

CONTACT AND ATTITUDES TOWARD COMMUNITY INCLUSION OF
INDIVIDUALS WITH DEVELOPMENTAL DISABILITIES

by

Carrie E. Moses

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Approved by the Master's Thesis Committee:

Mary Gruber, Ph.D., Major Professor 5-13-02
Date

Jim Dupree, Ph.D., Committee Member 5/13/02
Date

Jennifer Taylor, Ph.D., Committee Member 5/13/02
Date

Lumei Hui, Ph.D., Graduate Coordinator 5/13/02
Date

Donna Shafer, Ph.D.,
Dean for Research and Graduate Studies 6/1/02
Date

ABSTRACT

It has only been since the 1990's that the Americans with Disabilities Act granted individuals with disabilities equal opportunities to services and access to the community. However, it is a common belief that the community still holds a negative attitude toward developmentally disabled persons, which makes it difficult for disabled persons to achieve their goals and experience their membership in the community. The question this study intended to answer was which types of contact with people with developmental disabilities have the strongest relationship with positive and negative attitudes. This study surveyed 106 individuals in the community, some of who are working in the field of developmental disabilities, while others represented the general population. To measure contact and attitudes the researcher included in the survey the Contact with Disabled Persons Scale and the Community Living Attitudes Scale.

The findings showed significant negative relationships between the amounts of positive interaction participants had with developmentally disabled persons and their attitude toward exclusion. Pleasant contact also had a significant positive correlation with degree of perceived similarity with developmentally disabled persons in the staff member sample. In both samples, significant relationships were revealed between age and attitude. In the community member sample, there was a significant positive correlation with age and attitude toward sheltering and a significant negative correlation with age and perceived similarity. In the staff member sample, there was a significant

negative correlation between age and attitude toward empowerment. These findings suggest that pleasant contact with developmentally disabled persons is associated with positive attitudes toward them. This may be evidence for support of programs that foster positive interactions between community members and persons with developmental disabilities.

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INTRODUCTION

For centuries individuals with developmental disabilities experienced cruel and inhumane treatment. The institutions they were housed in were like prisons where they were treated like inmates and “chained, whipped, and beaten” (Hothersall, 1995, p. 262). Henry, Keys, Jopp, and Balcazar (1996) described how the advocacy for rights of inclusion in society began in the 1950s by the families of these individuals. In 1971 the United Nations first recognized human rights for people with developmental disabilities. Gething (1994) noted that it was not until the 1990s that the Americans with Disabilities Acts granted individuals with disabilities equal opportunities to services and access to the community. While society may have progressed far enough to extend laws that recognize the rights of developmentally disabled persons, it is still a common belief that the community holds an unfavorable attitude towards this population (Gething, 1994). Negative attitudes make it difficult for people with developmental disabilities to achieve their goals and to experience their membership in the community (Antonak & Livneh, 2000). Given the deficit in positive regard and the need to progress towards a community that values inclusion, it is necessary to research what factors are the most influential in the forming of both positive and negative attitudes about developmentally disabled persons.

Research on attitudes towards people with developmental disabilities can be applied to several areas. These include intervention plans that are used to change attitudes, professional programs that prepare people for careers in fields such as counseling or special education, and professional work in the field of developmental

disabilities such as vocational rehabilitation. It can also be used to support plans for public policy decisions (Antonak & Livneh, 2000).

There have been many studies done that focus on attitudes towards disabled persons and measures created to study attitudes (Antonak & Livneh, 2000; Antonak, Fielder, & Mulick, 1993; Antonak, 1994; and Gething & Wheeler, 1992). Yunker (1994) states that studies that have focused on demographic characteristics found few significant relationships of these characteristics with their attitudes. Furthermore, the factors associated with attitudes that need to be studied are factors that can actually be changed. Following the recommendations of Yunker (1994), this study intended to investigate individual contact with developmentally disabled persons and how contact relates to attitudes toward the inclusion of developmentally disabled individuals in the community. Contact can be changed because we can make future recommendations to create more opportunities for people to interact with developmentally disabled persons.

The question that this study intended to answer was which types of contact have the strongest relationship with positive attitudes. By indicating what types of contact are associated with positive attitudes, this research may support the movement towards tolerance and inclusion in the community. This area of research is also valuable because it is supportive of the issues that people with developmental disabilities are advocating to improve. This value is in part due to the fact that attitudes towards disabled persons living in the community have a very direct effect on their lives because persons with developmental disabilities are no longer expected to live in institutions. For over ten years self-advocates have been striving to claim their place in society and to be seen as

“people first” instead of being defined by their disabilities (Henry, Keys, Jopp, & Balcazar, 1996, p. 150).

REVIEW OF THE LITERATURE

Definition of Developmental Disability

The Diagnostic and Statistical Manual of Mental Disorders- Text Revised (DSM-IV-TR) provides the diagnostic criteria for disorders such as mental retardation and autism with separate criteria that must be met (American Psychiatric Association, 2000). In the field of developmental disabilities, a classification system exists that encompasses several disabilities, and that is independent of the diagnostic criteria. Alternatively, Gardner and Chapman (1993) provide a definition for developmental disability (shown in Appendix A) that describes it as “a severe, chronic disability of a person 5 years of age or older”. (p. 7) The individual with a developmental disability is affected mentally, physically, or both mentally and physically. The seven areas of functioning that Gardner and Chapman (1993, p. 7) have identified as being susceptible to impairment are “self-care, receptive and expressive language, learning, mobility, self-direction, capacity for independent living, and economic self-sufficiency”. The disabilities that are typically recognized as affecting these areas are mental retardation, cerebral palsy, epilepsy, and autism (Gardner & Chapman, 1993).

According to California’s Welfare and Institutions Code, the Lanterman Act is a law that provides a number of rights to individuals with developmental disabilities such as services provided in the least restrictive environment and freedom from harm. Through the Lanterman Act, there are regional centers, which are funded through the Department

of Developmental Services, and provide assessment and services to developmentally disabled consumers. The definition of developmental disability, according to the Lanterman Act (See Appendix B), is similar to that of Gardner and Chapman's (1993), but states that the disability must manifest before the age of 18 (Protection & Advocacy, Inc., 1999).

Historical Changes

Since the early 1900s, several shifts in the field of developmental disabilities have had a profound influence on the lives of this population. Discussing these shifts of paradigms is helpful to understand the contemporary movement toward community inclusion (Polloway, Patton, Smith, & Smith, 1996).

The first of these philosophies towards developmental disabilities is one that is facility-based. During the facility-based paradigm, it was felt that developmentally disabled persons in need of services were better cared for in groups (Polloway et al., 1996). This meant that many of these individuals were housed in developmental centers, hospitals, and colonies. Blatt and Kaplan (1967) provide a disturbing description of the conditions of these types of institutions during the 1960's, which includes the residents being too crowded, having little contact with people, and not even having their own clothes to wear. Another aspect of the facility-based paradigm that Antonak, Fielder, and Mulick (1993) address is the eugenics movement. This movement was based on the premise that developmentally disabled persons were to be blamed for society's problems and resulted in the forced sterilization of this population. The popularity of these types of

institutions began to decline in the late 1960's as a result of the movement for deinstitutionalization (Polloway et al., 1996). Polloway and colleagues (1996) noted that while developmental centers still exist, there have been reforms to improve their quality of care and they are no longer the preferred choice of placement.

The next philosophical shift was to the services-based model (Polloway et al., 1996). The goal of this paradigm was to provide services to developmentally disabled persons in order to prepare them to be integrated into society. It included programs such as group homes, special education classes, and job training programs. Arguments exist that these types of programs are necessary for the success of some individuals (Polloway et al., 1996). One argument is that many people with developmental disabilities have been in non-inclusive homes, schools, and job programs for a large portion of their lives and are reluctant to seek community integration. The goal of many job training programs is to assist developmentally disabled persons in making the transition into competitive employment and to educate the community about the value of hiring someone with a disability. Another argument for the services-based model is that many programs such as group homes and job training programs are able to better meet the needs of consumers of services and protect them from the dangers in society.

The most recent philosophical shift has been toward a supports-based model, which is a paradigm that embraces inclusion (Polloway et al., 1996). Within this philosophy is the belief that disabled persons should live and work in the community and receive support services to assist them in being successful. This includes full inclusion in educational settings, renting or owning their own homes and having staff come and assist

them as needed, or having job coaches support them at their place of employment (Polloway et al., 1996). This movement is surrounded by controversy and debate, particularly about the concept of full inclusion in schools. Many who oppose inclusion argue that developmentally disabled persons are unable to make appropriate decisions for themselves and need a higher level of supervision than they can receive in independent living or employment situations. Some opponents of full inclusions in schools believe that the non-disabled students are negatively impacted by having developmentally disabled students in the classroom because of the potential for maladaptive behaviors. Opponents of inclusion might also argue that it's unfair to non-disabled students because the teacher may need to provide extra assistance to a disabled student and his or her attention is then taken away from the rest of the class.

Given the degree of controversy within the field of developmental disabilities, many researchers have sought to understand attitudes about developmental disabilities and how they are formed (Fox & Rotatori, 1986; Beh-Pajooh, 1991; Antonak, Fielder, and Mulick, 1993, Zsombok, 1996; Gething, 1994; Beckwith & Mathews, 1994).

Related Scales and Measures

Antonak (1980) reported that attitudes towards both physically and developmentally disabled persons have been studied since around 1930. Antonak (1980) credits some of the earliest research in this area to Strong (1931). Since the 1930's, there have been several studies designed to measure attitudes toward these populations. These

include both direct methods where participants were aware that their attitudes were being measured and indirect methods where they were unaware (Livneh & Antonak, 1994).

One of the early scales used was the Attitudes Toward Disabled Persons Scale developed by Yuker, Block, and Campbell (1960). Yuker and Hurley (1987) also created the Contact with Disabled Persons Scale to measure level of contact with disabled persons. Antonak has developed instruments such as the Attitudes Toward the Application of Eugenics to the Treatment of People with Mental Retardation Scale (Antonak, Fielder, and Mulick, 1993) and the Test of Knowledge About Mental Retardation (Antonak, 1994), which are direct methods that reflect attitudes on a societal level. Gething and Wheeler (1992) developed another such scale called the Interaction with Disabled Persons Scale that measures attitudes relevant to personal issues and does not specify if the disability is physical or developmental. A more contemporary scale developed by Henry, Keys, Jopp, and Balcazar (1996) called the Community Living Attitudes Scale, Mental Retardation Form (CLAS-MR) examines attitudes regarding developmentally disabled persons and how individuals feel about inclusion of this population in the community.

Researchers have also used indirect measures of attitude in an effort to eliminate some of the threats to validity involved with direct self-report measures, such as reactivity. These methods entail experimental designs such as measuring participants' physical proximity of seating in the presence of a confederate with a physical disability (Livneh & Antonak, 1994). Another example described by Livneh and Antonak involved

having the participants sort photographs of people with physical disabilities and infer characteristics about them based on the photographs.

Contact Theory

Aboud (1988) indicates that several factors may be associated with negative attitudes towards disabled persons. One of these factors is the segregation of disabled persons in society. This decreases their opportunities to take on roles of worth, which causes them to be devalued. Another factor is the type of contact that individuals have with disabled persons. Aboud (1988) claims that contact can produce favorable attitudes or prejudiced ones depending on the context of the interaction.

According to the contact hypothesis, “there are positive attitudes when contact with disabled people includes equal status, cooperative independence, support from authority figures, and opportunities for individualizing out-group members (Yuker, 1994, p.6)”. Yuker and Hurley (1987) also recognize that the effects of contact on attitude are complex and that some interactions lead to positive attitudes while some lead to negative attitudes. Numerous studies have looked at how contact with disabled persons by non-disabled persons relates to their attitudes toward this population and have found that it has a significant relationship (Fox & Rotatori, 1986; Beh-Pajooh, 1991; Zsombok, 1996; Gething, 1994; Beckwith & Mathews, 1994).

Research on Contact and Attitudes

Fox and Rottatori (1986) conducted a study where 43 undergraduate college students who were enrolled in a course about children with special needs had the choice of completing a volunteer experience working with developmentally disabled persons in a variety of settings, which could include working as tutors, teaching assistants, babysitters, and in workshops. Of these 43 students, 33 chose to participate in the volunteer experience and the other 10 chose to write a paper. A pre-test was administered prior to the volunteer experience that assessed all 43 of the students' attitudes toward developmentally disabled persons at that time. After the end of the semester long volunteer experience, the students received a post-test with the same questionnaire to determine if any differences in the attitude measure emerged. The results showed that of the factors within the questionnaire (including Positive Stereotype, Community Segregation, and Classroom Segregation), the ratings for Positive Stereotype had a significant increase, for both the students who volunteered and those who chose to complete a term paper. In addition, the students who volunteered to work with the children with special needs showed a significant increase on mean attitude rating scores. This is evidence that contact with disabled persons does relate to more positive attitudes toward this population (Fox & Rottatori, 1986).

A study conducted by Beh-Pajooh (1991) investigated a program in City of Stoke-on-Trent, England that linked a group of college students with individuals from a school of students with severe developmental disabilities. The program gave the opportunity for students of the school for exceptional children who were ages 16-19 to participate in

classes at the college. The participants in the study were 132 college students who were enrolled full-time. After filling out a questionnaire with 54 questions, the students were grouped into categories based on whether they had experienced high contact, low contact, and no contact with the developmentally disabled students who were part of the program. Part of this questionnaire was a scale designed to measure the participants' attitudes towards the disabled students. The scale was designed by the researchers to look at both positive and negative reactions to this population. The results showed that those who had reported higher levels of contact with the disabled students showed significantly higher scores on the attitude measure (Beh-Pajoo, 1991).

Zsombok (1996) conducted a research experiment looking at the effect that contact with developmentally disabled persons had on attitudes toward this population. The participants in the study were 206 adults living in various neighborhoods, who either owned or rented the homes. They were divided into 6 groups. The participants were first assigned to groups based on whether they lived in a neighborhood with a group home housing developmentally disabled persons or not. They were then further divided into groups that were presented by the data collectors with a petition to sign that was either a negative petition objecting to having group homes in their neighborhood, a positive petition in support of having a group home, or a group with no petition at all. Signing or not signing the petition was considered to be the behavioral measure of attitudes toward disabled persons. Those who signed the negative petition were considered to have a negative attitude towards community inclusion and those who did not sign it were considered to have a positive attitude. Also, participants who signed that positive petition

were considered to have a positive attitude towards community inclusion and those who did not sign it were thought to have a negative attitude.

After the data collectors went through the petition portion of that research (for the groups that received the petition), the participants were then debriefed about the nature of the research. They were told that it was not really a petition, but part of a research experiment. All groups were then given another measure of attitude called the Scale of Attitudes Toward Disabled Persons (SADP) (Antonak, 1982). The control group that did not receive the petition was used to see if being presented with a petition had any effect on their measure on the SADP. In addition, all groups were given a demographic survey that included questions about previous contact with developmentally disabled persons.

The results of that research showed that those who reported having knowledge of a group home in their neighborhood scored significantly more positively on the SADP. Participants who reported having contact with disabled persons were significantly less likely to sign the negative petition than those with no contact. In addition, those who lived in the integrated neighborhood were significantly less likely to sign the negative petition. There were no significant differences between neighborhood or contact groups with responses to the positive petition. Participants who reported having more contact also scored significantly higher on the SADP than participants with no contact. These findings suggest that contact with disabled persons does have a relationship with less negative attitudes.

Hall and Minnes (1999) created a study to focus on attitudes toward developmentally disabled persons with a unique way to address contact. The participants

were 92 students enrolled in a psychology course. They were divided into three groups, two that were experimental groups and one that was a control group. The divisions matched the groups based on the results of an initial procedure, in which they completed a consent form, a social desirability scale, and a television preference scale that measured the types of programs that the participants liked to view. In the second session, the first experimental group viewed a documentary about a man with Down Syndrome. The second group saw a drama featuring a man with Down Syndrome. The control group saw a film that did not show any recognizably developmentally disabled persons. All of the films were about the same length. After viewing these different films, all participants received several different measures. The first of these was the Attitude Towards Disabled Persons Scale (ATDP) (Yuker, Block, and Campbell, 1960). The second was the Comfort Scale (Marcotte and Minnes, 1989). This scale measures level of comfort while interacting with individuals with a disability. The third was a behavioral measure that was a fictitious letter that asked participants if they would be interested in volunteering to work with developmentally disabled adults to assist them in acquiring independent living skills. The last measure was a questionnaire that addressed previous contact with developmentally disabled persons and frequency of viewing television programs that had someone with a developmentally disabled person in them. The relevant results of the multiple regression found that prior media exposure accounted for 20% of the variance in the ATDP. In addition previous quality of contact measured by the questionnaire accounted for 10% of the variance in the ATDP. Both of these predictors were statistically significant and associated with higher ATDP scores. Amount

of contact was not a significant predictor of attitude (Hall & Minnes, 1999). One of the important aspects of these findings is that media exposure is a significant predictor of attitudes. For some individuals, this might be the only type of contact that they have with developmentally disabled persons. Given this idea, portraying these individuals in a positive way has important implications.

Kobe and Mulick (1995) conducted a study that looked at the effect direct contact had on a group of students' attitudes toward the eugenics movement. The participants of the study were students from a ten-week course in psychology that focused on mental retardation. Of the 57 students enrolled in the course, pre and post-test measures were obtained from 37 students on the Scale of Attitudes toward Mental Retardation and Eugenics (AMRE) (Antonak, Fielder, and Mulick, 1993). Questions about participants' previous contact were also included. The results of the study showed no significant difference in the scores after completing the course, regardless of whether they had experienced prior contact. The students did show a significant increase in knowledge about mental retardation, which is what would be expected after a ten-week course on the topic of mental retardation. Looking back on Yunker's (1994) comments about the complex relationship between contact and attitudes, these findings seem to support that conclusion. Thus, it would be helpful to investigate relationships between specific types of contact and specific types of attitudes toward developmentally disabled individuals.

Hypotheses

This study used the Contact with Disabled Persons Scale (CDP) (Yuker and Hurley, 1987). This scale (see Appendix C) is a measure of the contact that participants have had with disabled persons. It was modified to focus specifically on developmental disabilities, and it was factor analyzed to divide its items into subscales measuring specific types of contact.

This study also used the Community Living Attitudes Scale Mental Retardation Form (CLAS-MR) developed by Henry, Keys, Jopp, and Balcazar (1996) because it is an indicator of attitudes regarding community inclusion. This measure contains four subscales that focus on Empowerment, Exclusion, Sheltering, and Similarity.

These measures were given to a group of community members and a group of staff members. This allowed a comparison between individuals who have experienced more contact with disabled persons due to the nature of their profession with those whose who do not work in the field.

1. It was hypothesized that the CDP scores would correlate positively with the CLAS-MR Empowerment and Similarity subscales; participants who scored higher on the CDP were expected to score higher on the Empowerment and Similarity subscales.
2. It was hypothesized that the CDP scores would correlate negatively with the CLAS-MR Exclusion and Sheltering subscales; participants who scored higher on the CDP were expected to score lower on the Exclusion and Sheltering subscales.
3. It was hypothesized that the staff members would score significantly higher on the CDP, Empowerment, and Similarity measures, than the community members.

4. It was hypothesized that the staff members would score significantly lower on the Exclusion and Sheltering measures, than the community members.

METHOD

Participants

The participants were 106 Humboldt County community members who were at least 18 years old. Approximately 70 of the participants were contacted outside of three consenting grocery stores that host diverse individuals in the community. Of the 71 participants who reported their gender, 31 were male and 33 were female. The grocery stores where participants were contacted included the CO-OP (located in Arcata) and Rays Food Place (located in McKinleyville and Eureka). Managers of these businesses were first contacted for permission to place a table in front of their businesses. This method created a convenience sample of participants that reflected the diversity of the community. Participants who have different genders, ages, educational levels, and occupations were necessary as these factors may relate to the attitude measures. In addition, 35 participants who are currently staff members in the field of developmental disabilities were asked to fill out the survey. Of those staff who reported their gender, there were 5 males and 27 females. The staff members included people employed through Redwoods United, Inc., Redwood Coast Regional Center, the Department of Rehabilitation, and two local group homes. The purpose of having these two groups was for comparison of community members' attitudes to that of staff members.

Measures

The first measure that was used in this study is a scale called the Contact with Disabled Persons Scale (CDP) (Yuker & Hurley, 1987). This scale was designed to measure the extent to which people have had contact with an individual with a disability. There are 20 items in this measure asking questions about specific types of contact with a 1 to 5 rating scale ranging from “never” to “very often”. An example item is “How often have you had a long talk with someone who is developmentally disabled?” The measure appears to be internally reliable with a split-half reliability of .93 and alpha coefficient of .92. To assess validity, the CDP items were correlated with the Attitude Towards Disabled Persons Scale. Of the 20 items, ten correlations were found with a range of -.26 to +.40. These correlations are moderate, which is reasonable given that these scales are not measuring exactly the same thing.

The second measure that was used in this study is the short form of the Community Living Attitudes Scale, Mental Retardation Form (CLAS-MR) designed by Henry, Keys, Jopp, and Balcazar (1999). This scale consists of 17 items that measure attitude towards disabled persons regarding their membership in the community. The responses are categorized on a 6-point Likert-type scale with a range from disagree strongly (1) to agree strongly (6). The scale also contains 4 subscales that were derived from factor analysis of the items, and measure Empowerment, Exclusion, Similarity, and Sheltering. The Empowerment subscale targets the attitude toward the extent to which people with developmental disabilities should have control over their own lives. An

example from the survey is “People with mental retardation can be trusted to handle money responsibly”. The Exclusion subscale examines whether individuals feel that developmentally disabled persons should be segregated in the community. An example is “People with mental retardation are a burden on society”. The Sheltering subscale measures the degree that participants feel that individuals with developmental disabilities need to be monitored and protected. An example is “People with mental retardation need someone to plan their activities for them”. The Similarity subscale reflects how much participants feel that they are like developmentally disabled persons in ways including their general rights and ambitions. An example is “People with mental retardation have goals for their lives like other people”.

Based on the results from analyses using this measure, the CLAS-MR full form appears to be psychometrically sound by demonstrating reliability and validity. The subscales showed significant test-retest reliability (.74 for Empowerment, .71 for Exclusion, .70 for Sheltering, and .75 for Similarity), which is an indicator that the attitudes being measured were consistent across time. The correlations among the subscales were moderate (average of r values = .57), but were statistically significant. To demonstrate construct validity, the CLAS-MR was compared with similar scales including the Scale of Attitudes toward Disabled Persons (Antonak, 1982) and the Community Attitudes Towards Mental Illness Scale (Taylor & Dear, 1981). The results found modest but significant correlations with CLAS-MR subscales and the subscales of the two similar scales. In addition, when the CLAS-MR was compared with a social desirability scale, the Balanced Inventory of Social Desirability (Paulhus, 1984, cited in

Henry et al., 1996), no significant correlation was found, suggesting that the measure was not confounded by social desirability motivations.

The CLAS-MR was originally designed for service providers of developmentally disabled persons. For the purposes of this study, the scale was mainly administered to community members who may not be familiar with some of the concepts that are included in the measure. To mitigate this problem, the short form of the scale was used. The short form contains 17 questions taken directly from the 40 questions in the full form. They appear to have a less technical language, which may have been more appropriate for the general public. The service providers who received the measure may have been more familiar with the wording in the questions presented.

The short form demonstrates good reliability when compared to Form A of the scale. The correlations between the subscales on the short form and full form were all significant (.78 for Empowerment, .94 for Exclusion, .94 for Sheltering, and .85 for Similarity).

In the present study, the language in the CDP has been changed to the term “developmental disability” as opposed to “physical disability”, for the purpose of consistency with the topic of the research. This is consistent with the suggestion made by the test developer that it is acceptable to replace the term with other forms of disabilities (Yuker & Hurley, 1987). The language has also been changed in the CLAS-MR to “developmental disability” as opposed to “mental retardation”, because this will measure attitudes relating to a wider range of disabilities. The scales were presented in different, alternating orders with half of the surveys using the CDP first and the other half using the

CLAS-MR first. This counterbalancing technique was done to reduce potential effects of the order.

In addition to the scales, there were also questions regarding demographic information at the beginning of the survey including gender, age, occupation, level of school completed, and whether the participant has ever provided services to developmentally disabled persons as a part of his or her job. These questions were for the purpose of describing the sample. In addition, significant findings may indicate that particular groups could be targeted for increased opportunities for contact with developmentally disabled persons.

An information sheet was made available, designed to inform the participants of the general purpose of the study. It also served to make them aware that their answers were anonymous and that they should not write their name on the survey. All relevant contact information was included should they have any questions. The name and contact number of the thesis chair were also included.

Procedure

Initially, approval from the Institutional Review Board was obtained on 02/06/02 and the number was 02-97. Upon approval, the managers of various businesses were asked to allow the researcher to set up a table outside of the business for the purpose of recruiting participants. It was explained to them that this is a voluntary process to further develop research that applies to the community. Both a male and female researcher or research assistant were present at the table to provide a gender balance should the gender

of the researcher bias the participant. A sign was posted on the table stating "Community Members, What Is Your Opinion?" This general wording was intended to attract a variety of community members, rather than biasing the sample only to people with strong opinions about developmentally disabled persons. Once locations of consenting businesses were established, volunteers who were age 18 or older were given an opportunity to participate in the study at the table. The participants were also told that information is strictly anonymous and that their names were not needed. Once they took the time to fill out the survey, their responses were placed inside of a box with a slot in the top. This step was to reassure the participants that their answers are confidential. Afterwards, they were given a small reward as an additional incentive (their choice of a flower or treats). They were also debriefed and provided with contact information in case they wish to discuss the study or the results.

The next phase of recruiting participants involved the researcher contacting Redwood United, Inc., the Department of Rehabilitation, the Redwood Coast Regional Center, and two local group homes to gain permission to attend a staff meeting. After establishing consent from these agencies, the researcher arranged a time to attend a meeting. When this occurred, the researcher explained the general purpose of the research and that the information obtained will be kept confidential. The researcher asked the staff members to fill out the survey. Afterwards, the staff were offered a small reward (their choice of a flower or treats). They were then debriefed and given a contact number should they wish to discuss the results.

Data Analysis

Once all of the data were collected they were analyzed using the Statistical Package for Social Sciences (SPSS). Factor analysis was conducted with the CDP to determine if the items formed separate factors reflecting different types of contact with disabled persons. Pearson correlations were used to test for significant correlations between the CDP measures and each of the four CLAS-MR subscales. The correlations were conducted for the community members alone, service providers alone, and community and service providers combined. In addition, analysis of variance was used to compare the service providers versus the community members on each of the measures. For all significant findings, the effect size η^2 was included, which indicates the proportion of variation in one variable that was related to another variable.

Risks and Benefits

The risks of this study appeared to be minimal. The main risk was that some of the participants might have experienced some uncomfortable feelings after being asked questions about developmental disabilities. Therefore, after filling out the survey they were debriefed about the general purpose of the study and asked if they had any questions or comments. In this process it was explained to them that they could contact the primary researcher or the thesis chair if they have any further questions or concerns. They were given their contact telephone numbers at Humboldt State University and informed that they can also find out the results of the study through these contacts. Another risk was

the amount of time that was required of participants to fill out the surveys. The time was approximately five minutes, and some of the participants may have been unfamiliar with this type of research and could have become frustrated. Therefore, they were informed of the amount of time that is involved prior to filling out the form. In addition, some of the terminology regarding developmental disabilities might have been unfamiliar to the participants who are not service providers and this could have caused some embarrassment. To mitigate this, all terms that might have potentially been confusing were defined. The anonymous survey forms will be kept by the researcher for at least five years.

There are several benefits that resulted from this study. Self-advocates with developmental disabilities, their family members, and other stakeholders have previously recommended that the topic of community inclusion be researched. Therefore, this study provides more information that this population is seeking. The data may also be utilized by professionals in the field to assess the community need for services and supports. There is a gap in the literature on community attitudes because many of the participants in similar studies were college students. This study contributes a perspective based on a broader demographic population. Furthermore, awareness of the concept of community inclusion may be raised as a result of the study. This was accomplished by the number of participants in the community who filled out this survey and became exposed to concepts about community inclusion that they otherwise may not have had the opportunity to learn about. This is an important contribution because community awareness and acceptance is a critical component of community inclusion for developmentally disabled persons.

RESULTS

Demographic Information

Of the 106 respondents, 71 were community members and 35 were staff persons who work in the field of developmental disabilities. In the community member sample, 35 respondents indicated that they either had or are currently provided services to developmentally disabled persons as part of their job.

Of those who reported their gender in the community member sample, there were nearly equal gender proportions, with 31 (48.4%) males and 33 (51.6%) females. Of the staff respondents, there was a higher proportion of females, with 5 (15.6%) males and 27 (84.4%) females. There were significant differences in gender proportions between the community and staff samples, $\chi^2(1, n=96)=8.45, p<.01, \eta^2=.10$. These differences are presented in Table 1.

In both the community and staff member samples, the median age category was 30 to 39 with ranges from 18 to 70. For the community member sample, the amount of schooling ranged from the eighth grade level to the graduate degree level, with a median at the Associate degree level. For the staff sample, the amount of school ranged from some amount of high school to the graduate degree level, with a median at the Bachelor degree level. The mean amount of schooling for staff members was significantly higher than for the community member sample, $F(1,103)=5.46, p<.05, \eta^2=.05$.

Table 1. Comparison of Gender Proportions in the Community and Staff

Samples, with Frequencies and Percents **

	Community f (%)	Staff f (%)
Males	31 (48.4%)	5 (15.6%)
Females	33 (51.6%)	27 (84.4%)

** Significant differences in gender proportions at $p < .01$.

Factor Analysis of Scale Items

Principle-components factor analysis with Varimax rotation was conducted on the Contact with Disabled Persons Scale items, in order to obtain separate factors reflecting different types of contact. All items in the scale and their loadings on the four resulting factors are presented in Table 2. The Community Living Attitudes Scale was already factor analyzed by the test developers (Henry, Keys, Jopp, & Balcazar, 1999). These items and their four corresponding factors are presented in Appendix D.

Contact with Disabled Persons Scale Factors

For the Contact with Disabled Persons Scale, four factors emerged, which accounted for 70.3% of the variance in the items. All items had above a .500 factor loading.

Table 2. Rotated Factor Matrix for Contact Items and their Loadings on the Four

Contact Factors

Item	Pleasant Contact 1	Support 2	Unpleasant Contact 3	Visitation 4
C18 Been pleased by behavior of D.D. person	<u>.859</u>	.075	.028	.198
C19 Pleasant experiences with D.D. person	<u>.848</u>	.167	.188	.230
C13 Met D.D. person that you like	<u>.797</u>	.252	.243	.166
C2 Brief conversations with D.D. person	<u>.702</u>	.212	.333	.171
C3 Eaten meal with D.D. person	<u>.702</u>	.281	.297	.328
C15 Met D.D. person that you admire	<u>.685</u>	.368	.052	.246
C7 Help D.D. person with problems	<u>.663</u>	.457	.261	.120
C1 Long talk with D.D. person	<u>.659</u>	.440	.243	.304
C9 Worked with D.D. client on the job	<u>.627</u>	.401	.350	-.191
C8 D.D. person help you with problems	.248	<u>.784</u>	-.076	.150
C6 You discuss life/problems with D.D. person	.254	<u>.773</u>	-.027	.221
C5 D.D. person discusses life/problems	.572	<u>.575</u>	.344	.123
C10 Worked with D.D. co-worker	.387	<u>.570</u>	.148	-.243
C4 Contributed money to D. D. organization	.095	<u>.568</u>	.225	.238
C14 Met D.D. person that you dislike	.034	.331	<u>.796</u>	.070
C20 Unpleasant experiences with D.D. person	.353	-.016	<u>.756</u>	.275
C17 Felt annoyed by behavior of D.D. person	.346	-.043	<u>.725</u>	.173
C11 D.D. friend visit you in home	.264	.296	.090	<u>.780</u>
C12 You visit D.D. friend in home	.324	.292	.301	<u>.632</u>
C16 Met D.D. person for whom you felt sorry	.177	-.041	.410	<u>.523</u>

The first factor explained 29.4% of the variance and was labeled Pleasant Contact. The items that had the highest loadings on this factor related to pleasant experiences interacting with developmentally disabled persons. There were nine items that loaded with this factor with loadings ranging from .627 to .859.

The second factor explained 17.0% of the variance and was labeled Support. The items that loaded highly with this factor related to the extent to which participants had received support or given support to developmentally disabled persons. There were five items that loaded with this factor with loadings ranging from .568 to .784.

The third factor explained 13.7% of the variance and was labeled Unpleasant Contact. The items that had the highest loadings on this factor were associated with the extent to which participants had unpleasant experiences interacting with developmentally disabled persons. There were three items that loaded with this factor with ranges from .725 to .796.

The fourth factor explained 10.3% of the variance and was labeled Visitation. The items that loaded highly with this factor related to the degree to which participants had visited the homes of developmentally disabled persons or had a developmentally disabled person visit them in their home. There were three items that loaded with this factor with ranges from .523 to .780.

The Kaiser-Meyer-Olkin measure of item sampling adequacy was .904, which is in the range that Kaiser labels as "marvelous". Bartlett's test of sphericity indicated a matrix of significant correlations, with $p < .001$. Factor scores were calculated for each

respondent on each of the four contact factors. The factor scores were on a standardized scale with a mean of 0 and a standard deviation of 1.

ANOVAs Comparing Community and Staff Samples

The community and staff groups were compared on each of the measures using one-way analysis of variance (see Table 3 and Table 4). When the means of the two groups were compared on the Contact scales, significant differences emerged.

Table 3. Means and Standard Deviations for Community Members (n=71) and Staff Members (n=34) on the Contact Measure (Total Contact Score and Standardized Factor Scores)

Measures	Community		Staff		Significance
	Mean	(sd)	Mean	(sd)	
Total Contact	54.55	(17.05)	73.86	(8.43)	***
Pleasant Contact	-0.33	(0.99)	0.67	(0.63)	***
Support	-0.11	(1.05)	0.22	(0.86)	
Unpleasant Contact	-0.29	(0.87)	0.60	(0.99)	***
Visitation	0.10	(1.05)	-0.20	(0.95)	

*** Significant difference at $p < .001$

The staff member group scored significantly higher than the community member group on the overall Contact measure, $F(1, 104)=39.95$, $p<.001$, $\eta^2=.28$. In addition, the staff group scored significantly higher on the Pleasant Contact subscale, $F(1,104)=29.95$, $p<.001$, $\eta^2=.22$. Also, the staff member group scored significantly higher on the Unpleasant Contact subscale, $F(1,104)=22.42$, $\eta^2=.18$.

Table 4. Means and Standard Deviations for Community Members (n=71) and Staff Members (n=34) on the Attitude Measures (Item Response Averages on 1-6 Scale)

Attitude Scales	Community		Staff		Significance
	Mean	(sd)	Mean	(sd)	
Empowerment	4.63	(0.75)	4.60	(0.88)	
Exclusion	1.47	(0.76)	1.32	(0.52)	
Sheltering	2.94	(1.04)	2.71	(1.06)	
Similarity	5.59	(0.60)	5.76	(0.49)	

When the means of the two groups were compared on the Attitude scales, there were no significant differences in mean attitude scores between the two groups. Both the community and staff samples had similar mean scores on the four attitude subscales. Participants in both groups had mean scores that were positive on Empowerment (4.63 and 4.60) and Similarity (5.59 and 5.76). Participants in both groups also had mean scores that were lower on Exclusion (1.47 and 1.32) and Sheltering (2.94 and 2.71).

Pearson Correlations Among Contact, Attitude, and Demographic Measures

Pearson correlations were conducted to determine if significant relationships existed between the contact and attitude measures. The results did indicate that are significant relationships between both the community member and staff member groups on the contact and attitude measures.

For the community group (See Table 5), there was a significant negative correlation between the Pleasant Contact subscale and the Exclusion subscale, $r(71) = -.234$, $p < .05$, $\eta^2 = .05$. This indicates that those community members who report higher levels of positive contact with developmentally disabled person scored significantly lower on the attitude measure that focuses on exclusion.

Table 5. Pearson Correlation Coefficients Relating Contact and Attitude Measures for the Community Members (n=71)

Attitude Measures

Contact Measures	Empowerment	Exclusion	Sheltering	Similarity
Contact Scale	.092	-.166	-.046	.076
Pleasant Contact	.144	-.234 *	-.134	.129
Support	.075	-.103	-.005	.076
Unpleasant Contact	-.144	.046	.102	-.068
Visitation	-.001	.117	.036	-.091

* Significant correlation at $p < .05$

Significant correlations were found in the community member group between age and other measures (see Table 6). The results indicated there was a significant positive correlation between age and the Sheltering subscale, $r(68) = .267$, $p < .05$, $\eta^2 = .07$. This means that older community member participants showed a higher amount of support for the sheltering of persons with developmental disabilities. In addition, there was a significant negative relationship between age and the Similarity subscale, $r(68) = -.239$, $p < .05$, $\eta^2 = .06$. This means that older community member participants see themselves more dissimilar to developmentally disabled persons than younger community members do.

In the community member group a significant negative correlation was found between job category (if someone had provided services to a person with a developmental disability) and the Exclusion subscale, $r(71) = -.370$, $p < .001$, $\eta^2 = .14$.

Table 6. Correlations between Demographic Variables and Other Measures for Community Members (n=71)

Variables	Correlation (r)	Significance
Age and Sheltering	.267	*
Age and Similarity	-.239	*
Job Service and Exclusion	-.370	***

* Significant correlation at $p < .05$

*** Significant correlation at $p < .001$

This means that community members who indicated that at some time they have provided services to someone with a developmental disability were also more opposed to exclusion (see Table 6).

The results revealed that there were no other significant correlations in the community group between level of contact and the attitude measures. In addition, there were no significant relationships in the community group between gender or level of education and other measures.

For the staff member group (see Table 7), there was a significant negative correlation between the Pleasant Contact subscale and the Exclusion subscale,

$r(35) = -.397, p < .05, \eta^2 = .16$. In other words, those participants who reported a higher amount of contact with a person with a disability significantly disfavored exclusion. In addition, there was a significant positive correlation between the Pleasant Contact subscale and the Similarity subscale, $r(35) = .404, p < .05, \eta^2 = .16$.

The results revealed that there were no significant relationships in the staff member group between gender and the other measures. There was a significant negative correlation between age and the Empowerment subscale, $r(35) = -.413, p < .05, \eta^2 = .17$. This suggests that staff members who are older show significantly lower support for the empowerment of developmentally disabled persons (see Table 8).

The results also revealed significant relationships between staff members' level of schooling and other measures (see Table 8). There was a significant positive correlation between level of schooling and the Unpleasant Contact subscale, $r(35) = .397, p < .05, \eta^2 = .16$. This means that in the staff member group, those with more years of education

Table 7. Pearson Correlation Coefficients Relating Contact and Attitude

Measures for the Staff Members (n=35)

Attitude Measures

Contact Measures	Empowerment	Exclusion	Sheltering	Similarity
Contact Scale	.278	-.103	-.256	.326
Pleasant Contact	.392*	-.333*	.175	.507**
Support	.050	-.178	-.137	.070
Unpleasant Contact	-.010	.264	-.224	.050
Visitation	.119	.279	-.165	-.150

* Significant correlation at $p < .05$ ** Significant correlation at $p < .01$

Table 8. Correlations between Demographic Variables and Other Measures for

Staff Members (n=34)

Variables	Correlation (r)	Significance
Age and Empowerment	-.413	*
Schooling and Unpleasant Contact	.397	*
Schooling and Similarity	.402	*

* Significant correlation at $p < .05$

also report higher amounts of unpleasant interactions with developmentally disabled persons. In addition, there was a significant positive correlation between level of schooling and the Similarity subscale, $r(35) = .402$, $p < .05$, $\eta^2 = .16$. In other words, staff persons who have had more years of education also see themselves as more similar to persons with developmental disabilities than dissimilar.

DISCUSSION

This study found several different relationships between the several variables that were measured. Some of these results provide partial support for the researcher's hypotheses. Other findings provide further information on contact and attitudes toward community inclusion.

The first hypothesis was that the Contact with Disabled Persons scores would correlate positively with the Community Living Attitudes Scale Empowerment and Similarity subscales, and that participants who scored higher on the CDP would score higher on the Empowerment and Similarity subscales. This hypothesis was partially supported since in the staff member sample there was a significant positive correlation with the Pleasant Contact subscale and the Similarity subscale. A possible explanation for this may be that those staff persons who have had more positive interactions with developmentally disabled persons have an increased opportunity to get to know them as people, as opposed to just consumers of services.

The second hypothesis was that the CDP scores would correlate negatively with the CLAS-MR Exclusion and Sheltering subscales, and that participants who scored higher on the CDP would score lower on the Exclusion and Sheltering subscales. This hypothesis was partially supported since in both the community member sample and the staff member sample there was a significant negative correlation with the Positive Contact subscale and the Exclusion subscale. This is consistent with Zsombok's (1996) finding that those participants who reported having more contact with a developmentally disabled person also scored higher on an attitude measure. This finding suggests that

there is an association between contact and inclusion and may be evidence for the importance of increasing the opportunities that community members have to interact with persons with developmental disability in a positive context.

The third hypothesis stated that the staff members would score significantly higher on the Contact, Empowerment, and Similarity measures, than the community members. This hypothesis was partially supported since the staff members did score significantly higher on the mean scores of the CDP and the Pleasant Contact and Unpleasant Contact subscales. Given that professional persons working in the field of developmental disabilities often have both positive and negative interactions with developmentally disabled persons, this finding appears reasonable. It was an interesting finding that there were no significant relationships with the Unpleasant Contact subscales and the attitude measures. This suggests that there is no association between negative experiences and staff members' attitudes toward persons with developmental disabilities.

The fourth hypothesis was that staff members would score significantly lower on the Exclusion, and Sheltering measures, than the community members. This hypothesis was not supported, as there were no significant differences in the mean scores of the community members and the staff members.

Other interesting findings were the significant relationships between age and the attitude measures in both the community and staff member samples. For the community members there was a relationship with between age and support for sheltering, which suggests that older individuals express more support of sheltering, which is in conflict with the inclusion movement. In addition, there was a relationship between age and

perceived similarity, indicating that older individuals see themselves as less similar to developmentally disabled persons than do younger people. This may be explained by the fact that many older people were socialized in an environment prior to the inclusion movement.

In the staff member sample, there was also a significant relationship between age and attitude toward empowerment. Younger staff members tended to have a more favorable attitude toward empowerment. This may also be explained by the more recent philosophical shift towards inclusion, which supports Palloway, Patton, Smith and Smith's (1996) theory of the paradigm shifts in the field of developmental disabilities.

Another finding of interest was the significant relationship that was found in the community member sample between whether they reported having provided services to developmentally disabled persons as part of their job and their scores in the Exclusion subscale. Community members who indicated that they had provided services also scored significantly lower on the exclusion measure, which assesses how participants feel about the exclusion of developmentally disabled persons from community participation. This is consistent with Beh-Pajoo's (1991) finding that those participants who reported higher levels of contact with developmentally disabled individuals also scored significantly higher on an attitude measure. This finding suggests that there is an association between contact and positive attitudes toward community inclusion.

In the staff member group, significant relationships were found between schooling and other measures. Amount of schooling had a positive relationship with the amount of unpleasant contact staff members have had with developmentally disabled

persons. In addition, a significant relationship was revealed between the amount of schooling staff members had and how similar they see themselves to persons with developmental disabilities. A possible explanation for both of these may be that those with more schooling have been in the field of developmental disabilities longer, and therefore have had more experiences with persons with disabilities and more opportunities to see persons with disabilities as “people first”.

In both the community and staff member samples, no significant gender differences were found on any of the measures. Therefore, stereotypes about the relationship between gender and attitudes about people with different abilities were not supported by this study. The only gender difference that was revealed was the difference in gender proportion in the staff member group, which had more females than males, relative to the community group, which had nearly equal numbers of males and females. This finding is consistent with the underrepresentation of males in the field of service to individuals with developmental disabilities.

The correlations and effect sizes found in this research are considered small to moderate. This size of correlations is consistent with Yuker and Hurley’s (1987) findings, and is expected given that these are different types of measures.

Limitations

One limitation of this study was that self-report measures were used. With any self-report measure, participants may not necessarily indicate accurate answers to the questions. This could be due to social-desirability factors or participants having limited

time and rushing through the surveys. In this study, participants were asked to fill out the surveys at grocery stores, when they may have been in a hurry and rushed through the process.

Another limitation is the fact that this study was done in Humboldt County, which has a relatively homogenous population. Therefore, the results may not be generalizable to a wider population. The fact that a convenience sample was used may have further compounded this issue, as there was no attempt to represent any specific demographic groups, other than using gender balancing of the researchers and the varied location choices for recruiting participants in the community member sample.

A third limitation is the fact that that it may have been difficult for participants to answer some of the questions on the attitude measure, given that persons with developmental disabilities are unique and have many different needs and levels of functioning. Therefore, a participant might feel that a question regarding attitude may require different responses about different disabled individuals. The researcher attempted to mitigate this issue by stating at the beginning of the survey “assume the following questions refer to someone with a medium amount of disability”, but this may not have reduced this problem.

Lastly, this study used correlation procedures to investigate attitudes, which does not imply causation. The findings that this study yielded demonstrate significant relationships, but these are only associations and do not indicate specific cause and effect. For example, contact may influence attitudes, attitudes may influence contact, and other factors may cause both contact and attitudes to covary.

Implications

For those individuals who are involved in the movement toward inclusion, this research may provide valuable information about this community and what the local climate is regarding inclusion. Many of the community members expressed supportive views about inclusion, which suggests that there is a degree of openness about this issue. While the researcher hypothesized that staff persons in the field would show greater support of inclusion, it was positive to learn that there were no significant differences and that both groups showed support.

The finding that increased positive contact is related to more positive attitudes suggests that those programs that allow for non-disabled people to interact with those with developmental disabilities are beneficial. In particular, this may provide evidence to support programs that foster positive connections, such as Community Companions, which links developmentally disabled individuals to non-disabled peers.

Another finding that may have implications for more contact was the relationship between age and attitude. This finding suggests that there may be a need for older individuals to have more positive interactions with developmentally disabled persons and to learn more about disability issues such as inclusion. The fact that younger individuals have more favorable attitudes toward disabled persons is positive because it is these individuals who will be dealing with the inclusion movement in the future.

In summary, this research has implications for self-advocates with developmental disabilities and their stakeholders, professionals in the field, and policy makers. As the

community inclusion topic is debated and policy makers attempt to further clarify the Americans with Disabilities Act, this topic should continue to be studied.

Future studies may investigate community inclusion by looking at the relationship between contact with developmentally disabled persons and the type of information those participants have received about persons with disabilities. This suggestion is consistent with Yunker's (1994) recommendations for focusing on characteristics that can be changed. The researcher believes this is important because investigating the combination of knowledge and information about disabilities and disability issues and how this relates to attitudes may indicate new ways to support the advocacy movement of community inclusion.

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APPENDIX A

Gardner and Chapman Definition of Developmental Disability

The term developmental disability means a severe, chronic disability of a person 5 years of age or older that:

- A. Is attributable to a mental or physical impairment or combination of mental and physical impairments:
- B. Is manifested before the person attains age 22;
- C. Is likely to continue indefinitely;
- D. Results in substantial functional limitation in three or more of the following areas of major life activity:
 1. *Self-care* (daily activities enabling a person to meet basic life needs for food, hygiene, and appearance);
 2. *Receptive and expressive language* (communication involving verbal and nonverbal behavior enabling a person to both understand others and to express ideas and information to others);
 3. *Learning* (general cognitive competence and ability to acquire new behaviors, perceptions, and information; apply experiences to new situations);
 4. *Mobility* (ability to use fine and gross motor skills; ability to move one's person from one place to another with or without mechanical aids);
 5. *Self-direction* (management and taking control over one's social and personal life; ability to make decisions affecting and protecting one's self-interest);
 6. *Capacity for independent living* (the extent to which the person exerts control and choice over his or her own life);
 7. *Economic self-sufficiency* (maintaining adequate employment and financial support).
- E. Reflects the person's need for a combination and sequence of special, interdisciplinary, or generic care, treatment, or other services that are lifelong or extended duration and are individually planned and coordinated; except that such term when applied to infants and young children, means individuals from birth to age 5, inclusive, who have substantial developmental delay or specific congenital or acquired conditions with a high probability of resulting in developmental disabilities if services are not provided.

(Gardner & Chapman, 1993, p. 7)

APPENDIX B

Lanterman Act Definition of Developmental Disability

The Lanterman Act defines a developmental disability as a disability that:

1. originates before a person reaches age 18;
2. continues or is expected to continue indefinitely;
3. constitutes a substantial disability for that person; and
4. is mental retardation, cerebral palsy, autism, or a seizure disorder; or
5. is a disabling condition closely related to mental retardation or requiring treatment similar to that required for people with mental retardation. § 4512(a).

Protection & Advocacy, Inc. (1999)

APPENDIX C

Cover Letter and Survey Form

Dear Community Member,

My name is Carrie Moses and I am a graduate student in the Psychology Department of Humboldt State University. I am conducting research as part of my Master's thesis that is designed to contribute to the local community. I have prepared for this research with close collaboration with my thesis advisor, Dr. Mary Gruber, Professor of Psychology. By voluntarily filling out this survey you are providing a valuable community service. This survey takes about 10 minutes to complete and you must be 18 years or older to fill it out. Thank you for taking the time to complete this survey. Please do not use your name, so that your answers will be strictly anonymous. If you have any questions or concerns about this survey you may contact my thesis advisor or me at (707) 826-3748 in the Psychology Department at Humboldt State University.

Thank you very much!

Sincerely,

Carrie Moses,
M. A. Candidate in Psychology

APPENDIX C (continued)

Thank you for taking the time to fill out this survey. **You must be at least 18 years old to fill this out.** Please do not put your name on these forms. Your answers are confidential. Please begin by answering the following questions:

Gender: Male Female

Age Category: 18-29 30-39 40-49 50-69 60-69 70 or older

Level of school completed: Up to 8th grade Some high school High school
graduate

(circle one)

Trade School

Some college courses

Associate degree

Bachelor degree

Graduate school

Graduate degree

Occupation: _____

Do you or have you provided services to people with developmental disabilities as part of your job? ___ No ___ Yes

The questions you are about to answer use the term “**developmental disability**”. This is a type of impairment that begins in childhood and may affect several areas of a person’s life. Please assume that the following questions refer to someone with a **medium amount of difficulty** with all or some of these areas.

- Problems caring for one’s basic life needs (food, personal hygiene)
- Difficulty talking or understanding words
- Difficulty learning
- Problems with movement
- Difficulty making personal decisions
- Difficulty living without any help
- Problems with handling money

APPENDIX C (continued)

Directions:

Please circle a number to the right of each statement indicating your answer to each question.

Use a number from 1 to 5 to indicate the following:

	1=Never	2= Once or Twice	3=A few times	4= Often	5= Very often
1. How often have you had a long talk with a person who is developmentally disabled?	1	2	3	4	5
2. How often have you had brief conversations with persons who are developmentally disabled?	1	2	3	4	5
3. How often have you eaten a meal with a person who is developmentally disabled?	1	2	3	4	5
4. How often have you contributed money to organizations that help developmentally disabled persons?	1	2	3	4	5
5. How often have developmentally disabled persons discussed their lives or problems with you?	1	2	3	4	5
6. How often have you discussed your life or problems with a developmentally disabled person?	1	2	3	4	5
7. How often have you tried to help developmentally disabled persons with their problems?	1	2	3	4	5
8. How often have developmentally disabled persons tried to help you with your problems?	1	2	3	4	5
9. How often have you worked with a developmentally disabled client, student, or patient on the job?	1	2	3	4	5
10. How often have you worked with a developmentally disabled coworker?	1	2	3	4	5
11. How often has a developmentally disabled friend visited you in your home?	1	2	3	4	5
12. How often have you visited developmentally disabled friends in their home?	1	2	3	4	5
13. How often have you met a developmentally disabled person that you like?	1	2	3	4	5
14. How often have you met a developmentally disabled person that you dislike?	1	2	3	4	5
15. How often have you met a developmentally disabled person that you admire?	1	2	3	4	5
16. How often have you met a developmentally disabled person for whom you felt sorry?	1	2	3	4	5
17. How often have you felt annoyed or disturbed by the behavior of a person with a developmental disability?	1	2	3	4	5
18. How often have you been pleased by the behavior of a developmentally disabled person?	1	2	3	4	5
19. How often have you had pleasant experiences interacting with developmentally disabled persons?	1	2	3	4	5
20. How often have you had unpleasant experiences interacting with developmentally disabled persons?	1	2	3	4	5

APPENDIX C (continued)

Directions: Please circle the number which indicates how much you agree with the following statements according to this scale:

1= Disagree strongly	2= Disagree moderately	3= Disagree somewhat	4=Agree somewhat	5=Agree moderately	6= Agree strongly	
1. People with developmental disabilities should not be allowed to marry and have children.	1	2	3	4	5	6
2. A person would be foolish to marry someone with a developmental disability.	1	2	3	4	5	6
3. People with developmental disabilities can plan meetings and conferences without assistance from others.	1	2	3	4	5	6
4. People with developmental disabilities can be trusted to handle money responsibly.	1	2	3	4	5	6
5. The opinion of a person with a developmental disability should carry more weight than those of family members and professionals in decisions affecting that person.	1	2	3	4	5	6
6. Sheltered workshops, or work environments that are only for disabled workers, are essential for people with developmental disabilities.	1	2	3	4	5	6
7. Increased spending on programs for people with developmental disabilities is a waste of tax dollars.	1	2	3	4	5	6
8. Homes and services for people with developmental disabilities downgrade the neighborhood they are in.	1	2	3	4	5	6
9. People with developmental disabilities are a burden on society.	1	2	3	4	5	6
10. Homes and services for people with developmental disabilities should be kept out of residential neighborhoods.	1	2	3	4	5	6
11. People with developmental disabilities need someone to plan their activities for them.	1	2	3	4	5	6
12. People with developmental disabilities do not need to make choices about the things they will do each day.	1	2	3	4	5	6
13. People with developmental disabilities can be productive members of society.	1	2	3	4	5	6
14. People with developmental disabilities have goals for their lives like other people.	1	2	3	4	5	6
15. People with developmental disabilities can have close personal relationships just like everyone else.	1	2	3	4	5	6
16. People with developmental disabilities should live in sheltered facilities because of the dangers of life in the community.	1	2	3	4	5	6
17. People with developmental disabilities usually should be in group homes or other facilities where they can have the help and support of staff.	1	2	3	4	5	6

**If you would like to add comments please do so:

Thank you very much for your participation!

APPENDIX D

CLAS-MR Subscales and Corresponding Items:

Empowerment:

1. People with mental retardation should not be allowed to marry and have children. (Reverse worded)
2. A person would be foolish to marry someone with mental retardation. (Reverse worded)
3. People with mental retardation can plan meetings and conferences without assistance from others.
4. People with mental retardation can be trusted to handle money responsibly.
5. The opinion of a person with mental retardation should carry more weight than those of family members and professionals in decisions affecting that person.

Exclusion:

7. Increased spending on programs for people with mental retardation is a waste of tax dollars.
8. Homes and services for people with mental retardation downgrade the neighborhoods they are in.
9. People with mental retardation are a burden on society.
10. Homes and services for people with mental retardation should be kept out of residential neighborhoods.

Sheltering:

6. Sheltered workshops for people with mental retardation are essential.
11. People with mental retardation need someone to plan their activities for them.
16. People with mental retardation should live in sheltered facilities because of the dangers of life in the community.
17. People with mental retardation usually should be in group homes or other facilities where they can have the help and support of staff.

Similarity:

12. People with mental retardation do not need to make choices about the things they will do each day. (Reverse worded)
13. People with mental retardation can be productive members of society.
14. People with mental retardation have goals for their lives like other people.
15. People with mental retardation can have close personal relationships just like everyone else.

Henry, Keys, Jopp, and Balcazar (1999)