any questions or concerns, please contact Jim Wiltz at wiltz.2@osu.edu or 614-292-5132. Thank you for your consideration.

Sincerely,

Steven Beck, Ph.D.
Associate Professor of Psychology
Ohio State University

James Wiltz, M.A.
Doctoral Candidate
Ohio State University
APPENDIX F

SCRIPT FOR INITIAL TELEPHONE CONTACT

“Hello, this is Jim Wiltz at Ohio State University. I sent you a letter about a week ago that described research we are conducting on consumer friendship.”

“Do you have a few minutes to discuss the study?”
  • if no,
    “Is there a better time later in the week that I can call you back?”
  • if yes,
    “The point of the study is to learn more about friendships in people with MR/DD. At this time, we are trying to find agencies and individuals willing to help. All we need is someone to distribute questionnaires to staff members who work with people with MR/DD. This can include residential, work, or recreation staff. To make things easier, each questionnaire comes with a postage-paid envelope, so the staff member just places it in a mailbox when finished. The person who distributed the questionnaires does not need to do anything else.”

    “One more important thing: All information is completely anonymous – in order to protect everyone’s confidentiality, no names are ever written on a questionnaire.”

“Do you have any questions?”
(answer any specific questions)

“Would you be willing to help us?”
  • if no,
    “Is there somebody else with your agency who might be able to help us distribute questionnaires to staff members?”
  • if yes,
    Get information on how many questionnaires to send, etc.

“Thank you for your time”
APPENDIX G

INTERNET-BASED INFORMATION PAGES
Participating in the Friendship Study

Nisonger Center
Participation in the Ohio Consumer Friendship Study

Consumer Friendship Questionnaire Booklet
(the questionnaire takes only 20 minutes to complete)

Totally Confidential
In fact we specifically ask for people NOT to write any names in the questionnaire. By keeping the information confidential, we protect you and staff raters. People feel free to share their opinions without any themselves or to their clients.

Approved by Human Subjects Committee
This study has been evaluated and approved by Ohio State University Human Subjects Committee.
Protocol 2004E0138

Sample Items
These are the first five friendship questions. As you see, they are understand and do not address anything embarrassing or potential to the individuals or caregivers. And remember, everything is kept confidential with no names on the questionnaire.

1. These individuals trust each other ... Strongly
   Do not know
   Agree
   Disagree

2. They like one another a lot .................. Strongly
   Do not know
   Agree
   Disagree

3. This relationship is strongly supported by staff (or family) ............ Strongly
   Do not know
   Agree
   Disagree

4. These individuals help one another out when needed ................... Strongly
   Do not know
   Agree
   Disagree

5. They have a lot in common .................. Strongly
   Do not know
   Agree
   Disagree

Participating in the Friendship Study

How does participation actually work?

Three Easy Steps to Collecting Data:

1. Identify adult consumer pairs in each of the following 3 categories (about equal numbers of each):
   (1) close friends
   (2) casual friends/acquaintances
   (3) consumers who dislike each other

2. Identify staff members who have known the consumer pairs identified above for at least 6 months.

3. Distribute questionnaires to staff members. Each staff ratee can complete up to 3 questionnaires.
   * Please inform staff members which consumer pair(s) to consider when completing the forms.
   * They can mail completed questionnaires using the stamped envelope provided.

That's It! - the questionnaires come to us in the postage paid envelopes, and we finish the study

Additional Info & Helpful Hints:

"Thank you" gifts: We appreciate your help in conducting this study. As a "thank you" from us,
* Staff members keep the Ohio State University pen that is included with each questionnaire.
* For each survey returned from your agency, an entry is made in a $100 raffle. The winner receives a $100 check paid to
  your agency's recreation fund.

Adult Consumer Pairs:
1. The pair may know one another from work, home, or recreational outings, etc.
2. They are either (1) close friends, (2) casual friends, or (3) they dislike each other.
3. Diversity is appreciated - ideally, the subjects include men, women, various racial backgrounds, and different levels of
   intellectual ability.
4. Each individual should only be rated once - for example, if Bill and Frank's relationship is rated, please do not also rate
   Bill and Tom, Frank and Tom, etc. Also, two staff members should not rate the same relationship (key = each consumer only
   once).

Which staff members are best?
1. Anybody who has significant experience with people with MR/DD and is familiar with the consumer pair (minimum 6
   months).
   * direct care staff in residential or workshop setting
   * house manager
   * SSA / case manager
   * program coordinator/manager or other administrator familiar with consumers
   * other person who knows the consumers well (e.g. family member or advocate)
2. Maximum of 3 questionnaires per staff member (ideally, one for each relationship type)

To find out more about this study, please contact James Wiltz at wiltz.38@osu.edu or call 614-292-5132.
APPENDIX H

CONTENT OF DATA CONTACT LETTER SENT WITH QUESTIONNAIRES

Date
Name of Data Contact
Title
XX County Board of MR/DD
Address

Dear Ms./Mr.,

Thank you for participating in this state-wide study on consumer friendship. It is only with the generous help of people like you that this research is possible. As we discussed on the phone, this packet includes ## questionnaires. Each questionnaire is accompanied by a postage-paid envelope for easy return to OSU. I also have enclosed a “quick reference” that explains data collection more thoroughly.

As a thank you gift for staff members completing questionnaires, there is an Ohio State University pen in each envelope for them to keep. An additional incentive benefits consumers directly. For each questionnaire from this packet that is returned to us by August 25, an entry is made in a $100 raffle. The winning entry will receive a $100 check made out to the winning county’s recreation fund (or equivalent). It is our way of saying thank you to the main subjects of this study.

Please let me know if you have any questions or concerns or if I can send additional questionnaires. I can be reached at wiltz.2@osu.edu or 614-292-5132.

Sincerely,

James Wiltz
The Nisonger Center
Ohio State University

Enclosures
APPENDIX I

QUICK REFERENCE GUIDE FOR DATA CONTACTS

THE OHIO STATE UNIVERSITY

Consumer Friendship Study
quick reference for data collection

Three Steps to Data Collection:

1: Identify adult consumer pairs in each of the following 3 categories:
   (1) close friends
   (2) casual friends/acquaintances
   (3) consumers who dislike each other
   } ideally, about equal numbers in each category.

2: Identify staff members who have known the consumer pairs identified above for at least 6 months.

3: Distribute questionnaires to staff members. Each staff rater can complete up to 3 questionnaires.
   • Please inform staff members which consumer pair(s) to consider when completing the forms.
   • They can mail completed questionnaires using the stamped envelope provided, or you can keep the envelopes and have staff return questionnaires to you– it is your choice.

That’s It – the questionnaires come to us in the postage paid envelopes, and we finish the study.

Additional Information:

“Thank you” gifts:
We appreciate your help in conducting this study. As a “thank you” from us,
• Staff members keep the Ohio State University pen that is included with each questionnaire.
• For each survey returned from your agency, an entry is made in a $100 raffle. The winning county receives a $100 check paid to its recreation fund (or equivalent) for consumers.

Adult Consumer Pairs:
1. The pair may know one another from work, home, or recreational outings, etc.
2. They are either (1) close friends, (2) casual friends, or (3) they dislike each other.
3. Diversity is appreciated – ideally, the subjects include men, women, various racial backgrounds, and different levels of intellectual ability.
4. Each individual should only be rated once – for example, if Bill and Frank’s relationship is rated, please do not also rate Bill and Tom, Frank and Tom, etc. Also, two staff members
   should not rate the same relationship (key = each consumer only once).

Which staff members are best?
1. Anybody who has significant experience with people with MR/DD and is familiar with the consumer pair (minimum 6 months).
   • direct care staff in residential or workshop setting
   • house manager
   • S/SA / case manager
   • program coordinator/manager or other adminstrator familiar with consumers
   • other person who knows the consumers well (e.g. family member or advocate)
2. Maximum of 3 questionnaires per staff member (ideally, one for each relationship type)

Thank you for your help! If you have any questions, please contact Jim Wiltz at (614-292-5132).
APPENDIX J

SCREE PLOT

Scree Plot

Eigenvalue

Factor Number
APPENDIX K

DATA-COLLECTION QUESTIONNAIRE

Front cover
### Relationship Information:

Please complete the following CONFIDENTIAL questionnaire about the relationship of two adults with mental retardation. (Please note not to write their names)

**These two individuals** (please check one):

- [ ] are “close friends” (they like each other a lot)
- [ ] are “casual friends” (occasional, but not close friends)
- [ ] dislike each other

**DEMOGRAPHICS**

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**PERSONAL HABITS & BEHAVIOR:**

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For the following questions about these individuals, please circle the appropriate response, and use this key:

**SD** Strongly Disagree: This phrase is not at all characteristic of this individual.

**D** Disagree: This phrase does not characterize this individual well.

**N** Neutral: Do not know, not applicable.

**A** Agree: This phrase somewhat characterizes this individual.

**SA** Strongly Agree: This phrase is definitely characteristic of this individual.

1. These individuals trust each other...
2. They like each other a lot...
3. This relationship is strongly supported by staff (or family)...
4. These individuals help one another...
5. They have a lot in common...
6. These two individuals listen to one another...
7. They are accepting of each other...
8. They are usually never fights...
9. They have a lot in common...
10. These individuals are happy together...

**Strongly Disagree**  **Strongly Agree**
23. These individuals help each other
without expecting "payback". ............. Strongly
Agree

24. Sometimes they get into fights........ Strongly
Disagree

25. These two individuals are total
opposites........................................ Strongly
Agree

26. They are loyal to each other........ Strongly
Agree

27. Sometimes one of them does
something for the other, or makes
him/her feel special........................... Strongly
Agree

28. These individuals confide in each
other............................................ Strongly
Agree

29. They have a helping relationship...... Strongly
Agree

30. These two are like "peas in a pod"..... Strongly
Agree

31. These individuals seldom get the
opportunity to share free time together........ Strongly
Agree

32. These two people act cold and
distant toward one another............... Strongly
Agree

33. These individuals are "up front" with
each other......................................... Strongly
Agree

34. They do fun things together........ Strongly
Agree

35. When one of these individuals does a
job or something, the other is happy for him/her........ Strongly
Agree

36. They take turns................................ Strongly
Agree

37. This pair is respectful of each
other.............................................. Strongly
Agree

38. They offer each other support in
times of need...................................... Strongly
Agree

39. If they have a fight or argument,
they can say "I'm sorry" and
everything will be alright.................. Strongly
Agree

40. These individuals give each other
small gifts, flowers, or surprise meals.... Strongly
Agree

41. They enjoy the same activities (such
as hobbies or sports)......................... Strongly
Agree

42. These two often tell each other... Strongly
Agree

43. They thank each other (not
necessarily in words)......................... Strongly
Agree

44. If someone was bothering one of
these two people, the other would
help................................................ Strongly
Agree

45. These two hold grudges easily
against one another......................... Strongly
Agree

46. Their relationship is reciprocal........ Strongly
Agree

47. They believe in each other............ Strongly
Agree

48. These individuals get to know each
other because of the services that
they were receiving............................ Strongly
Agree

49. They are playful with one another... Strongly
Agree

50. These individuals arrange their own
get-togethers..................................... Strongly
Agree

51. They disagree about many things........ Strongly
Agree

52. These two individuals live near each
other............................................. Strongly
Agree

53. They spend nearly all of their free
time together.................................... Strongly
Agree

54. Their relationship is characterized
by "give and take".............................. Strongly
Agree

55. They accept each other for who
they are............................................ Strongly
Agree

56. These two individuals share ideas
with one another................................ Strongly
Agree

57. These two like to joke around with
each other......................................... Strongly
Agree

58. They are often jealous of one
another............................................. Strongly
Agree

59. These two people often deceive each
other.............................................. Strongly
Agree

60. When they need to, they have the
ability to comprehend......................... Strongly
Agree

Page 8

61. These two will help one another
when one has a problem.................. Strongly
Agree

62. They think the same things are
funny.............................................. Strongly
Agree

63. One of these two people benefits
much more in the relationship than
the other.......................................... Strongly
Agree

64. They are patient with each other.. Strongly
Agree

65. This pair shows one another respect.. Strongly
Agree

66. They enjoy spending time together.... Strongly
Agree

67. The only reason they interact is
because they see each other as
often (e.g. home or work)................. Strongly
Agree

68. These individuals rely on each other
for help............................................ Strongly
Agree

69. They have a lot of interpersonal
conflict............................................ Strongly
Agree

70. These two individuals have similar
values............................................... Strongly
Agree

71. They treat each other the way they
want to be treated............................ Strongly
Agree

72. Staff or family members assist
them in their relationship in many
ways................................................ Strongly
Agree

73. They care for one another a lot...... Strongly
Agree

(These text pages and captions)

Page 9

107
APPENDIX L

SIX-FACTOR MATRIX

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APPENDIX M

FULL SUMMARY OF DATA CONTACTS

Note: All identifying information for data contacts was deleted at the request of the dissertation committee

Adams County Board of MR/DD
Phone: (937) 544-2574
April 5 – sent E-mail message introducing study and stating that a letter would follow
April 6 – sent letter and questionnaire in stamped envelope
April 13 – spoke on phone; superintendent got letter, but has not yet read it; will call back in a couple days
April 15 – superintendent still had not read it; I gave her a synopsis; she was not willing to allow staff to do it, but was willing to send it to parents; asked for a number - 50
April 27 – sent 50 questionnaires (201-250)
May 3 – called, but she was not in; did not leave a message
May 5 – called to follow-up; she got the packet and was very nice on the phone

Allen County Board of MR/DD
Phone: (419) 221-1385
April 5 – sent E-mail message introducing study and stating that a letter would follow (bounced back because address was wrong)
April 5 – sent second E-mail to updated address; it bounced back, too
April 6 – sent letter and questionnaire in stamped envelope
April 13 – spoke to superintendent; said that she would give to SSA’s (service coordinators); about 20 (turned to 40 when I said they could do 2 each); said to call head of SSA department
April 13 – left brief message for SSA dept. coord. and said I would call her back soon
April 15 – left a message with my phone number; said I’d call back in next couple days
April 16 – spoke with her; she was off to a meeting and we set up a time to speak on the phone 10am Monday, 4/19
April 19 – we spoke and she said to send 40
April 27 – sent 40 questionnaires (251-290)
May 3 – Spoke to SSA head; does not have packet yet
May 5 – left message as follow-up

Ashland County Board of MR/DD
Phone: (419) 289-0470
April 5 – sent E-mail message introducing study and stating that a letter would follow
(bounced back because address was wrong)
April 6 – sent letter and questionnaire in stamped envelope
April 13 – spoke with him; said he was interested, but did not get the letter or E-mail
(although he was out last week). He said to E-mail him, which I did
April 15 – He forwarded the E-mail to his directors; they are meeting on Monday,
April 26, so I should call back on the 27th.
April 27 – left a message with his secretary
April 27 – he responded via E-mail:
Hi Jim,
I'm sorry I didn't get back to you. I'm also sorry to say that we feel we cannot
give you the time at this moment to participate. Currently, we are in a layoff
situation and many staff members and administrators are pulling double duties.
To be fair and honest to you and your team would require significant efforts
which we cannot afford at this time. We are afraid it may not be a valid
participation. Good luck on your study.
April 27 – I responded via E-mail:

Ashtabula County Board of MR/DD
Phone: (440) 224-2155 or 224-2156
April 5 – sent E-mail message introducing study and stating that a letter would follow
(bounced back because address was wrong)
April 6 – sent letter and questionnaire in stamped envelope
April 13 – former superintendent no longer works there. The new (?) Superintendent
is {name deleted) and I left her a voice mail message. I also sent an E-mail
message
April 14 – called and she said to contact {name deleted).
April 14 – spoke with above individual who said she was “Glad you’re doing this”
because friends of people with MR/DD also have MR/DD; “I can commit to 5 in
each category”
April 27 – sent 15 questionnaires (291-305)
May 5 – called to follow up; she got the packet
June 4 – left message that none have arrived yet and that the deadline has been
extended to July 15
July 6 – left a voice mail for superintendent; asked her to call me back (so far zero
questionnaires received, but more general on message)
July 6 – superintendent called back and left a message
July 6 – left a voice mail on secretary’s phone
July 8 – superintendent called back and left a message; said I could leave more detail or we could play phone tag
July 8 – left superintendent a more-specific voice mail message that none have been returned, and we would like to be able to count Ashtubula Co. as one of the participants
July 8 – superintendent called back and said she would get in touch with people and have them return completed or blank forms

Athens County Board of MR/DD
Phone: (740) 594-3539
April 5 – sent E-mail message introducing study and stating that a letter would follow
April 6 – sent letter and questionnaire in stamped envelope
April 13 – spoke to superintendent; she said yes and gave me two contacts at the county board
April 13 – spoke to one of them who said she could do 10 in each group – send to her with some basic instructions at 21 South Campbell Street Athens, OH 45701
April 27 – sent 30 questionnaires (306-335)
April 28 – used incorrect address; sent it to Athens Co. address instead, so I called to let her know; left voice mail
May 5 – left voice mail message as follow-up
June 3 – left voice mail message stating that none had come back yet and that the deadline has been extended to July 15
June 7 – superintendent left voice mail saying all 30 were put in mail on Friday
April 13 – spoke to coordinator of SSAs of which there are 6; he (somewhat reluctantly) agreed that I could send a bundle of 12
April 27 – sent 12 questionnaires (336-347)
May 5 – left SSA coordinator voice mail message as follow-up
June 4 – left voice mail message that only a few had been received and the deadline has been extended to July 15

Auglaize County Board of MR/DD
Phone: (419) 629-2419
April 5 – sent E-mail message introducing study and stating that a letter would follow
April 6 – sent letter and questionnaire in stamped envelope
April 13 – left message on voice mail including my number, but said I’d call back in the next few days
April 16 – spoke to superintendent; he had been on vacation and had not yet read the letter, but wanted to know more; when I explained it, he said that he would be interested in participating and told me the person to contact would be {name deleted} who is the adult services director, which includes a sheltered workshop.
April 16 – spoke to above individual who was cooperative; he said send 15
April 27 – sent 15 questionnaires (348-362)
May 5 – spoke to him on the phone to follow-up; he plans to distribute tomorrow

Superintendent (also Noble County Board & Harrison County Board)
Belmont County Board of MR/DD
Phone: (740) 695-0233 or 695-0407
April 5 – sent E-mail message introducing study and stating that a letter would follow
April 6 – sent letter and questionnaire in stamped envelope
April 13 – called and left message with secretary; if I don’t hear from him soon, I’ll call in a couple days
April 15 – He left voice mail in morning saying “we are definitely willing to participate.” He also said he was superintendent of Harrison and Noble Counties as well.
April 15 – I called back and left message; then he called and left message
April 16 – telephone tag; out until afternoon; call back then
April 16 – called; left another message because he was in meeting
April 16 – Spoke with him on the phone; he was very interested and said that he would get some from the other counties as well (“obviously Belmont considerably more”)
April 19 – sent letter and extra questionnaire.
April 30 – left a voice mail message that I would be calling early next week
May 3 – called, but he was not in; did not leave a message
May 4 – called, but he was not in; I said I’d call back in the next couple days
May 5 – left a message with a secretary
May 6 – superintendent left a message on voice mail that they haven’t forgotten, but are a bit bogged down in accreditation right now; they will be in touch soon
May 20 – called him, and he needs a little more time; he is still interested
June 2 – received voice mail message from {name deleted} that she is the contact person
June 2 – called back; left message
June 8 – She called to ask a couple questions; left voice mail message
June 9 – spoke to {name deleted}; and gave details; will call back 6/11; also discussed Harrison and Noble counties; she said she would let me know
June 22 – she called and said to send 8 (did not find out about Harrison or Noble counties)
June 22 – she called back and said to send an additional 5 for Harrison and Noble
June 22 – sent 13 (1260-1269; 1313-1315)

Brown County Board of MR/DD
Phone: (937) 378-4891
April 5 – sent E-mail message introducing study and stating that a letter would follow
April 6 – sent letter and questionnaire in stamped envelope
April 14 – long conversation; she will transfer to the SSA supervisor
April 14 – supervises SSA’s - send 5 sets (3 SSA’s & 2 staff)
April 27 – sent 15 questionnaires (363-377)
May 5 – left message with secretary as a follow-up
May 6 – SSA supervisor left a voice mail message that she has the packet and is in
the process of distributing them; actually I got a couple back today from Brown
Co. as well

Butler County Board of MR/DD
155 Donald Drive
Fairfield, Ohio 45014
Phone: (513) 867-5962
April 5 – sent E-mail message introducing study and stating that a letter would follow
April 6 – sent letter and questionnaire in stamped envelope
April 14 – left voice mail message including my number; said I would call back
April 14 – he called back and was enthusiastic to participate (even though I had his
name wrong!); after talking, he said send 100 because he has various programs
that could participate (including a Leisure Coaching program)
April 27 – sent 100 questionnaires (101-200)
May 5 – left voice mail message as follow-up
May 5 – he returned the message with a voice mail message of his own; said he had
gotten all three envelopes and had distributed them; he gave his staff a May 31
deadline
May 5 – returned his call; left voice mail message
June 4 – left voice mail message that we have about ½ back and that the deadline has
been extended to July 15

Carroll County Board of MR/DD
Phone: (330) 627-6555
April 5 – sent E-mail message introducing study and stating that a letter would follow
April 6 – sent letter and questionnaire in stamped envelope
April 14 – left message with secretary; out of office this week so call next week
(4/19)
April 20 – called, but did not leave message
April 27 – left message including my number with a secretary
May 3 – spoke with superintendent and he said he was “interested and enthusiastic”
and that we “need more real knowledge – not just propoganda” about friendship.
May 3 – spoke to {name deleted} send 10
May 4 – the sample questionnaire was returned and is completed
May 7 – sent 10 (550-559)
May 12 – left message with secretary (call if questions or did not receive packet)
June 4 – on phone; left message and phone number with secretary
July 6 – left a voice mail message; asked superintendent to call back; so far zero questionnaires returned, but only generally talked about increasing return rate
July 7 – data contact called and said she was getting to it in the next couple weeks; I also informed her she is still in the raffle, which she was glad to hear.

Champaign County Board of MR/DD
Phone: (937) 652-1218
April 5 – sent E-mail message introducing study and stating that a letter would follow
April 6 – sent letter and questionnaire in stamped envelope
April 14 – out of office; left voice mail including my number; said I would call in a couple days to follow up
April 16 – in meeting, so I left voice mail including my number; said I would call back early next week if I didn’t hear from her.
April 20 – spoke with secretary; superintendent is out until Thursday; did not leave message
April 27 – {name deleted} called and said the letter I sent was forwarded to her. After speaking about the study, she said to send 15
April 27 – sent 15 questionnaires (378-392)
May 5 – spoke to her; she got the packet

Clark County Board of MR/DD
Phone: (937) 328-2675
April 5 – sent E-mail message introducing study and stating that a letter would follow
April 6 – sent letter and questionnaire in stamped envelope
April 14 – left voice mail message including phone number; will call back in two days
April 15 – she left voice mail for me regarding a research proposal; she also sent a fax with specifics as well as an E-mail (this person is thorough!)
April 15 – I called back; she was very receptive to taking part in study and will take it to her board next week; she indicated that a waiver of consent would probably be fine since we are not collecting names; I sent her a proposal for the study as an E-mail attachment. I also sent a hard copy along with the IRB title page and an extra questionnaire she requested.
April 23 – sent this message via E-mail:
Jim - Our Board adopted a resolution approving our participation, pending approval of the Human Rights Committee. The committee will meet next week and we will get back with you regarding the number of people we believe we can handle.
May 3 – she sent this E-mail message:
Both Human Rights Committee approved the project. Pls advise as to what the next steps will be for the county
May 3 – left voice mail message about participation; said I would send E-mail message
May 3 – sent return E-mail with description of next steps and referred to web page that has more instructions for data collection
May 5 – spoke to superintendent; she has meeting 5/13 with her managers and will give me a number after that
May 20 – left voice mail for D.C.
May 21 – E-mail: Jim - I should be sending you an email the first of next week with the number of survey forms to send us - we have had a little "blip" with vacations & a conference
May 21 – I responded
May 25 – E-mail request for 74 questionnaires (maybe more later)
May 26 – I responded that they would arrive in about a week
June 4 – packet of 74 sent (820-893)
June 4 – sent E-mail to D.C. that they are on the way

Clermont County Board of MR/DD
Phone: (513) 732-7000
April 5 – sent E-mail message introducing study and stating that a letter would follow
April 6 – sent letter and questionnaire in stamped envelope
April 14 – said she passed it to the SSA mgr.
April 14 – voice mail said he was out until 4/19; left message that I would call back
April 20 – left a voice mail message including my number; I said I’d call back in the next couple days if I did not hear from him first.
April 20 – SSA Mgr. called back and was interested in the details; he committed to 30; he said his goal was returned to me by May 15
April 27 – sent 30 questionnaires (51-80)
May 5 – left follow-up voice mail message
May 12 – he called on the phone and said that they had received the packet and would distribute it to a variety of people, but they might not meet the end of the month deadline; he wanted to make sure that was all right.
June 4 – left message that 11 already received and deadline has been extended to July 15
June 4 – SSA Mgr. called back to say he got my message and anticipated full participation
July 6 – left a voice mail message that only 9 of 30 so far returned; please beat the bushes to try to increase the return rate
July 6 – He called (although on vacation); he will send a subordinate some instructions to try to get more mailed

Clinton County Board of MR/DD
Phone: (937) 382-7519
April 5 – sent E-mail message introducing study and stating that a letter would follow
April 6 – sent letter and questionnaire in stamped envelope
April 14 – secretary said he is on vacation this week; left voice mail message; will call back next week
April 20 – spoke with superintendent who just got the letter and has not opened it; he preferred having a chance to look it over before speaking about it (he was quite nice about it, though). I gave the option to discuss the study or call back in a couple days; he preferred that I call back
April 27 – left message with secretary that I would call back in a couple days
May 3 – called, but he was at an early lunch; did not leave message and said I’d call back
May 5 – spoke to superintendent who said to send 10
May 7 – sent 10 (620-629)
May 12 – left follow-up message

Columbiana County Board of MR/DD
Phone: (330) 424-7788
April 5 – sent E-mail message introducing study and stating that a letter would follow
April 6 – sent letter and questionnaire in stamped envelope
April 14 – left a voice mail message including my number; out of office this week; will call back next week
April 20 – called, but he was in a meeting; did not leave a message and said I would call back tomorrow (secretary said he would be in then).
May 3 – spoke with superintendent and he forwarded the info to {name deleted} who happened to be in his office at the time
May 3 – data contact gave it to “hab managers” and he wants me to call back tomorrow at 1:30pm
May 4 – spoke on the phone; he said to send 15
May 7 – sent 15 (630-644)
June 5 – (none received back yet) left message with secretary that the deadline has been extended to July 15
July 6 – left message with a secretary to have superintendent call me back
July 16 – spoke to superintendent and he indicated he would try to get some back.

Coshocton County Board of MR/DD
Phone: (740) 622-2032
April 5 – sent E-mail message introducing study and stating that a letter would follow
April 5 – Responded to E-mail inquiry – I immediately wrote back and said to expect some information in the mail soon.
From her E-mail:
“I would be happy to participate. Looks like some good stuff!!”
April 6 – sent letter and questionnaire in stamped envelope
April 12 – spoke on phone; got the questionnaire will look at it tonight. I will call her back in a couple days.
April 14 – spoke on phone; had read material; we talked about numbers, etc., but she was not sure yet; she is going to give it to her Adult Svcs. Person
April 16 – spoke to her; she said to send 18
April 26 – she left a voice mail message stating that they would do it in another program as well, so send 18 more
April 26 – I called back and she confirmed that it was 36
April 27 – sent 36 questionnaires (81-100; 1-10; 393-398)
May 5 – follow-up phone call; has already distributed half - the other half soon
June 1 – have only received one back; telephoned her and she said that at least 20 were sent last week

Crawford County Board of MR/DD
Phone: (419) 562-3321 ext. 115
April 5 – sent E-mail message introducing study and stating that a letter would follow
April 6 – sent letter and questionnaire in stamped envelope
April 14 – left voice mail message and my phone number; will call back
April 16 – left voice mail message including my number; will call back next week
April 20 – He left voice mail regarding study and indicated that some staff indicated a willingness to take part; requested that I call back
April 20 – spoke with superintendent who was very supportive. He said that he thought studies of this type were “very undervalued” and that many people with MR/DD - even those in community settings - are often very lonely. Basically, he said that it is a worthwhile topic. He told me the person to contact is {name deleted}
April 20 – left message with secretary (there was somebody in her office); she took my number and will ask her to call me back
April 22 – spoke with data contact; she will help, but wants to talk to a few extra people (workshop & residential); she said she’d call me back in a few days.
April 27 – left phone message; asked her to call me back
April 27 – she left me a voice mail message and said to send 25
April 27 – sent 25 questionnaires (11-35)
May 5 – voice mail message left

Cuyahoga County Board of MR/DD
Phone: (216) 241-8230
April 5 – sent E-mail message introducing study and stating that a letter would follow
April 6 – sent letter and questionnaire in stamped envelope
April 14 – left voice mail message and phone number; mentioned {names deleted} helped with Roommate study; will call in couple days
April 16 – left voice mail message including my phone number; said I’d call back early next week
April 20 – called, but his secretary said he was in a meeting; I did not leave another message; will call back soon
April 22 – received phone call from {name deleted} who said he was given the letter and questionnaire by superintendent. He was meeting with several people today at 3pm, so I faxed a “quick reference” guide to help them better figure out what data collection looks like.
April 27 – left a message including my phone number; said I’d call back if I did not hear from him within a few days
April 27 – He E-mailed me the following response:
Jim:
Last Thursday (22nd) I discussed and distributed copies of your letter to {name deleted}, your fax, and copies of the survey questionnaire with our General Managers of Support Administration, Community Employment, and Adult Activities. They will share with their supervisory staff and attempt to identify participants who meet your criteria. They have been asked to report back in about a week to 10 days. I will then let you know the number of participants that have been identified.
May 20 – left a voice mail message with data contact
May 24 – received E-mail that they only have 14 identified, but are waiting for others
May 24 – replied via E-mail
June 2 – he sent E-mail that another program contacted him with about 200
June 2 – replied via E-mail
July 1 – received another E-mail that another program (SSA’s) could complete 7
July 1 – sent an E-mail asking if it was okay to send 206
July 2 – left a voice mail message for data contact
July 6 – left another voice mail message for data contact
July 6 – spoke to him said to send 230
July 7 – sent 230 (1010-1019; 1320-1539)
July 7 – sent E-mail message letting him know they are on the way in two batches
July 13 – data contact sent me a copy of an E-mail message he sent to staff
July 14 – I thanked him for the info via E-mail
August – returned 7 (1520-1526)

Superintendent (Also Preble County)
Darke County Board of MR/DD
Phone: (937) 548-9057
April 5 – sent E-mail message introducing study and stating that a letter would follow
April 6 – sent letter and questionnaire in stamped envelope
April 14 – left voice mail including phone number; said I’d call back in a couple days
April 16 – left message with secretary including my phone number
April 20 – spoke to secretary and he was out; will be in tomorrow (not morning)
May 3 – called; did not leave message with secretary; she said he had meeting at 2pm, so I will call around 1:30pm
May 3 – called at 1:30pm; was not in; did not leave a message
May 5 – spoke to secretary; he was not in, but will be in tomorrow; no message left
May 10 – spoke to superintendent who said he was willing to participate; he needs to talk with the person who runs programs to get a number; next week, he is out of town until Thursday, so I will call back Friday, 5/21
May 21 – called and was told to talk to {name deleted}; he agreed to do 15
May 21 – sent 15 (730-739; 693-697)
July 6 – left a message with superintendent that none had been returned and to please try to beat the bushes.
July 16 – spoke to data contact who said he would try to ask people to get moving on it

Defiance County Board of MR/DD
Phone: (419) 782-6621
April 5 – sent E-mail message introducing study and stating that a letter would follow
April 6 – sent letter and questionnaire in stamped envelope
April 14 – left voice mail message and phone number; will call back in couple days
April 16 – he forwarded it to a data contact in his office; he was not terribly enthusiastic, but maybe the data contact will be
April 16 – left voice mail message including my phone number; said I would call back early next week
April 16 – she left me voice mail and referred to herself as “the contact person for the friendship study” for Defiance County; said she would be in this afternoon
April 16 – completed it herself; then we talked and she committed to 10 more
April 27 – sent 10 questionnaires (41-50)
May 5 – follow-up phone call with data contact; she has already distributed them

Delaware County Board of MR/DD
Phone: (740) 368-5800 ext. 100
April 5 – sent E-mail message introducing study and stating that a letter would follow
April 6 – sent letter and questionnaire in stamped envelope
April 14 – had concerns about it being a staff rating and not asking the individuals; he forwarded it to a “people first committee” for their input; I explained that asking individuals is a great idea for a study, but it would be difficult to generate a friendship questionnaire from such a study (that can be used to target interventions in troubled relationships); he said that he did not want to categorically decline, but wanted the committee advice first.
April 27 – called and left a message about the $100 raffle. It seemed like relevant information for the people first committee
May 5 – left voice mail message including my phone number
May 12 – data contact called; I explained that I would love to have any participation they could provide; she agreed to take ten
May 12 – sent 10 (399-400; 456-460; 491-493)
June 4 – left a voice mail message that none had been received; deadline extended
July 6 – spoke to data contact and said that we are trying to increase the rate of response and have not gotten any back from Delaware County

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Erie County Board of MR/DD
Phone: (419) 626-0208 ext.120
April 5 – sent E-mail message introducing study and stating that a letter would follow
April 6 – sent letter and questionnaire in stamped envelope
April 14 – left voice mail message including my phone number; apologized for name mixup; said I’d call back in a couple days if I did not hear from him
April 16 – left voice mail message including my phone number; said I’d call back early next week if I did not hear from him
April 20 – spoke very briefly; he was in the middle of a meeting; said he had my phone number and would call me back.
April 20 – data contact called me and said that the superintendent had assigned it to her. We spoke about the specifics (e.g. 3 relationship categories and what staff could do it) and she said she would call back tomorrow with a number to send
April 27 – I called her and she said to send 10
April 27 – sent 10 questionnaires (401-410)
May 5 – left follow-up voice mail message
June 4 – called to tell her only one received, but deadline extended; she said they went in the mail yesterday

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Fairfield County Board of MR/DD
Phone: (740) 687-7244
April 5 – sent E-mail message introducing study and stating that a letter would follow
April 6 – sent letter and questionnaire in stamped envelope
April 14 – spoke with his secretary who was very nice; she wrote down my contact information and said he has gotten the letter; he is out until April 20; I will call back shortly after that if I don’t hear from him
May 3 – in meeting; left message with secretary
May 5 – secretary said he was out of the office
May 20 – spoke briefly; said he passed it along to {name deleted}
May 20 – spoke to data contact who said to send 12
May 21 – sent 12 (720-729; 698, 699)
June 1 – data contact sent an E-mail message asking about a deadline
June 1 – returned message via E-mail
June 7 – she sent the following message: I distributed our 12 surveys this morning. I’ll let you know if anyone needs help completing them.
June 7 – responded via E-mail
Fayette County Board of MR/DD
Phone: (740) 335-7453
April 5 – sent E-mail message introducing study and stating that a letter would follow
April 6 – responded to E-mail message saying that I had the wrong E-mail address. It was not really positive or negative.
April 6 – sent letter and questionnaire in stamped envelope
April 12 – spoke to superintendent on phone. He forwarded the letter and questionnaire to the habilitation coordinator for the county. Then he transferred me on the phone.
April 12 – I left a short message to her that I would call back in a couple days.
April 13 – (1) she left voice-mail on my phone and asked that I call back anytime today, (2) I returned call, but had to leave a message because she was not in the office (3) she returned call and left voice mail (4) called and talked to her
April 13 – I asked her to consider how many she would be able to do and I would call her back within a week.; I suggested that she consider a certain number (e.g. 10) of close friends, casual friends, and people who dislike one another
April 15 – spoke to her on phone; she will have meeting tomorrow with her boss and will discuss numbers then; she plans to call me back; I suggested that I send a short study proposal via E-mail; she said okay {E-mail address deleted} message sent
April 16 – she sent an E-mail message stating that she had gotten my E-mail and the proposal; she also wants to contact me again on Monday; I E-mailed back asking that she give me a time to be at my desk
April 27 – sent 15 questionnaires (411-420; 36-40)
May 5 – follow-up message left on voice mail

Franklin County Board of MR/DD
Phone: (614) 475-6440
April 5 – sent E-mail message introducing study and stating that a letter would follow
April 6 – sent letter and questionnaire in stamped envelope
April 9 – phone message from superintendent’s secretary. They got the letter and questionnaire and forwarded it to the head of psychology.
April 9 – left message with psychologist.
April 13 – Psychologist left phone message and said that I needed to send her a proposal and OSU human subjects forms.
April 13 – Called her back; she wants a letter addressed to her that is more specific;
She wants a research proposal with some methods, an IRB exemption form, specific numbers of questionnaires that need to be completed, etc.; Since last year there was no workshop research, she said this would be a “good time” to tap them as a resource;
April 16 – received long checklist of research requirements (it’s worth doing though because I asked at one of the ARC workshops today and they have over 40 floor instructors per workshop); left a voice mail message to psychologist that I received it and would prepare a response to each item early next week.

April 19 – prepared and sent a research proposal addendum;

April 19 – left voice mail message

April 23 – spoke with her at length about various things including my internship in Nebraska; she had only skimmed the proposal, but was concerned that there was no course number associated with the project, so I told her the course number.

May 3 – left voice mail message including my phone number; will call if I don’t hear from her in next few days.

May 5 – spoke to psychologist who has sent it to workshops for their input; she said call next week

May 20 – left a voice mail message

May 20 – she returned my call and said 4 workshops agreed to participate; expect letter

May 25 – received letter with confirmation of participation and contact info for data contacts: Arc E: {name deleted}; S: {name deleted}; W: {name deleted}; N: {name deleted}

May 26 – phone message to Arc East

June 3 – met director and I will give presentation to staff on 6/23 then distribute approx 90

June 4 – spoke to director of Arc North; made appointment for 9:30am Wed, 6/9

June 4 – left voice mail message with director of Arc West

June 5 – she left voice mail message

June 8 – I left director of Arc W. a voice mail message

June 8 – left a voice mail message for director of Arc South

June 9 – met with director of Arc North and distributed 80 (1120-1149; 1170-1219 minus 1177, 1211, 1212)

June 21 – received voice mail from Arc E. director – needed to reschedule

June 21 – returned message rescheduling

July 6 – Arc E. director called and said schedule did not work

July 6 – called back about scheduling

July 6 – spoke with director of Arc N.: Tuesday 7/14, 2pm; going to give short intro then hand out one copy to be returned; then they can take one with if they want to.

July 6 – left a message for director of Arc W.

July 6 – left a message with director of Arc N. re: update

July 7 – Arc E. director called and said what about July 20 at 8:15

July 7 – called back and confirmed time/date

July 12 – Arc W. director called and left voice mail – said she has a half hour meeting in afternoons; said to call back to schedule

July 13 – distributed 44 to Arc S.: 1720,1721, 1730-1733, 1740-1751,1753-1779

July 14 – Arc N. left voice mail and said they had over 40 to pick up

July 16 – left a voice mail message that I’d like to pick them up Tuesday at 10am
July 19 – Arc E. director left a message to confirm tomorrow’s morning meeting.
July 19 – called her back – ½ hour at 8:30am
July 19 – called Arc N. director to make sure tomorrow pickup was okay and to ask to get uncompleted ones back
July 20 – Arc E. (1660-1699; 1780-1789 not 1674)
July 20 – collected questionnaires from Arc N. 3 blank returns (1177, 1211, 1212)
July 20 – Arc W. (1700-1719; 1801-1819; 1787-1796, 1799) 1124 returned blank

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Fulton County Board of MR/DD
Phone: (419) 337-4575
April 5 – sent E-mail message introducing study and stating that a letter would follow
April 6 – sent letter and questionnaire in stamped envelope
April 14 – spoke to on phone, and he was very supportive (“really appreciate your work”); he passed it down the chain to his community services person.
April 14 – spoke to on phone, but she was in meeting; asked me to call back in 30 minutes; I did and she agreed to have me send her 35
April 27 – sent 35 questionnaires (421-455) (July returned 30 blanks = 421-426; 430-434; 436-455)
May 5 – left a follow-up voice mail message
June 4 – left voice mail message that only one has arrived and that the deadline has been extended to July 15
July 6 – left message with secretary asking to have superintendent call me back
July 8 – spoke with superintendent who was pretty full of excuses (accreditation, turnover, low priority, etc.); I asked that if at least some could be completed or at least blank copies returned – stamped envelopes were already provided – we would appreciate it
July 16 – 20 blank returned (2 others returned were completed)

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Gallia County Board of MR/DD
Phone: (740) 367-7371
April 5 – sent E-mail message introducing study and stating that a letter would follow
April 6 – sent letter and questionnaire in stamped envelope
April 14 – left voice mail message including my number; will call back in a couple days
April 16 – left voice mail message including my number; will call back early next week
April 20 – spoke to superintendent who had read the letter; it is a small county, but she would commit to 10; send to her
April 27 – sent 10 questionnaires (461-470)
May 5 – left voice mail message as follow-up
Geauga County Board of MR/DD (pronounced Jeauga)
Phone: (440) 729-9406
April 5 – sent E-mail message introducing study and stating that a letter would follow
April 6 – sent letter and questionnaire in stamped envelope
April 14 – spoke on phone very briefly; he indicated they would participate and that he gave the info to an individual in Community Support Services
April 14 – spoke on phone; she was thinking some workshop, some SSA, some other stuff, too; she said to send 20
April 27 – sent 20 questionnaires (471-490)
May 5 – left voice-mail message as follow-up
June 4 – left voice mail message that deadline has been extended to July 15
July 6 – out of office until July 12 (superintendent also out); left a voice mail that only 5/20 have been returned
July 13 – she called and said that the 5 is all we will get; there have been firings, etc.

Greene County Board of MR/DD
Phone: (937) 562-6500
April 5 – sent E-mail message introducing study and stating that a letter would follow
April 6 – sent letter and questionnaire in stamped envelope
April 14 – left message on voice mail of receptionist (was my only option); included my phone number; will call back in a couple days if I haven’t heard from him
May 3 – not in; left no message; will call back
May 5 – left a voice mail message including my number
May 20 – left a voice mail message including my number
June 4 – left another voice mail message including my number

Guernsey County Board of MR/DD
Phone: (740) 439-4451 ext. 16
April 5 – sent E-mail message introducing study and stating that a letter would follow
April 6 – sent letter and questionnaire in stamped envelope
April 14 – left message on voice mail of receptionist (was my only option); included my phone number; will call back in a couple days
April 16 – left message on voice mail of receptionist (was my only option); including my phone number; will call back early next week
April 20 – left her a voice mail message (previous messages were on a secretary’s phone).
May 3 – left voice mail message including my number
May 5 – spoke to superintendent; she said to send 10
May 7 – sent 10 (600-609)
April 22 – sent E-mail message introducing study and stating that a letter would follow
April 22 – sent letter and questionnaire in stamped envelope
May 3 – spoke with superintendent who acted very interested; we also talked about OVRS and Nisonger Center (she used to work in Central Ohio); she referred me to {name deleted}; she said she would tell her that I would be calling
May 5 – spoke at length with {name deleted} about what/why etc. in the study. She is going to participate and started to seem enthusiastic; she needs until about 5/12 to determine the number to send
May 12 – left a voice mail message including my phone number
May 12 – she called back; she was still not exactly sure about the number; she seemed to grasp the study well, but wanted some additional information, so I sent her an E-mail message with a couple attachments; she said she will call me next week
May 12 – sent E-mail in response to above conversation
May 21 – she sent an E-mail message stating that she wanted 30 booklets
May 24 – I responded via E-mail saying they are on the way; it bounced back
May 24 – left a voice mail message
May 24 – sent 30 (740-769)
July 15 – data contact Emailed to make sure we had gotten most back
July 15 – I responded via E-mail that I had

Hancock County Board of MR/DD
Phone: (419) 422-6387

April 22 – sent E-mail message introducing study and stating that a letter would follow
April 22 – sent letter and questionnaire in stamped envelope
May 3 – left message including my phone number with his secretary
May 3 – he called back and left a voice mail message; he said he had a meeting tomorrow “to discuss your study and find out how many booklets we’ll need”
May 5 – called, but he was out until 1pm; said I’d call back then
May 5 – called again and left message with a secretary
May 5 – left voice mail message (“we’re playing phone tag”); said to call back
May 6 – spoke to superintendent who was still interested, but did not yet know a number; I said I’d call him back in the middle of next week
May 12 – left a message with the person who answers the phone
May 12 – superintendent called; they are xeroxing them and sending them to me; I have no idea how many
Hardin County Board of MR/DD
Phone: (419) 674-4158
April 22 – sent E-mail message introducing study and stating that a letter would follow
April 22 – sent letter and questionnaire in stamped envelope
May 3 – spoke to superintendent who said they got the letter and “definitely want to participate” he passed it along to a data contact
May 3 – spoke to data contact who was very helpful; she wanted a couple days to determine the number of participants.
May 5 – spoke to data contact; she said send 31
May 7 – sent 31 (645-675)
June 4 – left voice mail message that only a few have arrived, and the deadline has been extended to July 15

Harrison County Board of MR/DD
Phone: (740) 942-2158
April 15 – He left voice mail in morning saying “we are definitely willing to participate.” He also said he was superintendent of Harrison and Noble Counties as well (COG??).

April
From Belmont above - June 22 – data contact called and said to send 8
June 22 – she called back and said to send an additional 5 for Harrison and Noble
June 22 – sent 13 with Belmont County (1260-1269; 1313-1315)

Henry County Board of MR/DD
Phone: (419) 278-3050
April 22 – sent E-mail message introducing study and stating that a letter would follow; message bounced back;
April 22 – found updated E-mail address and resent message
April 22 – sent letter and questionnaire in stamped envelope
May 3 – left voice mail message including my phone number; said I would call back if I did not hear from him in a couple days
May 3 – he called back and said he forwarded it to {name deleted}; I will call her
May 3 – left voice mail message including my phone number; I said that the superintendent gave me her name and number; I also said I would call back if I did not hear from her in a couple days
May 5 – called, but did not leave a message
May 12 – left a voice mail message including my phone number
May 14 – left me a voice mail message that she will be out of town early next week, but that “we will be glad to participate” She will call middle of next week.
June 4 – left her a voice mail message
July 2 – left a voice mail message for data contact
July 2 – she called back and said to send 10
July 3 – sent 10 (970-979)

Highland County Board of MR/DD
Phone: (937) 393-4237 x111
April 22 – sent E-mail message introducing study and stating that a letter would follow
April 22 – sent letter and questionnaire in stamped envelope
May 3 – left a voice mail message including my phone number; will call back in a couple days if I haven’t heard from him
May 12 – left a voice mail message including my phone number
May 20 – left message with secretary who said he told her he will call me back
May 21 – superintendent left me a voice mail message that he copied the questionnaires and will send them to me (7 already completed)
May 21 – left message with secretary

Hocking County Board of MR/DD
Phone: (740) 385-6805
April 22 – sent E-mail message introducing study and stating that a letter would follow; bounced back
April 22 – found updated E-mail address; resent message
April 22 – sent letter and questionnaire in stamped envelope
May 3 – talked with superintendent; she got letter and had discussed it with various employees; she directed me to talk to {name deleted}; she was not in at the time; I said I’d call back within a couple days
May 5 – left message with a secretary including my number
May 5 – data contact called back; I explained the study some more; she said she would call back in a couple days with a number
May 5 – she left a message to send five
May 7 – sent 5 (676-680)

Holmes County Board of MR/DD
Phone: (330) 674-8045 ext. 202
April 22 – sent E-mail message introducing study and stating that a letter would follow
April 22 – sent letter and questionnaire in stamped envelope
May 3 – out of office; left a voice mail message including my number; I said I’d call back within a couple days if I hadn’t heard from him
May 5 – superintendent sent the following E-mail message:
Mr. Wiltz- I received the information and your telephone message. I'll try to call you back today. We would be glad to assist in your study. Maybe 25 surveys for adult staff.

May 5 – he called me to follow up on E-mail. He said to send 25

May 7 – sent 25 (560-584)

June 4 – left voice mail message stating that none had been received, and the deadline has been extended to July 15

July 6 – left a voice mail message that only 7 of 25 have been returned; also deadline extended through the end of August

Huron County Board of MR/DD
Phone: (419) 668-8840

April 22 – sent E-mail message introducing study and stating that a letter would follow

April 22 – sent letter and questionnaire in stamped envelope

May 3 – spoke to superintendent who then referred me to {name deleted}

May 3 – spoke to data contact; she is going to have a meeting 3/5/04 with various people under her and she will have them identify consumers in the three categories; I should call her back after the meeting

May 12 – received this E-mail message

I spoke with staff here about the friendship study you described to me when we spoke last week on the phone, and we've come up with 1/2 a dozen friendship pairs in each of the three sets - close friends, casual acquaintances, dislike each other - and will be willing to complete questionnaires for the study if you want to send them this way. I can be your contact person: We'll look forward to hearing from you. And p.s. Are you familiar with any of my ex-colleagues' work on friendship with people with disabilities from the University of Oregon? Steve Newton, Rob Horner, et. al.?

May 12 – I responded:
Thank you for your participation. I will send the packet of 18 today.

Also, about the research from Newton, Horner, et al., yes I read a couple papers of theirs. I believe they had to do with social skill and stability of relations between consumers and non-consumers. I cited their papers in the study proposal before starting this one.

May 12 – sent 18 (494-499; 681-692)

June 4 – talked to data contac and told her the deadline has been extended to July 15

July 6 – Email message from data contact: All 18 were mailed to you last week.

July 6 – returned message; thank you!
Jackson County Board of MR/DD
Phone: (740) 286-6491
April 22 – sent E-mail message introducing study and stating that a letter would follow
April 22 – sent letter and questionnaire in stamped envelope
May 3 – spoke to superintendent who said she passed it to her SSAs; she said she would have a data contact call me
May 12 – called, but office closed; no message left
May 20 – data contact was not in, but I left a message with a secretary including my number
June 4 – talked to her; she is the only SSA in the county; send her 3
June 5 – sent 3 (894-896)
July 16 – left a message asking her to complete the questionnaires or return blanks

Jefferson County Board of MR/DD
Phone: (740) 264-7176
April 22 – sent E-mail message introducing study and stating that a letter would follow
April 22 – sent letter and questionnaire in stamped envelope
May 5 – spoke with secretary; he is out of office until 5/10
May 20 – left message including my number with a secretary

Knox County Board of MR/DD
Phone: (740) 397-4656
April 22 – sent E-mail message introducing study and stating that a letter would follow
April 22 – sent letter and questionnaire in stamped envelope
May 5 – left superintendent a voice mail message including my number; I said I would call back if I didn’t hear from her
May 20 – left voice mail including number

Lake County Board of MR/DD
Phone: (440) 350-5100
April 22 – sent E-mail message introducing study and stating that a letter would follow
April 22 – sent letter and questionnaire in stamped envelope
May 5 – left a message with her secretary including my number; said I’d call back next week if I didn’t hear from her
May 10 – received the following E-mail message:
Greetings. Your study looks very interesting. I am willing to help. How many questionnaires do you want/need from an agency? What is your time frame for completing questionnaire? I am {name deleted} director of public relations and volunteer services for the Lake County Board of MR/DD. I may be reached at (440) 350-5050. Thank you.
May 10 – spoke on the phone; she was going to take a few days to come up with a number; I will call back then; she was very enthusiastic: “this sounds wonderful” & “any way we can be of support, you’ve got us”
May 20 – left a voice mail message including my number
May 21 – left a voice mail message on my phone; updated me that a meeting is taking place Monday and she should know by Tuesday “I’m very excited that we are participating”
June 1 – data contact Called and said she still does not quite have a number, but will get it to me soon.
June 18 – she left a voice mail message to send 8
June 22 – sent 8 (1305-1312)

Superintendent
Lawrence County Board of MR/DD
Phone: (740) 532-7401
April 22 – sent E-mail message introducing study and stating that a letter would follow; bounced back
April 22 – checked OACMRDD website, and {name deleted} may not be the superintendent any longer
April 22 – sent letter and questionnaire in stamped envelope
May 5 – left a message with a secretary including my number
May 6 – superintendent left an early morning voice mail message asking that I call back
May 6 – spoke with superintendent who agreed to do 15
May 7 – sent 15 (585-599)
May 12 – {name deleted} called; she is actually the person who is distributing surveys; she wanted some clarification on who can complete the questionnaires, etc.

Licking County Board of MR/DD
Phone: (740) 349-6588
April 22 – sent E-mail message introducing study and stating that a letter would follow
April 22 – sent letter and questionnaire in stamped envelope
May 5 – secretary said she was out for the rest of the week; left voice mail; said I would call by the middle of next week if I did not hear back from her
May 20 – left a voice mail message including my phone number
May 21 – superintendent left me a voice mail message; did not necessarily get the mailing; interested in participating, but wants more details
May 21 – left a voice mail message including website address; said I would call next week
July 2 – an SSA called for more information; she was going to talk to her supervisor (director of service coord.) and get back to me; I told her by the end of next week.
July 9 – data contact called me back and said to send 15
July 14 – sent 15 (1540-1549; 786-788; 897, 794)

Logan County Board of MR/DD
Phone: (937) 592-0015
April 22 – sent E-mail message introducing study and stating that a letter would follow
April 22 – sent letter and questionnaire in stamped envelope
May 5 – left a voice mail message on his secretary’s voice mail including my number; said I’d call back by the middle of next week if I didn’t hear from him
May 20 – left a voice mail message including my number
May 21 – returned E-mail
June 24 – left data contact a voice mail message
July 2 – left a voice mail message
July 2 – she called and left a voice mail; said I should call back
July 9 – office closed this week, but I left a message that I would call back next week
July 13 – spoke to data contact on the phone – she said to send 10
July 14 - sent 10 (1550-1559)

Lorain County Board of MR/DD
Phone: (440) 329-3734
April 22 – sent E-mail message introducing study and stating that a letter would follow
April 22 – sent letter and questionnaire in stamped envelope
May 4 – received E-mail from data contact:
   Hi, Jim,
   On behalf of {name deleted}, our superintendent here at the Lorain CBRMDD, I am responding to your letter of 4/22. {name deleted} shared your interesting
proposal with our Administrative Team last week, and our agency will be happy
to participate. She has asked me to serve as the contact person, so please direct
information to me at the address you have on file. I can also be reached by phone
at 440-329-3734. I will look forward to hearing from you! {name deleted}
May 4 – I returned his E-mail message and said that I would call him sometime this
week
May 5 – spoke on phone; he seemed quite willing and was going to give me a number
by the middle of next week
May 20 – left message with secretary including my number; also said E-mail is fine
May 24 – data contact sent the following E-mail message:
Jim, Sorry to have missed your call the end of last week ...... We anticipate being
able to get about fifty surveys completed for you if all goes well. We'll look
forward to hearing from you! {name deleted}
May 24 – spoke to data contact on the phone and said I'd send 50
May 24 – sent 50 (770-819) (returned 7/7: 786, 787, 789, 794)
July 6 – left a message with data contact’s secretary to call me back (he’s on
vacation)
July 6 – sent an E-mail message to him
July 7 – received letter with 4 returned questionnaires: 786, 787, 789, 794
July 7 – sent him E-mail thanking him for envelope and explaining that more
completed questionnaires had arrived

Lucas County Board of MR/DD
Phone: (419) 248-3585
April 22 – sent E-mail message introducing study and stating that a letter would
follow
April 22 – sent letter and questionnaire in stamped envelope
May 5 – left a message with his secretary including my number
May 20 – left a message with his secretary including my number

Madison County Board of MR/DD
Phone: (740) 852-7050
April 22 – sent E-mail message introducing study and stating that a letter would
follow
April 22 – sent letter and questionnaire in stamped envelope
May 5 – left a voice mail message including my number
May 20 – spoke to superintendent who said okay and send 20
May 21 – sent 20 (700-719)
June 22 – received call that they are doing it even though they haven’t yet; I assured
the caller that the deadline on the letter was not going to affect their inclusion in
the study or the raffle
Mahoning County Board of MR/DD
Phone: (330) 797-2825
April 22 – sent E-mail message introducing study and stating that a letter would follow
April 22 – sent letter and questionnaire in stamped envelope
May 5 – secretary said that they were not interested in participating

Marion County Board of MR/DD
Phone: (740) 387-1035 ext. 114 (110 is secretary)
April 22 – sent E-mail message introducing study and stating that a letter would follow; bounced back
April 22 – found updated E-mail address and resent message
April 22 – sent letter and questionnaire in stamped envelope
May 5 – left message with secretary including phone number
May 6 – left early morning voice mail message; said to call him back; left number
May 6 – returned call, but secretary did not answer the phone; left voice mail message
May 6 – superintendent called back; said to send 50
May 11 – superintendent called again re: phone tag; he requested that I call back
May 7 – sent 50 (500-549)
May 11 – superintendent called and left a voice mail message that he got the packet and had a question; he requested that I call back
May 11 – left a voice mail message on secretary’s phone (ext. 110)
May 11 – spoke to a county board employee to clarify how the study works (i.e. it is a staff rating scale); she was very supportive of the study and will try to get as many back as possible.
May 11 – superintendent left a voice mail message returning my call (probably did not know his employee had called)
May 12 – I called back (he didn’t know about the other call); he asked a basic q.
July 6 – talked to superintendent; only 10 of 50 back at this point; he assured me that many of the remaining 40 would be returned

Medina County Board of MR/DD
Phone: (330) 725-7751
April 22 – sent E-mail message introducing study and stating that a letter would follow; bounced back
April 22 – found new E-mail address and resent message; it bounced back, too
April 22 – sent letter and questionnaire in stamped envelope
May 5 – said they often participate in this type of research; she passed it to {name deleted} who is out sick today; she will have him give me a call
May 20 – left voice mail message including my number
June 24 – left data contact a voice mail message
July 2 – closed for holiday
July 7 – left data contact another message

Meigs County Board of MR/DD
Phone: (740) 992-6681
April 22 – sent E-mail message introducing study and stating that a letter would follow
April 22 – sent letter and questionnaire in stamped envelope
May 5 – called and left message
May 20 – left voice mail message including my phone number

Mercer County Board of MR/DD
Phone: (419) 586-2369
April 22 – sent E-mail message introducing study and stating that a letter would follow
April 22 – sent letter and questionnaire in stamped envelope
May 5 – “if this yields anything, it would be a wonderful thing”; send 10
May 7 – sent 10 (610-619)

Miami County Board of MR/DD
Phone: (937) 339-8313
April 22 – sent E-mail message introducing study and stating that a letter would follow
April 22 – sent letter and questionnaire in stamped envelope
April 30 – received the following E-mail
Jim,
After receiving the questionnaire and talking with my management team, we've decided not to participate in the study.
Our primary reason is due to the survey design. (etc.) {name deleted}
April 30 – I sent her a return E-mail

Monroe County Board of MR/DD
Phone: (740) 472-1712
April 22 – sent E-mail message introducing study and stating that a letter would follow
April 22 – sent letter and questionnaire in stamped envelope
May 5 – spoke to superintendent who said she would be the data contact for the county; said she would make a list then call me back
May 20 – spoke to superintendent who had not yet come up with a list; she wanted until next week to decide on a number.
June 24 – left superintendent’s secretary a message
July 2 – due to budget cuts, they have laid people off; she did not have time to look it over and would not any time soon, so she said to take them off the list

Montgomery County Board of MR/DD
Phone: (937) 854-0094
April 22 – sent E-mail message introducing study and stating that a letter would follow; bounced back
April 22 – found updated E-mail address; resent message
April 22 – sent letter and questionnaire in stamped envelope
May 5 – spoke to his secretary who took a message including my number
May 11 – Asst. superintendent called and left a voice mail message saying “our agency is very interested in participating in the friendship project.” She was concerned they might be too late for participation. Au contraire monfrere . . .
May 12 – called and left voice mail message
May 13 – she called back and left a voice mail message; said she was interested in doing it with residential and a parent advocate group; “we will participate”
May 13 – another voice mail message from her: “we absolutely will participate”
May 20 – left a voice mail message
May 25 – data contact called and we spoke; she talked to residential providers who seem interested in participating (maybe parents, too); wanted to know next step, so I am sending a letter
May 25 – sent asst. superintendent a letter with instructions and a quick reference
June 24 – left her a voice mail message
June 28 – another data contact called said she was working with the asst. superintendent and they need 300 ph: (937) 837-9207
July 2 – left her a voice mail message
July 6 – data contact left me a message; asst. superintendent out of town until next week
July 6 – spoke with data contact and explained the ratio thing (we want a high percentage back); our deadline is extended and we just want to make sure that as many as possible come back; asked her to have asst. superintendent call back
July 13 – data contact called and said to send 100 – they were confident they could get them returned.
July 13 – called back and left a voice mail message saying 100 are on the way
July 14 – sent 100 (1560-1659)
July 21 – data contact called to ask about the deadline again; they are getting them out now
Morgan County Board of MR/DD
Phone: (740) 962-4200
April 22 – sent E-mail message introducing study and stating that a letter would follow
April 22 – sent letter and questionnaire in stamped envelope
May 5 – left a message with his secretary including my number
May 5 – superintendent returned my phone call; he seemed interested and said “I think this is a great thing to see happen” He needed to ask his board at a meeting 5/11, but did not anticipate problems; I offered to send him a research proposal and he accepted
May 5 – sent proposal via E-mail
May 5 – he replied saying the proposal went through and should be enough
May 20 – spoke with superintendent on phone; it was fine with county board, but materials have been lost. I am resending them; then calling back next week.
May 20 – sent another letter with more materials
June 24 – left a message with a secretary
July 1 – superintendent returned call; left voice mail
July 2 – offices closed; no answer
July 6 – talked to superintendent; said to send 10
July 7 – sent 10 (1000-1009)

Morrow County Board of MR/DD
Phone: (419) 947-7045
April 22 – sent E-mail introducing study and stating that a letter would follow
April 22 – sent letter and questionnaire in stamped envelope
May 5 – left a message with his secretary
May 21 – left voice mail message on a secretary’s (?) phone, I think

Muskingum County Board of MR/DD
Phone: (740) 453-4829
April 22 – sent E-mail message introducing study and stating that a letter would follow
April 22 – sent letter and questionnaire in stamped envelope
May 5 – left a voice mail message including my phone number
May 6 – superintendent called back and left a voice mail message; said he had information and they are interested in participating; don’t call back today.
May 21 – spoke to superintendent on the phone; he wanted the quick reference sheet
May 27 – sent a quick reference with short letter.
June 24 – left superintendent a voice mail message
June 24 – superintendent returned message via voice mail and said to call back
June 24 – I called back; he said to send 12
June 25 – sent 12 (930-939; 898, 899)
Noble County Board of MR/DD
Phone: (740) 732-7144
April 15 – He left voice mail in morning saying “we are definitely willing to participate.” He is also superintendent of Harrison and Noble Counties as well.
From Belmont (above)
June 22 – {name deleted} called and said to send 8 (did not find out about Harrison or Noble counties)
June 22 – she called back and said to send an additional 5 for Harrison and Noble
June 22 – sent 13 with Belmont County (1260-1269; 1313-1315)

Ottawa County Board of MR/DD
Phone: (419) 898-5250 ext. 209
May 25 – sent E-mail message introducing study and stating that a letter would follow
May 27 – sent letter and questionnaire in stamped envelope
June 9 – left message with secretary

Paulding County Board of MR/DD
Phone: (419) 399-4800
May 25 – sent E-mail message introducing study and stating that a letter would follow
May 27 – sent letter and questionnaire in stamped envelope
June 9 – left message on voice mail
June 10 – superintendent called back and said they wanted to participate; said send 50
June 22 – left voice mail message for superintendent
June 24 – left superintendent another voice mail message
July 1 – spoke with superintendent and we decided that 20 was a more manageable number
July 2 – sent 20 (940-959)

Perry County Board of MR/DD
Phone: (740) 342-3542
May 25 – sent E-mail message introducing study and stating that a letter would follow
May 27 – sent letter and questionnaire in stamped envelope
June 9 – spoke to superintendent who was interested; said to send 15
June 10 – sent 15 (1080-1089; 1074-1078)
Pickaway County Board of MR/DD
Phone: (740) 477-3353
May 25 – sent E-mail message introducing study and stating that a letter would follow; bounced back
May 25 – found updated address and resent E-mail
May 27 – sent letter and questionnaire in stamped envelope
June 9 – left message on voice mail (but he is on vacation until June 16)

Pike County Board of MR/DD
Phone: (740) 947-7502
May 25 – sent E-mail message introducing study and stating that a letter would follow
May 27 – sent letter and questionnaire in stamped envelope
June 9 – left message with secretary

Portage County Board of MR/DD
Phone: (330) 297-6209
May 25 – sent E-mail message introducing study and stating that a letter would follow
May 27 – sent letter and questionnaire in stamped envelope
June 9 – left message on voice mail

Preble County Board of MR/DD
Phone: (937) 456-5891
Fax: (937) 456-1760
May 25 – sent E-mail message introducing study and stating that a letter would follow
May 27 – sent letter and questionnaire in stamped envelope; letter bounced back because it was old address
June 9 – spoke to superintendent who seemed interested, but wanted to see the questionnaire; requested that I fax it
June 9 – faxed letter, questionnaire, & quick reference sheet
June 10 – she called back and left message; they are willing, but need more info
June 24 – left superintendent a voice mail message
July 1 – I called and spoke to her; she said she’d call back today after a meeting
July 2 – superintendent called back and said she had met with staff; send 15
July 3 – sent 15 (980-994)
Putnam County Board of MR/DD
Phone: (419) 876-3944
May 25 – sent E-mail message introducing study and stating that a letter would follow
May 27 – sent letter and questionnaire in stamped envelope
June 10 – left message with secretary

Richland County Board of MR/DD
Phone: (419) 774-4200
May 25 – sent E-mail message introducing study and stating that a letter would follow; bounced back
May 25 – found updated address and resent E-mail
May 27 – sent letter and questionnaire in stamped envelope
June 10 – left message on voice mail
June 18 – the asst. superintendent called and said send 20
June 22 – left voice mail that I would be sending 20
June 22 – sent 20 (1220-1239)

Ross County Board of MR/DD
Phone: (740) 773-8044
May 25 – sent E-mail message introducing study and stating that a letter would follow
May 27 – sent letter and questionnaire in stamped envelope
June 10 – left message on voice mail
June 10 – superintendent called back and said he was interested; send 30
June 10 – sent 30 (1020-1049)

Sandusky County Board of MR/DD
Phone: (419) 332-9296
May 25 – sent E-mail message introducing study and stating that a letter would follow
May 27 – sent letter and questionnaire in stamped envelope
June 10 – left message on voice mail
June 14 – received E-mail: Jim, Sandusky county is interested. Thanks {name deleted}
June 17 – I responded and said I would contact her next week
June 22 – called and spoke to data contact who said send 20
June 22 – sent 20 (1240-1259)
Scioto County Board of MR/DD  
Phone: (740) 353-0636  
May 25 – sent E-mail message introducing study and stating that a letter would follow  
May 27 – sent letter and questionnaire in stamped envelope  
June 10 – left message with secretary who asked for additional information on study  
June 22 – data contact called and said he was happy to participate and to send 15  
June 22 – sent 15 (1290-1304)

Seneca County Board of MR/DD  
Phone: (419) 447-7521  
May 25 – sent E-mail message introducing study and stating that a letter would follow  
May 27 – sent letter and questionnaire in stamped envelope  
June 10 – left message with secretary

Shelby County Board of MR/DD  
Phone: (937) 497-8155  
May 25 – sent E-mail message introducing study and stating that a letter would follow  
May 27 – sent letter and questionnaire in stamped envelope  
June 8 – {name deleted} called and left a voice mail message; he said he would be the “contact person” (937) 498-4229  
June 8 – I called data contact back and described study; he is going to talk it over with other SSA’s and come up with a number; said he would call me back  
June 24 – Left him a voice mail message  
July 2 – talked to data contact who said send 9  
July 3 – sent 9 (995-999; 1316-1319)

Stark County Board of MR/DD  
Phone: (330) 477-5200  
May 25 – sent E-mail message introducing study and stating that a letter would follow  
May 27 – sent letter and questionnaire in stamped envelope  
June 10 – left message on voice mail  
June 11 – received the following E-mail  
Mr. Wiltz, Stark MRDD is not interested in participating in the Friendship survey.  
{name deleted}, Superintendent
Summit County Board of MR/DD
Phone: (330) 634-8000
May 25 – sent E-mail message introducing study and stating that a letter would follow
May 27 – sent letter and questionnaire in stamped envelope
June 10 – left message on voice mail
June 14 – Data contact left a message to call her back
June 22 – spoke to her and she said she wanted to have a high level of participation; she said to send 50
June 22 – sent 50 (1150-1169; 900-929)

Trumbull County Board of MR/DD
Phone: (330) 652-9800
May 25 – sent E-mail message introducing study and stating that a letter would follow
May 27 – sent letter and questionnaire in stamped envelope
June 10 – left message with secretary

Tuscarawas County Board of MR/DD
Phone: (330) 339-5145
May 25 – sent E-mail message introducing study and stating that a letter would follow
May 27 – sent letter and questionnaire in stamped envelope
June 10 – left message on voice mail, but it was another woman’s (secretary?) voice mail box
June 10 – received a phone call from a county employee (not sure name) who asked some questions and said she would get back to me
June 14 – Email
   Jim, I spoke with last week about the Friendship survey. If we had each of our SFs complete one survey, what is the timetable they would have to have it completed and turned in? Thanks, {name deleted} TCBMRDD
June 17 – I responded and said early August
June 21 – data contact called and left a voicemail message; she requested 11 questionnaires; needs immediately
June 22 – left her voice mail message saying the questionnaires were on the way; send 11
June 22 – sent 11 (1110-1119; 1079)
Union County Board of MR/DD
Phone: (937) 644-8145
May 25 – sent E-mail message introducing study and stating that a letter would follow
May 27 – sent letter and questionnaire in stamped envelope
June 10 – left message on voice mail

Van Wert County Board of MR/DD
Phone: (419) 238-1514
May 25 – sent E-mail message introducing study and stating that a letter would follow; bounced back; no alternative E-mail address found
May 27 – sent letter and questionnaire in stamped envelope
June 10 – voice mail said he was on vacation until June 16; would not take a message

Vinton County Board of MR/DD
Phone: (740) 596-5515
May 25 – sent E-mail message introducing study and stating that a letter would follow
May 27 – sent letter and questionnaire in stamped envelope
June 1 – received the following E-mail
I received your questionnaire today in Vinton County and sincerely want to participate in the project. The enclosed letter stated that someone needed to complete "each" questionnaire and return them in the stamped envelopes. I only received the Sample Copy booklet and the letter. No other enclosures accompanied the information. Please forward all that is needed for us to participate. Thanks{name deleted}, Executive Director, VCBMRDD
June 2 – sent a response via E-mail
June 10 – spoke to superintendent who just returned from the office and had not yet checked her E-mail, so she had not gotten my response; I suggested she read it and either E-mail me or call me back
June 24 – called, but did not leave message because she does not have voice mail
June 24 – sent superintendent an E-mail message
June 28 – I just returned from being on vacation. Please send us approximately 10 for us to complete. {name deleted}, Executive Director VCBMRDD
July 1 – responded via E-mail
July 2 – sent 10 (960-969)

Warren County Board of MR/DD
Phone: (513) 695-1652
May 25 – sent E-mail message introducing study and stating that a letter would follow
May 27 – sent letter and questionnaire in a stamped envelope; letter bounced back because of wrong address
June 10 – left message on voice mail
June 10 – he called back; said he was leaving the position soon; said I should call the workshop director
June 10 – left message on voice mail
June 22 – workshop director called back; he needs some more info; I will call back
June 22 – spoke on the phone again; he said to send 20
June 22 – sent 20 (1270-1289)
August – returned 2 (1284, 1285)

Washington County Board of MR/DD
Phone: (740) 373-3781 ext. 18
May 25 – sent E-mail message introducing study and stating that a letter would follow
May 27 – sent letter and questionnaire in stamped envelope
June 10 – left message on voice mail
June 11 – received an E-mail from data contact stating they are interested, but can only complete 3 or 4 because of their small size.
June 17 – responded via E-mail and said I would call next week
June 22 – called her; she said to send 4
June 22 – sent 4 (1070-1073)

Wayne County Board of MR/DD
Phone: (330) 345-6016
May 25 – sent E-mail message introducing study and stating that a letter would follow
May 27 – sent letter and questionnaire in stamped envelope
June 10 – left message on voice mail

Williams County Board of MR/DD
Phone: (419) 485-8331 ext. 14
May 25 – sent E-mail message introducing study and stating that a letter would follow
May 27 – sent letter and questionnaire in stamped envelope
June 10 – left message on voice mail
Wood County Board of MR/DD
Phone: (419) 352-5115
May 25 – sent E-mail message introducing study and stating that a letter would follow
May 27 – sent letter and questionnaire in stamped envelope
June 10 – left message on voice mail
June 15 – voice mail message left by an agency representative saying the study was interesting, but they were unable to participate at this time.

Wyandot County Board of MR/DD
Phone: (419) 294-4901
May 25 – sent E-mail message introducing study and stating that a letter would follow
May 27 – sent letter and questionnaire in stamped envelope
June 10 – left message on voice mail


