SOCIAL INTEGRATION AMONG UNDERGRADUATE
STUDENTS WITH PHYSICAL DISABILITIES

DISSERTATION

Presented to the Graduate Council of the
University of North Texas in Partial
Fulfillment of the Requirements

For the Degree of

DOCTOR OF PHILOSOPHY

By

Janet S. Hodges, B.S., M.A.
Denton, Texas
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Research with nontraditional students has indicated that collegiate social integration may be influenced by variables not currently addressed in college impact research (Nora & Cabrera, 1996). To gain an understanding of what undergraduate students with physical disabilities perceive as influencing their social integration, a three phased mixed method study was employed. The study's purposes were to understand how students with physical disabilities perceive a) normative pressures identified in Weidman's (1989) Model of Undergraduate Socialization as affecting their social integration; b) their own disability as influencing their social integration; and c) their levels of satisfaction with social integration.

Phase I solicited quantitative information on demographics, campus activity, and implications of impairment from 48 students identified as having either a visual or mobility impairment. In-depth interviews (Phase II) were conducted with 16 volunteer undergraduates with physical disabilities. Verbatim interview transcripts were subjected to constant comparison analysis (Glaser & Strauss, 1969) to identify perceived influences. Phase III included member checks (Lincoln & Guba, 1984) to verify the truth of the summarized transcripts.
Students with physical disabilities expressed influences from precollege, off-campus, intrapersonal, and on-campus pressures. Additional influences emerged specific the sample. Participants perceived themselves as in control of their social activity and expressed satisfaction with their social integration. They perceived personal control as more influential than the actions of peers, architectural access, or implications of disability. The influence of precollege socialization varied between persons with onset of disability before or after high school although it was not predictive of collegiate social integration for either group.

Negative influences identified as affecting the social integration of undergraduate students with physical disabilities included the use of a personal care attendant, transportation, child care responsibilities, and academic pressures. Physical accessibility of buildings and grounds nor attitudes of campus peers were perceived as negatively influential.

The implications of this study span students with physical disabilities, university personnel, and rehabilitation practitioners. This preliminary understanding of the factors perceived by students with disabilities as influencing their social integration stands as a catalyst for enhancing the environment of the university community.
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CHAPTER 1

INTRODUCTION

Increased numbers of students with disabilities are enrolling in institutions of higher education, in part due to legislation such as the Americans with Disabilities Act (ADA) of 1990. Academic accommodation for students with disabilities has been reported in higher education literature, at professional meetings, and in faculty handbooks. Studies about students with disabilities demonstrate that opportunities have increased in the academic arena.

The academic integration of students with and without disabilities brings to light the need to understand the social lives of students with disabilities. Research among school-aged children suggests that academic integration does not predict social integration and that additional efforts are needed to assure social integration (Bullock, Bedini, & Driscoll, 1993). At the university level, even for the traditional student, academic integration may not positively correlate with social integration and may, in fact, hinder social integration.

Social integration defines an individual who is both quantitatively and qualitatively involved in the university community (Astin, 1984; Pace, 1979, 1984; Weidman, 1989). The integrated experience includes emotionally satisfying social activities within an individual's social group (Haring, 1991). A noted benefit is that socially integrated college students are less likely to drop out (Tinto, 1987), are more
satisfied with the college experience (Astin, 1977), develop increased personal skills (Astin, 1984), and perceive having both personal acceptance and significant peer relationships within the college community (Weidman, 1989).

The process of becoming integrated is influenced by the level and amount of involvement with campus entities. The social experience of college students has been described as a "web-like series of family, interpersonal, academic, and organizational pulls" (Terenzini et al., 1994, p. 61). Other influences on social integration, have been identified, such as opportunity for campus activity, past social experience, interests, and academic goals (Christie & Dinham, 1991; Tinto, 1987; Weidman, 1989).

Weidman (1989) developed a model that explains the influences on social integration among traditional students. Bean and Metzer (1985) contended that influences vary for nontraditional students, who are defined as those who have diminished interaction with the university community. For nontraditional students, Bean and Metzer concluded that their development is not as heavily influenced by social concerns as is development among traditional students.

To date, collegiate social influences specific to students with physical disabilities have not been identified. Research involving the social integration of persons with disabilities into other communities suggests that living with a disability requires additional time for dealing with activities of daily living such as dressing, eating, and transportation (Kinney & Coyle, 1989). Astin (1984) contended that anything that takes time away from campus activity reduces involvement. Because involvement is central to
achieving social integration, living with a disability may reduce time available for involvement in campus activities and subsequent social integration.

Statement of the Problem

The problem addressed in this study was what undergraduate students with physical disabilities perceive as influencing their social integration.

Purposes of the Study

The purposes of this study were the following: (a) to understand how normative pressures identified in Weidman’s Model of Undergraduate Socialization are perceived by students with physical disabilities as affecting their social integration; (b) to understand how their own disability is perceived by students with physical disabilities as influencing their social integration; and (c) to understand the perceived levels of satisfaction with social integration by students with physical disabilities.

Research Questions

1. What do students with physical disabilities perceive as influencing the development of college social networks?

2. What do students with physical disabilities perceive as influencing involvement in extracurricular campus activities?

3. How do students with physical disabilities perceive architectural accessibility as influencing their social integration?

4. How do students with physical disabilities perceive noncampus normative pressures as influencing their campus social integration?
5. Is the use of a personal care attendant perceived to affect the opportunity for social integration of students with physical disabilities?

6. What are the expectations of students with physical disabilities for social integration on their university campus?

7. How do students with physical disabilities perceive background normative pressures as influencing integration into the university community?

8. In what ways do students with disabilities perceive their parents as influencing their social integration into the university community?

9. Do students with physical disabilities perceive themselves to be socially integrated into the university community to the degree they desire?

Significance of the Study

The college impact approach to higher education research emphasizes interaction between student and environment and subsequent academic and personal developmental gains (Kuh, 1995; Pascarella & Terenzini, 1991). A person who completes college is expected by society to possess skills beyond those learned in the classroom. Many of these skill can be associated with social integration. Social integration has been found to be positively associated with outcomes in persistence (Astin, 1977, 1984; Kuh et al., 1991; Nora & Cabrera, 1996; Pascarella & Terenzini, 1980; Terenzini, Theophilides, & Lorang, 1984), satisfaction with college (Astin, 1977), personal development (Astin, 1984), social competence (Kuh, 1993), sense of acceptance (Collison, 1990; Terenzini et al., 1994), sense of worth (Baxter-Magolda, 1992; Terenzini et al., 1994), and adjustment to college (Baxter-Magolda, 1992; Kuh, 1995; Tomlison-Clarke & Clarke, 1994).
One area of out-of-class involvement is participation in university-sponsored extracurricular activities. Students involved in extracurricular activity report greater satisfaction with college and increased development (Astin, 1975, 1977; Baxtor-Magolda, 1992; Kuh et al., 1991). Among seniors, perceptions of learning and personal development attributed to social integration include social competence, reflective thought, altruism, autonomy, knowledge acquisition, confidence, practical competence, and self-awareness. These gains in both interpersonal and cognitive competence may be attributed to peer interaction and extracurricular activity (Kuh, 1995).

Developmental gains have been measured using Chickering’s (1969) developmental task model. Involvement in extracurricular activity has been found to contribute to growth in interpersonal skills (Astin, 1993; Riahinejad & Hood, 1984), leadership (Astin, 1993), life-management skills (Cornelius, 1995), interdependence, and mature lifestyle plans (Cooper, Healey, & Simpson, 1994).

Similarly, Astin (1996) studied a large national sample over a period of time to measure the power of involvement in campus activities. The results showed that involvement in campus activities, including extracurricular activities, enhances both cognitive and affective development. Involvement with peers is the strongest influence.

Social integration is not a static outcome, but an emerging process. Integration is influenced by pressures exerted by peers, family, and campus environment (Christie & Dinham, 1991; Weidman, 1989) as well as the intrapersonal differences in students (Weidman, 1989).
Harris (1993) wrote of metropolitan universities, “There are few areas that present as many challenges while presenting a plethora of community enhancing opportunities as that of expanding access and opportunity for students with disabilities” (p. 71). This is particularly salient for metropolitan universities due to the higher concentration of people with disabilities in urban areas and the increasing number of students with disabilities.

Researchers in the arena of college impact have tended to focus on traditional-aged residential students. Bean and Metzer (1985) have broadened the perspective by including older, part-time, and commuter students. Murguia, Padilla, and Pavell (1991) and Nora and Cabrera (1996) have been among the researchers to explore college impact specifically among minority students. A yet unexplored nontraditional student population consists of students with disabilities.

Nationally, from 1978 to 1994, the percentage of first time/full-time freshman with disabilities rose from 2.6 percent to 9.2 percent (C. Henderson, 1995). The number is still growing, with 10.8 percent of the undergraduate student population estimated as having at least one disability (C. Henderson, 1995). However, persons with physical disabilities currently enter four year institutions at a lower rate than nondisabled students (2.1% and 28%, respectively) (C. Henderson, 1995). Enactment of the ADA and the 1990 Individuals with Disabilities Education Act has increased awareness of opportunity and, consequently, expectations for higher education pursuits by persons with disabilities.

Other characteristics differentiate students with disabilities. C. Henderson (1995) reported that students with disabilities in higher education institutions are more likely than nondisabled students to be men, to be older, to receive financial assistance, and to be
from lower income families. Persons under the age of 18 include 5.8 percent with a disabling condition compared to the 18- to 44- year-old category, in which 13.6 percent report a disabling condition (McNeil, 1997). As the student population ages, increasing numbers of students with disabilities will be expected to enter college (C. Henderson, 1995). These students socially will have the double disadvantage of age and disability.

Further, African American (20.8) and American Indian (26.9) groups currently have a higher incidence of disability than Caucasian (17.7) or Asian (9.6) groups (McNeil, 1997). Again, as minority enrollments increase, so does the potential for increased numbers of students with a disabilities.

Fine and Asch (1988) have warned of automatically attributing differences to disability. The multiple effects of disability, age, and minority status correlate with tendencies of lower economic levels (McNeil, 1997). Consistent with prior research, precollege socialization is one contributor to collegiate socialization (Christie & Dinham, 1991; Weidman, 1989), and lower economic status is associated with lower precollege socialization.

Because social integration has been shown to positively affect the outcomes of traditional students, an understanding of its effects on students with disabilities is warranted. To better enhance the environment, as suggested by Harris (1993), the influences and values of social integration must be understood. Researchers exploring nontraditional students have demonstrated that models developed from studies with traditional students do not fully explain the socialization process of students with differing characteristics (Nora & Cabrera, 1996; Metzer & Bean, 1987; Murguia et al.,
Students with disabilities present additional heterogeneous categories of differences. Differences in severity of physical disability and prior socialization may affect the social outcomes of college attendance.

To date, students with physical disabilities have been ignored in the literature on social integration. To grasp the full meaning of social integration, an understanding of the multitude of interacting influences is necessary (Christie & Dinham, 1991; Weidman, 1989). Weidman's (1989) acknowledgment of the interacting influences of external, institutional, and precollege factors lends readily to research on the social integration of students with physical disabilities. As students with disabilities become increasingly present on university campuses, assurance of their full participation in the university community will be expected.

Definition of Terms

The following terms used throughout this document are defined. The definitions are intended to clarify rather than restrict the parameters of particular terms.

On-campus influences are elements of the campus environment. Campus elements might include participation in extracurricular activities, awareness of campus social opportunities, socialization with peers, development of friends (Weidman, 1989), time on campus, campus residence (Christie & Dinham, 1991), commitment to academic goals (Bean & Metzer, 1985), and accessibility of facilities.

Off-campus influences include those influences outside the campus community such as family, continued interaction with high school friends, noncampus social groups, and off-campus work commitments (Weidman, 1989). Additionally, Bean and Metzer
(1985) identified the off-campus influences of commuting, family responsibilities, and economic pressures.

Intrapersonal influences are those personal characteristics unique to each individual such as perception of acceptance, perceived social competence, satisfaction with social opportunity or involvement (Weidman, 1989), and implication of disabling condition.

Background influences are pressures experienced prior to college attendance that affect one’s social integration. Parents potentially socialize students toward college attendance, influencing the student’s expectation of college attendance and what that experience will entail (Weidman, 1989). Additionally, precollege pressures influence the formation of goals for college and commitment to those goals (Bean & Metzer, 1985).

Student with a physical disability refers to undergraduates identified by the University of North Texas, Office of Disability Accommodations, as having a physical impairment that affects the physical functioning of that person, including mobility, motor, and vision (University of North Texas, Denton).

Handicapped exists when individuals with impairments or disabilities are unable to fulfill one or more of the roles considered normal for their age, gender, and culture. Such roles include physical independence, mobility, social integration, and economic self-sufficiency (Whiteneck, Charlifue, Gerhart, Overholser, & Richardson, 1992).

Involvement refers to (a) both psychological and physical energy on tasks, (b) continuous and differing amounts of energy invested on an array of tasks, (c) both quality
and quantity of effort, (d) directly proportional to learning, and (e) an indicator of educational effectiveness (Astin, 1984).

Delimitations

The study was delimited to undergraduates with physical disabilities, as identified by the University of North Texas, Office of Disability Accommodations, during the academic year of 1996-1997.

Limitations

Participation in all phases of the study was voluntary. Therefore, generalizations concerning how disability affects social integration can be made only to those undergraduate students comprising the sample. The sample included undergraduate students identified by the Office of Disability Accommodations as having mobility or visual impairment, for the academic year 1996-1997 at the University of North Texas, Denton. Acknowledgment is made that there are students with physical disabilities who are not registered with the Office of Disability Accommodations.
CHAPTER 2

LITERATURE REVIEW

Introduction

Consistent with qualitative methods, the following literature review provided the conceptual framework of the study. Post hoc related literature reviews were added as findings emerged from the investigation. The literature review related to this study included an explanation of the influences on the social integration of undergraduate students. Additionally, a description of persons with disabilities was explored, including issues related to social integration.

Theoretical Frame of Reference

The meaning of the collegiate experience is a dynamic concept. Blumer (1969) stated that people are self-reflective and discern meaning based on their interactions with elements of the environment. Theorists within higher education have generalized the idea of symbolic interaction to the understanding of student change. College impact models focused on "environmental or sociological origins of student change" (Pascarella & Terenzini, 1991, p. 17). Various authors have attributed change to involvement (Astin, 1993, 1996), effort (Pace, 1984), or integration (Tinto, 1987). These influences on change describe the student's interaction with activities of the university.

Research on college impact has identified variables presumed to exert influence on student change. One such impact model (Tinto, 1987) explained the impact of college
environmental factors on student attrition. Tinto posited that students enter college with varying characteristics, abilities, and aspirations. Such characteristics as gender, family economic status, aspiration, and past academic and social experiences are hypothesized to influence a student's commitment to the institution. Commitments are then modified throughout college based on interactions between the student and the university environment, where satisfying interactions result in continued commitment. Tinto's (1987) model postulated that those students who become socially and academically integrated into the university community are less likely to drop out than those who do not. Tinto, however, placed little attention on influential factors external to the institution.

Tinto (1987) has dealt primarily with traditional-aged Caucasian, residential, and 18- to 26-year-old students. Research among nontraditional students suggests that social integration may not explain the interactions of many students (Arnold, Kuh, Vesper, & Schuh, 1993; Bean & Metzer, 1985; Metzer & Bean, 1987; Murguia et al., 1991; Wolfe, 1993).

Bean and Metzer (1985) defined nontraditional students as commuter, older, and part-time, but they acknowledged the breadth of nontraditional characteristics:

It seems unlikely that a widely acceptable formula can be derived that precisely distinguishes traditional from nontraditional students. Nontraditional students are distinguished by the lessened intensity and duration of their interactions with the primary agents of socialization at the institution they attend. (p. 488)

The normative pressures affecting nontraditional students differ from those of traditional students, due in part to less interaction with institutional variables and greater interaction
with external groups. Environmental variables of finance, employment, outside encouragement, and family responsibility are presumed to be important (Metzer & Bean, 1987).

Another area of study related to nontraditional students involves minority students. In applying Tinto's (1987) model to the integration of racial minorities, Murguia et al. (1991) have found that racial differences inhibit full integration into the campus environment. Fine and Asch (1988) have suggested that persons with disabilities comprise a minority group and that many associated problems can be understood from the minority group framework. Citing a 1948 issue of the *Journal of Social Issues*, Fine and Asch concluded that persons with disabilities are faced with environmental, prejudicial, and interpersonal factors that can lead to marginal social acceptance, much as those faced by persons identified with racial minorities. These issues of living with a disabling condition may better align the student with a physical disability with nontraditional students.

Weidman (1989) conceptualized the socialization process of all undergraduate students as beginning before college admission and including normative pressures from within and outside the university. This model may hold value for understanding the socialization process of students with disabilities. External pressures and intrapersonal aspects of living with a disabling condition seem to fit within the model.

One critique of college impact models contended that research on both traditional and nontraditional students has been conducted from a positivistic paradigm (McKeown, MacDonell, & Bowman, 1993). Kuh (1993) contended that existing college impact
models fail to take into account the student view. Similarly, Attinasi (1989) believed that an interpretive paradigm will lead to greater discovery of what students deem important about the college experience. Specific to persons with disabilities, Treischmann (1988) has expressed the need for detailed descriptions of each subject to be included, to best represent the heterogeneity of the population.

Similarly, within the theoretical frame of symbolic interaction, social integration is influenced by other interaction elements (Blumer, 1969). Weidman (1989) conceptualized undergraduate socialization as a series of bidirectional processes by which students enter the university with various characteristics, are exposed to influences, form new relationships, maintain some previous relationships, and finally change by integrating and balancing normative pressures. The normative pressures of parents, noncollege reference groups, and institution are considered equally important.

Although admittedly not conclusive, Weidman (1989) suggested that normative pressures are exerted by elements within the categories of background, parental socialization, and noncollege reference groups before and at the time of entering college. Background characteristics include socioeconomic status, aptitudes, career preferences, aspirations, and values. Socioeconomic status and lifestyles of parents interact, as do parent/child precollege relationships. Additionally, experiences with precollege reference groups influence the understanding of the normative pressures of entering undergraduate student.
Parental socialization and noncollege reference groups combine with collegiate experiences to form in-college normative pressures. Tinto (1987) has described integration into the university community as separation from precollege groups prior to transition into the new group. Continuation of interactions with parents and precollege peers thus interfere with integration into the university community.

The collegiate experience is the most overt of the influences described by Weidman's (1989) model, involving both academic and social interactions. Academic influences include university mission, size, atmosphere, academic reputation, and rigor of individual academic majors. Socially, students are exposed to opportunities to participate in extracurricular activity, develop friendships, participate in organizations, or attend university events. Both academic and social experiences are mediated through the interaction of intrapersonal values, beliefs, and expectations formed prior to or during college. This continual interaction influences understanding of the collegiate experience.

Influences on Social Integration

Benefits of social integration have been established in the higher education literature. The benefits, however, differ among students implying that there are more influences on outcome than simply participation in extracurricular activity. Symbolic interaction theory emphasizes the importance of the perceived meaning of an event is being altered by prior and simultaneous experiences (Blumer, 1969).

Weidman (1989) suggested that socialization outcomes vary according to interaction with influences and resultant social behavior. The categories of influences currently established are institutional, external, background, and intrapersonal (Arnold et
al., 1993; Astin, 1977; Chickering, 1969; Christie & Dinham, 1991; Terenzini et al.,
1994; Tinto, 1975; Weidman, 1989).

On-campus Influences

Interaction with elements of the campus environment represents institutional
influences (Kuh et al., 1991; Newcomb & Wilson, 1966; Pace, 1979, 1984; Pascarella &
Terenzini, 1980). Institutional elements include campus peers (Kuh et al., 1991),
dormitory residence (Astin, 1973; Pascarella, 1985; Weidman, 1989), opportunity for
extracurricular activity (Astin, 1984; Kuh et al., 1991, 1995; Niles, Sowa, & Laden, 1994;
Weidman, 1989), and institutional mission (Arnold et al., 1993; Pace, 1984; Terenzini et
al., 1994; Weidman, 1989).

Peer group denotes face-to-face, frequent interactions by a loosely formed group
of students (Weidman, 1989), although Love (1995) has suggested that peers should be
differentiated to include those with equal rank, ability, or experience. Newcomb and
Wilson (1966) were among the first to discuss the influence of peer groups. Newcomb
(1966) suggested that informal group development begins with interactions between high
school friends attending the same institution or by meeting new college peers with similar
interests. Continuation of high school friendships strongly influences successful
transition when those high school friends attend the same institution (Christie & Dinham,
1991; Terenzini et al., 1994). These friends provide a "bridge to social life during the
initial transition period" (Terenzini et al., 1994, p. 65). Nora and Cabrera (1996) have
found the development of close personal relationships with college peers to be positively
associated with persistence decisions.
When students are acquiring new friends, sports and college major influence peer group formation (Newcomb, 1966), as do gender and residential status (Hays & Oxley, 1986). Peer groups are a powerful source of social influence (Hoff & Ellis, 1992; Weidman, 1989), and group formation begins within the first 10 weeks of school (Paul & Kellerher, 1995).

Living on campus is continually associated with increased social integration (Astin, 1973; Christie & Dinham, 1991; Pascarella, 1985; Tinto, 1987). Influences from campus residence include increased opportunity to meet other students, learn about social opportunities, and to have time to socialize (Christie & Dinham, 1991). Campus residence aids integration by providing geographical and social distance from precollege networks (Christie & Dinham, 1991; Tinto, 1987). Subsequently, extracurricular activity provides opportunities for increased peer interaction and, consequently, social integration (Christie & Dinham, 1991; Tinto, 1987).

Much of the work related to institutional differences stems from the research of Pace (1979, 1984, 1990). Concerned with college outcomes, Pace has researched both the institution and the student. The experience of college students has been found to differ according to institutional differences such as scholastic image, size, available facilities, and opportunity for socialization.

Other institutional influences differ for nontraditional students. Findings indicate that nontraditional students are more committed to educational goals and less interested in social aspects of the university than are traditional students (Bean & Metzer, 1985). Nontraditional students spend less time on campus and perceive the institutional
environment differently from traditional students (Arnold et al., 1993; Murguia et al., 1991; Wolfe, 1993). As hypothesized by Bean and Metzer (1985), Kuh (1995) found that campus peer interaction has little influence on perceived development for nontraditional students.

**Off-campus Influences**

Social experience is not viewed solely as a consequence of the campus environment. To become integrated, Tinto (1987) suggested the need for separation from old networks, transition, and incorporation into a new community. Involvement theory acknowledges that time and energy spent on one influence reduces time and energy spent on another (Astin, 1984). External forces such as high school friends not attending the same institution (Christie & Dinham, 1991; Newcomb & Wilson, 1966; Weidman, 1989), family (Christie & Dinham, 1991; Eaton, & Bean, 1995; Hays & Oxley, 1986; Newcomb & Wilson, 1966; Tinto, 1987; Weidman, 1989), and off-campus contacts (Newcomb & Wilson, 1966) limit opportunity for involvement on campus (Astin, 1984; Christie & Dinham, 1991; Newcomb & Wilson, 1966; Tinto, 1987; Weidman, 1989).

Beyond time required for involvement with external influences, both Tinto (1987) and Weidman (1989) have suggested that normative pressures of an outside group influence campus integration. The influence exerted by precollege friends varies according to geographical proximity and friends' support for higher education. Continued dependence on a precollege network not attending the same college negatively influences adjustment to college (Paul & Kellerher, 1995; Terenzini et al., 1994). Outside groups
that do not support higher education influence students to exert less energy on campus activities (Christie & Dinham, 1991; Terenzini et al., 1994; Tinto, 1987).

Unlike transition away from high school friends, interactions with parents are not ended with college attendance, but, they do change (Christie & Dinham, 1991; Weidman, 1989). Research related to the influence of family repeatedly emphasizes the need for a balanced relationship with the family. It is generally accepted that healthy family relationships increase college students’ feelings of belonging and competence of college students.


Additional external demands influence integration. Perceived financial need (Nora & Cabrera, 1996), family responsibility (Nora & Cabrera, 1996), and off-campus work (Astin, 1993; Nora & Cabrera, 1996) have been negatively associated with persistence. Off-campus work is significantly detrimental to involvement for minority students, but insignificant by gender (Nora & Cabrera, 1996).

Background Influences

Just as the campus environment and external pressures differ, so do the individual characteristics of students (McKeown et al., 1993). Newcomb and Wilson (1966) suggested the necessity of understanding student precollege characteristics, including
students' expectations (Pascarella, 1985; Paul & Kellerher, 1995; Weidman, 1989) and past social relationships (Fagan, 1994; Terenzini et al., 1994; Weidman, 1989). Expectations and prior socialization are presumed to influence social integration. Other background characteristics, including gender, ethnicity, SAT scores, and parental education, have been found to be insignificant influences on social integration (Christie & Dinham, 1991; Terenzini & Wright, 1987).

Lack of precollegiate socialization influences students' expectation of social life on campus (Newcomb & Wilson, 1966; Tinto, 1987). Many new students have had little experience with separation from family, such as independent traveling or attending summer camp. Students with more experience away from their family adjust to college better than other students (Tinto, 1987). Terenzini et al. (1984) have found that precollege characteristics reliably influence social integration during only the first year of school. However, Weidman (1989) implied that external pressures continue to exert influence on socialization throughout college. One explanation of this difference is the congruence between expectation and reality (Tinto, 1987). Students challenged by the opportunity to make new friends integrate better than those threatened by new friendships (Paul & Kellerher, 1995).

An additional influence is motive for attending the university. Students who attend college for an instrumental purpose, such as to gain employment or obtain a pay raise, interact with the campus environment differently from those who value college as an opportunity to leave home, be on their own, and obtain a degree (Wiseman, Emry, &
Morgan, 1988). Villella and Hu (1991) concluded that nontraditional students have higher extrinsic/instrumental goals, such as getting a job.

Early research on social integration has looked primarily at traditional-aged residential students (Tinto, 1987). More recent studies include older students (Arnold et al., 1993; Tinto, 1987), commuter students (Arnold et al., 1993; Wolfe, 1993), part-time students (Arnold et al., 1993), and minority students (Murguia et al., 1991; Nora & Cabrera, 1996). Pascarella and Terenzini (1991) stated that more than half of American college students commute and that commuting is associated with restricted opportunity for psychosocial development.

The following section introduces characteristics related to another category of nontraditional student, those with physical disabilities. First, a description of potential and characteristic implications of specific disabling conditions is discussed. This chapter concludes with a review of existing research on social implications for persons with disabilities. Social implications are reviewed related to both university integration and integration into the community at large.

Students With Disabilities

Nationally, about 13.2 million people aged 16 and over are estimated to have some difficulty with mobility and/or self-care limitations (LaPlante, 1993), and the American Council on Education estimates that 10.5 percent of the nation’s college students have at least one disability (Hartman, 1993, p. 9). Although group statistics are enlightening, students with disabilities are a heterogeneous group. The diagnosis and implications are numerous, and thus, handling these students as a group is tenuous at best.
The following discussion provides an introduction to the specific disabilities represented in this study, not a compilation of all characteristics of these disabilities.

Characteristics of Physical Disability

Physical disability refers to those disabling conditions that affect the physical functioning of a person, including mobility, motor, and vision (University of North Texas, 1995-1996). Persons with physical disabilities have differing types and severities of impairment affecting the neurological, muscular, and sensory functions.

Various injuries and diseases may affect the neurological system. Injury or disease of the neurological system impairs ability to transmit and receive neurological messages, resulting in impaired movement or vision (Carter, VanAndel, & Robb, 1995). The effect of neurological disorders is dependent on the location and extent of injury to the neurological system. These impairments result in several diagnoses.

Cerebral palsy. Cerebral Palsy (CP) is a nonprogressive disorder resulting from injury to the brain during prenatal, natal, neonatal, or early childhood development (Crothers & Paine, 1988). Abnormalities of muscle tone or stiffness interfere with fine and gross motor movements, including coordination and balance. Persons with cerebral palsy may exhibit uncontrollable movements or impaired speech and may require the use of a wheelchair for mobility (Crothers & Paine, 1988; Falvo, 1991).

Cerebellar ataxia. Damage to the cerebellum impairs coordination of the skeletal muscles. The cerebellum becomes unable to control balance and equilibrium, and depending on severity, the use of a wheelchair may be necessary (Falvo, 1991; LaFleur-Brooks, 1994).
Spinal cord injury (SCI). Lesion of the spinal cord may result in loss of transmission of nerve impulses between the brain and other parts of the body. Degree of loss is dependent on the level and completeness of injury, complete and higher lesions result in greater loss of functioning (Dew, Lynch, Ernst, & Rosenthal, 1983; Falvo, 1991; Treischmann, 1988). Injury above the second thoracic vertebra impacts all four limbs, resulting in quadriplegia. Injuries below the second thoracic vertebra result in paraplegia (Carter et al., 1995).

Injury above the third cervical vertebra paralyzes the diaphragm muscles, causing respiratory difficulty and typically requiring the use of a respirator for breathing. Consequently, total assistance may be required to maintain daily living functions such as dressing, eating, and mobility (Treischmann, 1988). Respirator-dependent quadriplegics require an average of 76 hours of assistance per week by a paid attendant (Fuhrer, Carter, Donovan, Rossi, & Wilkerson, 1987). At approximately the sixth cervical vertebra and below, independent living is possible; however, daily living tasks still require increased time and energy (Treischmann, 1988).

Arthrogryposis. This rare disorder results in fixation of joints in a flexed or contracted position. Children born with arthrogryposis have joint problems ranging from bent or crooked joints, fused joints, or malformed distal body parts below the level of fusion (Thomas, 1985).

Visual impairments. Sensory impairments include those conditions that impair the functioning of sensory perception, such as visual auditory acuity (Falvo, 1991). Visual impairment describes people with various skill deficits directly related to loss of
sight (Hardman, Clifford, Egan, & Wolf, 1993). Most persons with visual impairments can perceive light or motion and can read large print (Carter et al., 1995). Visual acuity of 20/200 or worse or a field of view of less than 20 degrees after correction equates to legal blindness. Visual impairments result from congenital impairments, injury, or disease, and severity ranges from correction with lens to total blindness. The resultant handicap from visual impairment varies with severity. Typically, persons who lose their vision later in life display a coping advantage due to memory of the physical nature of the environment, allowing for associations to be made (Falvo, 1991; Hardman et al., 1993).

Social Integration of Persons With Disabilities

The implications of having a disability have been found to impact various aspects of life. Kinney and Coyle (1989) have stated, “Additional time requirements for dressing, traveling, and eating; confronting architectural and attitudinal barriers everyday; and encountering limits in work and leisure are realities that influence how a disabled individual views his or her world” (p. 872).

One aspect of a person’s world is integration. Haring (1991) defined integration as a dual phenomenon. Functional integration represents accommodation of facilities and programs that physically allow access to persons with disabilities. Social integration defines the full participation of persons with disabilities into the community in which they live and the inclusion into a social group of casual to intimate relationships (Haring, 1991). To date, the major focus on integration of students with physical disabilities in higher education has focused on functional integration, or physical accessibility (Haring, 1991).
The following section examines existing thought on social integration in general for persons with disabilities. This review provides insight for exploring social integration into a specific community, the university.

On-campus. West et al., (1993) has studied the functional integration of students with disabilities. Eighty-six percent of students with physical disabilities encountered architectural barriers on campus. Interestingly, most of the students with disabilities reported social isolation, ostracism, or scorn as a greater barrier to campus integration than physical accessibility. One student explained the barrier as "no sense of belonging . . . sense of not fitting in with the other students on campus" (Penn & Dudley, 1980, p. 462). Penn and Dudley (1980) indicated that social isolation is among the most common problem faced by students with disabilities. In contrast, Burbach and Babbitt (1988) found that 52 percent of students with physical disabilities feel very accepted on campus and 80 percent feel there are sufficient social opportunities.

To achieve social integration, students with disabilities face barriers such as psychological fear (Penn & Dudley, 1980), social isolation (Stilwell, Stilwell, & Perritt, 1983), and stigmatization from peers (Fichten & Bourdon, 1986; Hartman, 1993). The greatest barriers for students with disabilities are the social barriers built and maintained by persons without disabilities (Fichten & Bourdon, 1986; Haring, 1991). Although Fichten and Bourdon (1986) reported that people with disabilities have the necessary skills to interact, they are stigmatized by perceptions and thoughts of others. This stigma interferes with the development of social relationships and causes problems in existing relationships (Ainlay, Becker, & Coleman, 1986).
Off-campus. Other influences on the social integration of students with physical disabilities are exerted by off-campus pressures. Persons with physical or sensory disabilities are more likely to reside in their own homes or with family members than are those without disabilities (Falvo, 1991). Family members of persons with disabilities may be overly protective, thus adding to the loss of personal control (Falvo, 1991; Rintala, Young, Hart, Clearman, & Fuhrer, 1992).

Using a 90-item questionnaire, Dew et al. (1983) interviewed 111 persons with spinal cord injuries associated with a Veterans Administration medical center. Results indicate that participation in and satisfaction with social activities by persons with spinal cord injury are influenced by continued medical needs that require recurring treatment. Additionally, the time, energy, and expense of medical visits strains social relationships.

An age- and sex-matched group of persons with and without disabilities self-recorded all activities such as work, leisure, activities of daily living (ADL), or sleep. Persons with disabilities have been found to require assistance an average of 5.67 hours per day and spend 3.9 hours per day in mass media activity. A matched group of persons without disabilities required no assistance with daily living chores and spent only 1.6 hours per day in mass media activity. When questioned about barriers to community integration, persons with disabilities most frequently identified architectural barriers, lack of social resources, and transportation (Yerxa & Locker, 1989).

Bedini and Henderson (1993) interviewed 30 women with physical disabilities. Although not specific to university women, the findings indicated active involvement in organized activities such as the church or volunteering. Some women tended not to
participate when confronted with a situation in which they required assistance from someone else.

Persons with physical impairments have required assistance for activities of daily living such as eating, dressing, bathing, and household maintenance. Many persons with neurological impairments have resultant bowel and bladder function loss. To maintain bowel or bladder control persons may adhere to an elimination schedule to avoid accidents and embarrassment. For persons with high level injuries, an additional issue is the need for a personal care attendant to help in transfer from wheelchair to toilet or to dress (Treischmann, 1988). The need for assistance interferes with social opportunity by reducing spontaneity and flexibility of schedule and limiting privacy (Falvo, 1991; Treischmann, 1988).

**Intrapersonal.** In a study of persons with physical disabilities, perceived competence influenced boredom (Caldwell & Weissinger, 1994) and leisure participation (Coyle & Kinney, 1990). In the findings of Bedini and Henderson (1993) interviewees reported that, when meeting new people, they perceive the need to initiate interaction due to others' unfamiliarity with disabilities, or they reported befriending other women with disabilities due to the ease in communicating and relating.

Life with a physical impairment affects life satisfaction. Interview results with 675 persons with disabilities and 1,064 persons without disabilities indicate that persons with disabilities report lower life satisfaction than those without disabilities (Mehnert, Kraus, Nadler, & Boyd, 1990). Persons who require personal assistance had the lowest life satisfaction among the sample. The extent to which disability limits activity, such as
the need for personal care assistance, has been directly associated with life satisfaction (Fuhrer et al., 1994; Mehnert et al., 1990).

Nosek, Fuhrer, and Potter (1995) studied the life satisfaction of persons with physical disabilities and mediating influences on satisfaction. Influences included severity of disability and self-described adequacy of personal assistance. No association between level of disability and life satisfaction was found in this 45-person sample. However, life satisfaction was significantly correlated with level of satisfaction with personal assistance (Nosek et al., 1995).

Rintala, Young, Hart, and Fuhrer (1994) found correlations between measures of resultant handicap and relationship reciprocity. Persons with disabilities identified persons with whom they had social contact and categorized the interaction as (a) reciprocal, (b) other more, and (c) self more. Other more interactions indicated relationships in which the nondisabled supporter gives more support than he or she receives. Self more interactions indicate that the nondisabled receive more than they give. Higher independence dimension scores on the Craig Handicap Assessment and Reporting Technique (CHART) (Whiteneck et al., 1992) have correlated with other more interactions by persons with disabilities. Higher scores on the mobility, occupation of time, and social integration scales of the CHART correlated with having reciprocal relationships (Rintala et al., 1994).

For persons with visual impairments, intrapersonal influences have included isolation, loneliness, and frustration (Hardman et al., 1993). Many daily living activities involve vision. Social activities such as using the telephone, going to the movie, and
ordering at a restaurant are affected by visual impairment (Falvo, 1991; Hardman et al., 1993). Minor changes in the environment or changing of environments may result in disorientation. Consequently, mobility outside familiar environments such as the residence may be inhibited. When used, guide dogs increase mobility and add protection for some persons with visual impairments (Falvo, 1991).

An additional social inhibitor for some persons with visual impairments is the inability to see and imitate the physical mannerisms of peers, such as body language and gestures (Carter et al., 1995). This lack of nonverbal communication limits personal interaction and perpetuates myths. Consequently, many persons with visual impairments are excluded from social opportunity (Hardman et al., 1993). Persons with severe visual impairments may be further inhibited by the presence of "blindisms" such as rocking, rigidity, and lowered fitness level (Carter et al., 1995).

Existing literature on social integration of university students and research and literature highlighting the implications of disabilities are reported in this section. This literature review provides an understanding of the parameters and benefits of social integration. Influences, as discovered using primarily deductive processes with traditional students, are identified and categorized as background, institutional, and external. Finally, this chapter provides an overview of possible social limitations among students with physical disabilities represented in this study. The accumulation of this literature provided the framework for answering the question, what influences do students with physical disabilities perceive as impacting their social integration?
CHAPTER 3

METHODOLOGY

Introduction

This study was conducted at the University of North Texas (UNT), during the 1996-1997 school year. A qualitative design was used to increase the understanding of what students with physical disabilities perceive as influences on their social integration. Research on social integration has rarely been grounded in the realities of students and has been primarily deductive (McKeown et al., 1993). "Little research has been done on the personal and organizational mechanisms and processes by means of which students become involved" (Terenzini et al., 1994, p. 58). To understand the student experience, McKeown et al. (1993) suggested that research must be conducted "from the point of view of the actor" (p. 83). Similarly, Henderson (1991) stated that the use of qualitative approaches allows people being researched to ascribe their own understandings, rather than researchers controlling variables. Thus, the possibility of uncovering meaning is enhanced (Henderson, 1991; LeCompte & Preissle, 1993).

When many current research instruments and models of college impact were developed, students' frames of reference were not taken into account (Kuh, 1993). Attinasi (1989) recommended the use of phenomenological interviews using a semistructured interview guide to solicit the meanings that individuals attach to their
experiences. The use of interviews has led to the discovery of aspects of college considered important by students.

Treischmann (1988) faulted previous research on persons with disabilities because researchers have assumed that persons with disabilities comprise a homogeneous group. In reality, persons with disabilities comprise a very heterogeneous group. To compensate for grouping persons with disabilities into a single group, Treischman suggested that samples should be described in great detail, including age, duration of disability, sex, socioeconomic status, severity of disability, and etiology of disability.

To date, there has been a dearth of research on the collegiate social integration of students with physical disabilities. Lincoln and Guba (1985) suggested the appropriateness of qualitative approaches when seeking new knowledge or the emergence of new theory.

Research Design

This study consisted of three phases. Phase I included the administration of the Craig Handicap Assessment and Reporting Technique (Whiteneck et al., 1992), the Demographic Profile Sheet, and the Activity Participation Form. Students identified by the University of North Texas Office of Disability Accommodation as having a physical disability were mailed Phase I instruments. Data obtained were used to develop a description of the sample and to identify individuals for participation in Phase II.

In Phase II, qualitative in-depth interviews were conducted with participants representative of the sample. Participants were selected for interviews from Phase I data and were solicited through snowball sampling (Lincoln & Guba, 1985). Phase III
consisted of soliciting input from participants on the validity of findings (Lincoln & Guba, 1985; Miles & Huberman, 1984).

Instrumentation

Phase I instrumentation consisted of the administration of the Craig Handicap Assessment and Reporting Technique (CHART) (Whiteneck et al., 1992). The CHART was developed to measure handicap related to social functioning. Four dimensions of the original instrument were used: physical independence, mobility, occupation, and social integration (see Appendix B).

Whiteneck et al. (1992) demonstrated both the validity and reliability of CHART. Test-retest reliability coefficient for the overall CHART was $r = .94$, and each individual dimension was over $r = .80$. A subject-proxy correlation study revealed a significant coefficient for each dimension. Physical independence, mobility, and occupation were each over $r = .80$. Validity was shown by rehabilitation professionals rating the level of handicap of members of the sample. CHART scores were then compared between high- and low-rated levels of handicap, and scores were found to be significantly different. Validity was also shown through a Rasch analysis that proved a well-calibrated linear scale with good fit (Whiteneck et al., 1992).

CHART scores range from 0 - 100, with a lower score indicating more resultant handicaps. A person who received a score of 100 points was regarded as having no handicap in that dimension, irrespective of disabling condition (Whiteneck et al., 1992). CHART scoring was calibrated by using a matched group of nondisabled persons. Persons without disabilities consistently scored more than 100 in each dimension.
Although scores of more than 100 were mathematically possible, 100 was considered to be indicative of no handicap and 100 was the highest score marked.

Additionally, all participants completed a Demographic Profile Sheet (see Appendix C), results of which were used in developing a demographic profile of the sample. The profile sheet included age, residential status, marital status, gender, class standing, race, and type of disabling condition.

The final Phase I instrument was the Activity Participation Form (APF). The APF included Likert scale rating of eight extracurricular activity categories by frequency of attendance, with whom person attended, by whom participation was initiated, and satisfaction with attendance. Frequency was rated as daily, two to four times per week, two to four times a month, two to four times per semester, have attended once, or have never attended. Attendance with whom was rated as alone, with one other, or with two or more, followed with by whom attendance was initiated, self or other. The final rating was satisfaction with each category. The rating was very satisfied, somewhat satisfied, neutral, or not satisfied (see Appendix D).

Neither reliability nor validity was established for the Demographic Profile Sheet (DPS) or the Activity Participation Form (APF). However, each tool was subjected to review by three persons identified for their expertise in research related to persons with disabilities. Three persons with expertise related to social integration of persons with disabilities comprised the panel. The expert panel included Leandra Bedini, University of North Carolina at Greensboro. Bedini has written in the Therapeutic Recreation Journal and the Annual in Therapeutic Recreation on issues related to inclusion of persons with
disabilities and has multiple articles from qualitative research. Linda Caldwell, from Pennsylvania State University, recently published an article on the perceived boredom of persons with physical disabilities. The third reviewer, Ed Hamilton, from Indiana University, is himself a wheelchair user as well as a professional in the area of therapeutic recreation. After agreeing by telephone to participate, each was mailed a packet containing the draft guide, the purpose, research questions, a brief synopsis of related literature, and each of the Phase I instruments. Each expert panelist was requested to review the items on the Phase I instruments and the interview guide for content validity, clarity, and comprehension.

Additionally, three recent graduates of the University of North Texas who have disabling conditions completed the Phase I instruments as a pilot. Each was instructed first complete the DPS and APF as if they were still students at the university, noting the time required for completion. Secondly, each person was invited to provide comments concerning clarity of sentences, depth of information solicited, and other comments related to completing the surveys.

Phase II in-depth interviewing involved the use of a nonscheduled standardized interview (Denzin, 1978). The nonscheduled standardized interview guide (see Appendix E) provided a list of information to be covered with each participant. Items included in the interview guide were developed from literature on social integration and on persons with disabilities. The particular phrasing, order, and depth were not dictated, allowing for the individual uniqueness of each interview. The interview guide was formatted to allow a check-off system to assure that all pertinent information was gathered from each
participant (Patton, 1990). The interview guide allowed questions to be phrased and probed (Denzin, 1978) in a way that allowed respondents to provide their understanding of influences on their social integration.

During the process of expert panel review, one pilot interview was conducted. From this interview, audiotape recording was insufficient for documenting the responses of some interview participants with verbal impairments. A methodological revision was noted for the investigator to take notes and to clarify and restate frequently during interviews with persons with speech deficits.

Upon receipt of the expert panel members' input, revisions were made to the interview guide to alleviate leading questions and to relate to the research questions. After revisions, a second pilot interview was conducted. Both participants of the pilot had recently completed undergraduate degrees and were graduate students at the University of North Texas at the time of the pilot. One pilot participant had a presenting disability of cerebral palsy, and the other was congenitally blind. Each pilot participant commented that the interview guide provided an ample description of the social life of persons with disabilities on the University of North Texas campus.

Procedures for Data Collection

Sample

The University of North Texas (UNT) is a comprehensive metropolitan research university designated by the Carnegie Foundation for the Advancement of Teaching (1994) as a Class I Doctoral Granting Institution. UNT is located in Denton, a town with a population of more than 66,000, approximately 37 miles north of the Dallas-Fort Worth
metroplex. Enrollment at the University of North Texas exceeds 26,000, with a faculty of more than 1,000. The university has served students from all 50 states and approximately 100 foreign countries (UNT, 1995-1996).

A wide array of clubs and organizations offers UNT students opportunities to develop friendships and participate in meaningful service to the community. Organized activities include national honor societies, national professional societies, departmental clubs, Greek and special focus groups, and recreational sports activities.

UNT has supported openness and tolerance of individual difference in the student body. The university has expressed commitment to maintaining an accepting atmosphere and does not discriminate on the basis of individual differences (UNT, 1995-1996).

The ODA reported 359 undergraduates registered as requiring academic accommodation as of September 1996 (S. Pickett, 1996, personal correspondence). Of those, 97 were identified as having a mobility or visual impairment of which 15 students reported needing wheelchair access. The class rank breakdown of undergraduate students identified by ODA was freshman, 14 percent; sophomore, 14 percent; junior, 21 percent; and senior, 51 percent (Pickett, 1996). However, it is possible that not all persons with mobility or visual impairments were registered with the ODA.

To find additional interview participants, snowball sampling (Lincoln & Guba, 1985) was used. Several persons having contact with students with disabilities were asked to refer students to the study. These persons included (a) the Director of the Office of Disability Accommodation and a staff member, (b) manager of the Adapted Computer Lab, (c) Associate Dean of the College of Education, and (d) coach of the wheelchair
basketball team. Additionally, notices were posted at the Adaptive Computer Lab, ODA, and campus offices of Texas Rehabilitation Commission. Additionally, interview participants were asked to refer other UNT students they knew who had mobility or visual impairments.

Four students meeting the sample criteria of the study returned the survey packet but did not sign the interview consent form. A profile was written from the Phase I data and forwarded to ODA. An employee of ODA was requested to personally ask those students to participate in the study. Each student was informed of the study, but each chose not to participate.

Sampling was terminated at 16 after the sampling frame was exhausted (Denzin, 1978; Lincoln & Guba, 1985), and continued efforts to secure interview participants resulted in no new participants. This number was acceptable according to the guidelines of Lincoln and Guba (1985):

In interviewing members of some particular group it is usual to find that a dozen or so interviews, if properly selected, will exhaust most available information: to include as many as 20 will surely reach well beyond the point of redundancy. (p. 234)

**Data Collection**

**Phase I.** All students identified by the ODA as having a physical disability (n = 97) were mailed Phase I materials. Each person received the CHART, Demographic Profile Sheet, Activity Participation Form, Interview Consent Form, and an addressed, stamped return envelope. The mailing was done through the ODA on September 12,
1996, by first-class mail. Returns were requested by September 27. Seventeen packets were returned to sender as undeliverable, resulting in 80 delivered packets.

To protect the confidentiality of the students with disabilities, the investigator did not have access to names, addresses, or telephone numbers. Personal information was available to the investigator only when an interview consent form was returned completed. A reminder letter was mailed on September 25, 1996, to the original mailing list minus the names of the 17 previously undeliverable addresses and 12 other names of students who had already returned the packet including the interview consent form, thus releasing their name and address. The letter reminded recipients to complete and return the instruments by an extended deadline of October 3, 1996. Recipients were invited to telephone the investigator with questions if they had not received the initial mailing. Six calls were received from recipients asking to be sent the initial mailing, which was done on the day of each call.

Phase II. In-depth interviewing began on November 5, 1996, and was completed on January 30, 1997. Prior to each interview, the participant was called or e-mailed to confirm the date, time, and location of the scheduled interview. To prepare for each interview, the investigator reviewed results of the CHART, Demographic Profile, and Activity Participation Form to gain familiarity with the participant.

All interviews were conducted by the primary investigator of the study and took place in a private office. Before the interview began, participants were asked to choose a pseudonym for the study. All other names of friends, organizations, and assistive animals have been changed to pseudonyms selected by the investigator. Each interview began
with a review of the purpose of the study and confidentiality, and an overview of how the interview would proceed (Lincoln & Guba, 1985). Next, general questions were asked to clarify initial information and to gain additional general information. This served as a means to develop rapport and familiarize the interviewee with the process. Interviews lasted an average of 1 hour with a range of 45 minutes to 2 hours. The one 2-hour interview was in part due to communicating with a participant who had severe verbal deficits.

Interviews followed a semistructured interview guide to assure that all pertinent information was gathered from all subjects (see Appendix E). The interview guide allowed for flexibility of order and wording and enhanced the conversational flow of the interview. The guide format grouped like questions, moving from simple to complex and from behavioral to interpretive (Patton, 1990). The importance of individual stories was emphasized by asking the participants to tell their own stories. Each interview was started with a question such as “Please describe yourself, tell me who you are, and how you became that person.”

Each interview concluded with the interviewer summarizing the session and soliciting a member check (Lincoln & Guba, 1985; Miles & Huberman, 1984). The participants responded to the summary by clarifying their comments or giving additional information. In each case, additional discussion ensued until both parties agreed that a good understanding had been achieved. Beginning with the first interview and continuing throughout the process, questions were added or probed differently in relationship to topics of previous interviews. One topic discussed more in later interviews was
reciprocity of interactions. The stories of initial participants raised additional questions about how people form their perceptions of social integration. Probes were added to learn more about giving and receiving social affirmation.

**Phase III**. Beyond verbal member checks (Lincoln & Guba, 1985; Miles & Huberman, 1984), which concluded each interview, each participant received a draft interpretation of their transcript. Each participant was asked to review a draft interpretation and to provide input on the truth of the general understandings developed. Revisions suggested by participants were made as needed.

**Data Recording**

Two audiotape recorders were used to record interview sessions. Lapel microphones were used on one recorder to enhance quality (Henderson, 1991). The second recorder was used as a backup.

Each participant was assigned a code number used to label Phase I instruments, the interview guide with notes, interview tapes, and transcripts. Tapes were transcribed by a paid transcriptionist. Each taped session was recorded into a separate computer file. Upon completion by the transcriptionist, the investigator reviewed printed transcripts while listening to interview tapes. This was done to insure accuracy of the transcripts. After transcription, a backup computer file and a hard copy were stored (LeCompte & Preissle, 1993) in a locked private office.

During each interview, the investigator took brief notes of additional questions and to assure adherence to the interview guide. Immediately following each session, the
investigator expanded notes from memory as needed (K. Henderson, 1995).

Additionally, each interview tape was reviewed within 24 hours.

Procedure for Data Analysis

Data analysis began with the first interview and continued through completion of writing this document. Phase I data were compiled into a descriptive matrix. The scoring procedures that accompanied the CHART instrument included weighting various behaviors based on values held by general society. The weights were determined through literature review and expert evaluation done while testing the validity of the CHART (Whiteneck et al., 1992). An example of weighting was that hours of paid employment were doubled and added to the actual hours of volunteer work, implying the social value of paid work over nonpaid work. In the area of social integration, living with a significant other was weighted more than living with a paid attendant. Living with a significant other implied a higher level of social integration than living with an attendant.

What was perceived by undergraduates with physical disabilities as influencing their social integration was analyzed. Initial data coding to categories was done according to the research questions and the interview guide (Patton, 1990). Once initial relationships between and within categories were identified, rules of inclusion and exclusions were developed (K. Henderson, 1991; Lincoln & Guba, 1985; Miles & Huberman, 1984).

Transcripts were read and reread, and remarks were placed in the margins. During the first reading, coding was done according to the a priori categories of noncollegiate, parental, background, and collegiate. Subsequent reading included coding
to smaller themes within categories and refinement of rules of inclusion and exclusion. Coding was transferred to Ethnograph 4.0, and printed documents by categories were produced. Compiled categories were then read, and further subdivided, and explained. Issues unrelated to explaining perceived influences on collegiate social integration were omitted.

Continually throughout data collection and analysis, data were compared and contrasted into homogeneous and sensible categories (LeCompte & Preissle, 1993). Consistent with constant comparison (Glaser & Strauss, 1967), new questions were addressed with subsequent interviews as questions arose from analysis. When no contradictions were unexplained, or when no more data were relevant, saturation was assumed to have occurred (Denzin, 1978).

Trustworthiness

The validity and reliability of qualitative data cannot be measured in ways typical of quantitative designs. Trustworthiness was addressed related to applicability, consistency, and truth value (Lincoln & Guba, 1985). Additionally, the biases of the investigator were identified.

Applicability

Comparability and transferability of the data were addressed. To improve comparability, a thorough description of the setting and sample was provided (Denzin, 1978). This information was obtained through the review of the University of North Texas, (1995-1996) catalogue. A description of the sample with physical disabilities was obtained from internal records of the Office of Disability Accommodation and reported to
explain the sample. Additionally, descriptive data from Phase I were used to describe the sample of students with physical disabilities and time from which they were drawn (Denzin, 1978).

Transferability of data was enhanced through a thorough description of the methodology of this study. As issues, questions, or revelations occurred, documentation was made in the journal for consideration during future interviews or during analysis (Miles & Huberman, 1984). The methodology was reviewed by an expert in qualitative research who was otherwise not associated with the study.

Consistency

Data were collected until a frequency or regularity was achieved in multiple instances. To challenge the consistency, persons with various characteristics and levels of social integration were included in the study. Data analysis was consistent with the process of constant comparison (Glaser & Strauss, 1967). Transcripts were read and coded into explanatory units. Additional readings resulted in units being collapsed or further divided until mutually exclusive, definable categories emerged.

Truth Value

Several techniques were used to increase the truth of the data. The use of the expert panel and pilot administration of Phase I instruments and the interview guide aided in eliminating researcher bias. During the interview phase, data cases were sought that severely test categories and/or negate inferences constructed in the analysis (Miles & Huberman, 1984). A thorough knowledge of the participants and setting was achieved through the investigator’s previous 4 years of interaction with the university and over 15
years of working with persons with disabilities. Contact with subjects was increased through both the review of Phase I data and continual learning from ongoing interviews.

Truth was also tested by member checks (Lincoln & Guba, 1985) in which participants reviewed transcripts and interpretations and provided input on the validity of the work. A narrative description of each participant was written from Phase I data and the interview transcripts. Upon completion of the profile, each was read and compared with the original transcript to assure accuracy and completeness.

Researcher as Instrument

Acknowledgment of investigator bias is essential to qualitative research. This study was approached to cross-disciplinary interests of higher education and therapeutic recreation. Consequently, persons with disabilities were studied, and social integration into the university community was emphasized. Weidman's (1989) model of undergraduate socialization acknowledged the academic pressure of the institution, including the institutional mission, size, and academic reputation. Based on the interests of the investigator, academics were de-emphasized to focus on the social indicators and influences.

More than 15 years of experience working with people with disabilities in various settings influenced this investigator's interpretation and understanding. An unstated a priori hypothesis that institutions of higher education do not provide environments in which students with disabilities are socially integrated provided the impetus for this study. In an attempt to front bias, the investigator listened carefully to the stories of each
individual, being conscious to avoid leading the participants. Questions and statements were presented from both positive and negative perspectives.

During analysis of Phase I results, concern for a lack of understanding about how students without disabilities would respond led to the administration of Phase I instruments to a convenience sample of undergraduates without disabilities. This was not done to provide comparative data; it was done only to "check" the biases of the investigator.
CHAPTER 4

FINDINGS

Descriptive findings were presented from Phase I to describe the sample from which interview participants were drawn. Comparison of demographic information was given between Phase I and Phase II participants to show the representation of the interview sample. For each interview participant, a narrative profile represents the unique story of each individual. Because this study was based on Weidman’s (1989) Model of Undergraduate Socialization, the chapter concludes with the clustering of findings in relation to the model.

Phase I

Although 97 survey packets were mailed, 17 were returned as undeliverable. Eighty survey packets were delivered to persons identified by the Office of Disability Accommodations (ODA) as students with physical disabilities. Forty-eight packets (60%) were returned; however, 17 packets from graduate students were eliminated from the study. A total of 31 undergraduates with physical disabilities participated in Phase I. The sample consisted of 19 (61%) females and 12 (39%) males, with an average age of 31.9 years and a range of 22 to 52 years. The mode was 5 persons at age 22.

Table 1 compared demographic information between the screening sample and the interview sample. Of persons who responded to Phase I, the majority were EuroAmerican (75%) and seniors (65%). Eight persons identified themselves as of ethnic
minority descent, including Mexican American (4), Native American (2), Pacific Islander (1), and African American (1). Class rank included 2 freshman (6%), 5 sophomores (16%), 4 juniors (13%), and 20 seniors.

Six disabilities were represented. Visual impairments (29%) and spinal cord injury (22%) were the most reported disabling conditions. Sixteen percent of the sample reported arthritis as their primary impairment. Additionally, respondents reported orthopedic impairments (16%), cerebral palsy (6%), and acquired brain injury (9%).

The majority of students reported academic majors related to human services. Thirty-five percent of the respondents were students within the School of Community Services. Majors included rehabilitation, criminal justice, and aging studies. Other respondents were from the College of Education (30%), College of Arts and Sciences (22%), and College of Business (10%) and 1 person was undeclared.

Eighteen students reported being single, never married. Additional single students included five divorced students and 1 widowed student. Of five married students, four currently lived with spouse.

Only seven students lived in university dorms with another nine students living within the city limits, but off campus. Fifteen students commuted to campus from outside the city limits.

Phase II

Sixteen students who returned the consent to be interviewed form and self-identified themselves as having mobility or visual impairment participated in interviews in Phase II. This represented 33 percent of the Phase I respondents. Persons with
Table 1

Demographic Characteristics of Sample

<table>
<thead>
<tr>
<th>Class rank</th>
<th>Phase I (n=31)</th>
<th>Phase II (n=16)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>2 (6%)</td>
<td>0</td>
</tr>
<tr>
<td>Sophomore</td>
<td>5 (16%)</td>
<td>2 (12%)</td>
</tr>
<tr>
<td>Junior</td>
<td>4 (13%)</td>
<td>4 (25%)</td>
</tr>
<tr>
<td>Senior</td>
<td>20 (65%)</td>
<td>10 (63%)</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EuroAmerican</td>
<td>23 (74%)</td>
<td>12 (75%)</td>
</tr>
<tr>
<td>Mexican American</td>
<td>4 (13%)</td>
<td>3 (19%)</td>
</tr>
<tr>
<td>Native American</td>
<td>2 (6%)</td>
<td>0</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>1 (3%)</td>
<td>1 (6%)</td>
</tr>
<tr>
<td>African American</td>
<td>1 (3%)</td>
<td>0</td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>18 (58%)</td>
<td>10 (62%)</td>
</tr>
<tr>
<td>Divorced</td>
<td>5 (16%)</td>
<td>3 (18%)</td>
</tr>
<tr>
<td>Married</td>
<td>5 (16%)</td>
<td>2 (12%)</td>
</tr>
<tr>
<td>Unmarried living together</td>
<td>2 (6%)</td>
<td>0</td>
</tr>
</tbody>
</table>

(table continues)
<table>
<thead>
<tr>
<th></th>
<th>Phase I (n=31)</th>
<th>Phase II (n=16)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Residential status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Out of town</td>
<td>15 (48%)</td>
<td>5 (31%)</td>
</tr>
<tr>
<td>Off-campus, in town</td>
<td>9 (29%)</td>
<td>7 (43%)</td>
</tr>
<tr>
<td>Dormitory</td>
<td>7 (22%)</td>
<td>4 (25%)</td>
</tr>
<tr>
<td><strong>Disabilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visual</td>
<td>9 (29%)</td>
<td>6 (37%)</td>
</tr>
<tr>
<td>Spinal cord inj</td>
<td>7 (22%)</td>
<td>5 (31%)</td>
</tr>
<tr>
<td>Arthritis</td>
<td>5 (16%)</td>
<td>0</td>
</tr>
<tr>
<td>Orthopedic</td>
<td>5 (16%)</td>
<td>2 (12%)</td>
</tr>
<tr>
<td>Cerebral palsy</td>
<td>2 (6%)</td>
<td>2 (12%)</td>
</tr>
<tr>
<td>Brain injury</td>
<td>3 (9%)</td>
<td>1 (6%)</td>
</tr>
<tr>
<td><strong>Academic major by college or school</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School of Comm Serv</td>
<td>11 (35%)</td>
<td>7 (43%)</td>
</tr>
<tr>
<td>College of Education</td>
<td>9 (30%)</td>
<td>4 (25%)</td>
</tr>
<tr>
<td>College of Arts &amp; Science</td>
<td>7 (22%)</td>
<td>2 (12%)</td>
</tr>
<tr>
<td>College of Business</td>
<td>3 (10%)</td>
<td>2 (12%)</td>
</tr>
<tr>
<td>Undeclared</td>
<td>1 (3%)</td>
<td>1 (6%)</td>
</tr>
</tbody>
</table>
The average age of interview participants was 30.6 years, with 9 persons being 26 years of age or younger. Participant ages ranged from 22 to 52 years (see Table 3). The interview sample consisted of 9 females (56%) and 7 males (43%), 87 percent of whom were not currently married.

Community Services (43%) was the college or school most identified as the participants major, followed by Education (25%) (see Table 3). Thus, 68 percent of the participants were majoring in a human service field, including rehabilitation, aging, criminal justice, special education, or therapeutic recreation.

Participants in Phase II scored slightly higher on the CHART (mean=93) than those in Phase I (mean=87). In contrast, physical independence scores were lower for interview participants (mean=87) than for the screening sample (mean=90) (see Table 2).

A narrative description of each participant follows. Each participant's story is told within the framework of precollege, institutional, and external experiences perceived as influencing social integration into the campus community.

Narrative Profiles of Students with Visual Impairments

**Jane**

**Background.** Jane was raised in a rural South Texas town. A retinal disease at birth left her legally blind. The nonprogressive eye impairment resulted from the retina’s
Table 2

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Phase I (n=31)</th>
<th>Phase II (n=16)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Range</td>
<td>Mean</td>
</tr>
<tr>
<td>Social</td>
<td>45 - 100</td>
<td>87</td>
</tr>
<tr>
<td>Independence</td>
<td>38 - 100</td>
<td>90</td>
</tr>
<tr>
<td>Mobility</td>
<td>71 - 100</td>
<td>96</td>
</tr>
<tr>
<td>Occupation</td>
<td>36 - 100</td>
<td>90</td>
</tr>
</tbody>
</table>

tearing and hemorrhaging. With correction, her vision was limited to 20/200; she could see distant objects using a telescopic device. She described her vision:

The only thing that hinders me from it [impairment] is I don’t drive, of course. I have trouble seeing things from a distance, so it is hard to see people’s faces from a few feet away. If I go out to eat at a restaurant, I can’t see the menu.

Through the third grade Jane attended a special education class for children with visual impairments. Being in a very sheltered classroom where I was with kids that had problems like I did and could understand what was going on, there wasn’t a lot of taunting and teasing and name-calling. Fourth and fifth grade were terrible; those two years I would go home crying—they called me all these names. I had to deal with that and was very much an introvert for a long time because of it. It wasn’t until after high school really, I came out of it a little bit.
Table 3

**Background Characteristics of Interview Sample**

<table>
<thead>
<tr>
<th>Name</th>
<th>Age</th>
<th>Sex</th>
<th>Residence</th>
<th>Marital</th>
<th>Major</th>
<th>Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ryan</td>
<td>22</td>
<td>M</td>
<td>Off</td>
<td>Single</td>
<td>Arts &amp; Sci</td>
<td>Senior</td>
</tr>
<tr>
<td>Rena</td>
<td>22</td>
<td>F</td>
<td>On</td>
<td>Single</td>
<td>Comm Serv</td>
<td>Junior</td>
</tr>
<tr>
<td>Fred</td>
<td>22</td>
<td>M</td>
<td>On</td>
<td>Single</td>
<td>Education</td>
<td>Junior</td>
</tr>
<tr>
<td>Nicole</td>
<td>22</td>
<td>F</td>
<td>Commute</td>
<td>Single</td>
<td>Education</td>
<td>Junior</td>
</tr>
<tr>
<td>Joshua</td>
<td>22</td>
<td>M</td>
<td>Commute</td>
<td>Single</td>
<td>Arts &amp; Sci</td>
<td>Junior</td>
</tr>
<tr>
<td>David</td>
<td>23</td>
<td>M</td>
<td>Off</td>
<td>Married</td>
<td>Business</td>
<td>Senior</td>
</tr>
<tr>
<td>Spike</td>
<td>25</td>
<td>M</td>
<td>On</td>
<td>Single</td>
<td>Education</td>
<td>Senior</td>
</tr>
<tr>
<td>Jeremy</td>
<td>26</td>
<td>M</td>
<td>On</td>
<td>Single</td>
<td>Comm Serv</td>
<td>Junior</td>
</tr>
<tr>
<td>Jewell</td>
<td>26</td>
<td>F</td>
<td>Off</td>
<td>Single</td>
<td>Comm Serv</td>
<td>Senior</td>
</tr>
<tr>
<td>Kissa</td>
<td>31</td>
<td>F</td>
<td>Off</td>
<td>Single</td>
<td>Education</td>
<td>Senior</td>
</tr>
<tr>
<td>Angie¹</td>
<td>31</td>
<td>F</td>
<td>Off</td>
<td>Single</td>
<td>Undecl</td>
<td>Soph</td>
</tr>
<tr>
<td>Jane</td>
<td>35</td>
<td>F</td>
<td>Commute</td>
<td>Married</td>
<td>Arts &amp; Sci</td>
<td>Senior</td>
</tr>
<tr>
<td>Mary¹</td>
<td>37</td>
<td>F</td>
<td>Off</td>
<td>Divorced</td>
<td>Comm Serv</td>
<td>Senior</td>
</tr>
<tr>
<td>Jill¹</td>
<td>45</td>
<td>F</td>
<td>Off</td>
<td>Widowed</td>
<td>Comm Serv</td>
<td>Senior</td>
</tr>
<tr>
<td>Kip</td>
<td>49</td>
<td>M</td>
<td>Commute</td>
<td>Divorced</td>
<td>Comm Serv</td>
<td>Senior</td>
</tr>
<tr>
<td>Melody</td>
<td>52</td>
<td>F</td>
<td>Commute</td>
<td>Divorced</td>
<td>Comm Serv</td>
<td>Senior</td>
</tr>
</tbody>
</table>

¹Hispanic
Table 4
Characteristics of Disability Within Interview Sample

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Age of onset</th>
<th>Independence</th>
<th>Social</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ryan</td>
<td>Visual</td>
<td>11 years</td>
<td>99</td>
<td>100</td>
</tr>
<tr>
<td>Rena</td>
<td>Cerebral palsy</td>
<td>Birth</td>
<td>38</td>
<td>100</td>
</tr>
<tr>
<td>Fred</td>
<td>Cerebral palsy</td>
<td>Birth</td>
<td>100</td>
<td>95</td>
</tr>
<tr>
<td>Nicole</td>
<td>SCI</td>
<td>21 years</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Joshua</td>
<td>SCI</td>
<td>18 years</td>
<td>38</td>
<td>100</td>
</tr>
<tr>
<td>David</td>
<td>Visual</td>
<td>Birth</td>
<td>98</td>
<td>100</td>
</tr>
<tr>
<td>Spike</td>
<td>Arthrogryposis</td>
<td>Birth</td>
<td>98</td>
<td>100</td>
</tr>
<tr>
<td>Jeremy</td>
<td>SCI</td>
<td>22 years</td>
<td>38</td>
<td>100</td>
</tr>
<tr>
<td>Jewell</td>
<td>Visual</td>
<td>Birth</td>
<td>89</td>
<td>100</td>
</tr>
<tr>
<td>Kissa</td>
<td>Visual</td>
<td>Birth</td>
<td>100</td>
<td>97</td>
</tr>
<tr>
<td>Angie</td>
<td>SCI</td>
<td>27 years</td>
<td>100</td>
<td>75</td>
</tr>
<tr>
<td>Jane</td>
<td>Visual</td>
<td>Birth</td>
<td>96</td>
<td>89</td>
</tr>
<tr>
<td>Mary</td>
<td>Arthrogryposis</td>
<td>Birth</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Jill</td>
<td>Cerebral ataxia</td>
<td>38 years</td>
<td>70</td>
<td>75</td>
</tr>
<tr>
<td>Kip</td>
<td>Visual</td>
<td>Birth</td>
<td>93</td>
<td>100</td>
</tr>
<tr>
<td>Melody</td>
<td>SCI</td>
<td>48 years</td>
<td>100</td>
<td>87</td>
</tr>
</tbody>
</table>
In high school Jane was in choir, drama, and a career club. She had a group of friends and “got to do almost everything I wanted to.” She maintained some of these friendships for a couple of years after high school. “I grew up in a little town where everyone knew everyone. Once they graduated they wanted to get out of town.” She was also active in her church during high school and met her future husband at a church social.

Jane did not receive pressure from her parents, nor does she remember being expected to attend college. Her mother attended a university for 1 year; however, no one else in her immediate family attended a university. Soon after marrying, Jane commuted to Sam Houston University, but she quit after 2 years to take care of her new daughter.

After 8 years of staying home with her daughters, Jane returned to the university. She stated that she did not choose to return to college for its social opportunities, but rather to meet her academic goals. She did not expect to be socially involved, in part because of the realization of the impact of commuting to campus and her desire to spend free time with her family.

In-college experiences. Jane now lives with her husband and two daughters, aged 8 and 5. He is a university graduate and is supportive of her educational pursuits. That was not the case when she initially returned to school. He was apprehensive about the loss of her income and the home schooling of their children.

Jane is a speech pathology major and, although classified as a senior, she has two years until expected graduation. She has commuted 20 miles to campus using the [SPAN] transportation network since the spring of 1995. The typical transportation time
is 45 minutes to 1 hour each way. Additionally, she waits from 2 to 4 hours after her classes for her scheduled pickup. Sometimes she wishes she could just go home: “Gosh, I am so tired. I don’t want to stay up here until 6:15 [p.m.]. I really wish I could go home right after class and just kind of relax and take it easy.”

To pass the time awaiting her transportation, Jane takes care of university business, studies, or visits at the Baptist Student Union (BSU). She has not formed friendships there that generalize away from campus, but she enjoys the interaction at the BSU.

It’s laid back and they usually have some music playing and people are talking and playing around. It’s a really relaxed atmosphere. It’s not like you have to be quiet because someone is studying, or you can’t be rowdy. Other people are friendly.

Jane is a member of Golden Key National Honor Society and the speech majors club. She has developed friendships with her classmates.

Now that I am into my major and into the junior and senior level courses, a few [students] are the same in my other courses. So we talk about the classes, and we talk about what we are supposed to be doing in here. We get together in class and talk. There are two girls, and we’ve been occasionally getting together if we’ve got a break between classes.

Much of Jane’s nonschool life is involvement with her family. When asked about her best friend, she without hesitation claimed her husband. She and her husband have a volunteer ministry, and they perform at prisons, homeless shelters, and other
institutions almost every weekend. Jane sings, and her husband works the sound equipment. Typically, their children accompany them on the trips.

Jane maintains friendship with a mother with whom she now shares child care and home schooling responsibilities.

Mainly I have got a couple of good friends that have children and we usually swap off on babysitting. So then we get to see each other and talk a little bit. I am so busy that I don't have time really to go out and do a lot like I used to. It is always I have to go study.

She expressed her greatest barrier to increased involvement. "It's just limited because I commute, for one thing—because I have a family and I have kids and other responsibilities that most college students don't have." She is made aware of social opportunities by reading the campus newspaper and bulletin boards.

I wanted to, at times, to get involved in some of the activities they have, but I just don't have the opportunity. Usually when they have a meeting or some activity going on it always seems to fall on the days I am not here.

In relation to her expectations, Jane is satisfied with her social involvement at the university.

Being that I am older, not old-old, but older than the majority of the students, there are times I think I really don't fit because I am 35. But I start talking to them and just being friendly and showing that I am interested in what they have to say. Then they will do the same thing too. I have always found that people, at first, if you have got any type of disability, being visual or mobile or whatever, people are
a little stand-offish at first. They really just don’t know how to approach you, and some won’t even talk to you at all. But most people will, if you make the first step and you initiate the talk first. You’ve got to be a little bit outgoing. You can’t just draw back and hope that someone is going to approach you and start talking to you. After awhile it gets to where its not the disability that they are focusing on, but its just the person. That’s the way it should be.

Also, she is focused on her education:

If I really got into a lot of social activities I would be afraid of what it would do to my grades, and I wouldn’t have time to study. My visual impairment doesn’t hold me back. I try to do as much as I can.

Ryan

Background. At a young age, Ryan was diagnosed with Stardarts, a nonprogressive disorder similar to macular degeneration. His corrected vision of 20/200 in one eye and 20/400 in the other categorized him as legally blind. He participated in basketball, track, and football until the ninth grade yet had few friends. “In junior high I got teased a lot. I had glasses like an inch think and I couldn’t see the chalk board and I’d get teased about that. High school there was a little bit [teasing].”

In the tenth grade Ryan began working at a local grocer and did little socializing with high school peers.

I guess I was too shy or something. Maybe if I was driving I would date more because I would do more things. I would be more assertive calling people and
asking them to do stuff. I don’t have the car and I just can’t run out and do whatever.

His primary social group was made up of people from work whom he continued to see after high school. “For probably a year afterwards [quitting his job], but everybody kind of went their own way.” He could obtain 20/40 vision using a bioptic lens, which enabled him to get a drivers license. The lens results in vision similar to a telescope, but with a limited field of vision and with limited peripheral vision. Due to his own discomfort with the safety of driving, he stopped.

In-college experiences. Ryan lives in Denton with his family of origin, including both parents and three brothers. This decision was based on convenience and economics because two of his brothers are also college students. He occasionally cycles and/or camps with one brother and attends most University of North Texas home football games with his 11-year-old brother. Interaction with other family members involves dinner and occasional television watching.

Ryan is now a 22-year-old senior majoring in economics. He is an honor student and a member of Golden Key National Honor Society. He is committed to his goal of graduating this semester.

At this time he is not involved in any noncampus group. He does eat most lunches at the student union, but typically alone. “I will go eat right quick; it’s not like a big social deal” and then goes someplace quiet to study. He did play intramural football for one semester, initially to fill in for a night and eventually playing the whole season.
Ryan’s primary mode of transportation is a bicycle. Having lived in Denton his whole life, he is oriented to the streets and intersections in Denton. The five-mile commute takes an average of 20 minutes.

His best friend is one he has known since high school. The two of them go camping, fishing, or other participate in outdoor events. He spends time also with a friend he met at the UNT cycling club. Cycling is not only his primary mode of transportation, but also his primary leisure pursuit. “It’s freedom for me, just getting out there on the open road and going. It’s great exercise. I love the feeling I get when I am out riding.” His friend calls him to initiate trips and drives him to area cycling events. “In the cycling club I don’t think too many people know about my eye condition. There’s a few people.”

Ryan’s friends invite him out and he occasionally double dates to overcome the deficit of not driving.

My friends are always wanting to set me up and stuff like that. It’s usually kind of a group thing. They know that when we are talking about going someplace, they know I can’t drive. They will offer rides to me.

Also about one night a week, he goes to a local bar.

He does not believe that his visual impairment has hindered him considerably. It probably slows me down some, just because not being able to drive. It definitely slows me down that way. If I need to go somewhere and I can’t ride my bike, I have to find a ride. There are times it might get in the way a little bit, but
in the bigger picture it really hasn’t impacted me. I could have done almost anything I wanted to do.

Ryan did not expect his social life to change when he entered the university, primarily because of his decision to continue living with his family. He feels he is more accepted now than in high school, although he wishes he had been even more involved. “I don’t always feel like I fit in, but most of the time.”

Kissa

Background. Legally blind since birth, Kissa lived in the Colorado School for the Deaf and Blind until age 16. Life at the school was very structured; social events were planned for the students, and they were expected to attend. There she had a choice to attend or not, but if she chose not to participate in the structured activity, there was nothing else to do.

Kissa estranged herself from her family of origin, in part due to anger about her institutional placement. At age 16 she left school and the state to live with a boyfriend whom she eventually married. She continued her schooling at the public high school, but developed no friendships among her high school peers.

For one thing, a lot of the things that they liked to do, I didn’t like to do. I wasn’t interested in drinking parties, drugs, and going to the football games and prom.

Very few people are my friends, everyone else is an acquaintance, no matter how often I see you I still consider you an acquaintance. I don’t know how you come from acquaintance to friend, I don’t know that. I know I have really few friends.
The marriage resulted in the birth of a daughter who is profoundly mentally retarded. Following her divorce, Kissa cared for her daughter alone at home for about 8 years. She had limited social contact during this time, due in part to the demands of being a single parent. "I got depression from just being at home isolated with my daughter."

Kissa placed her daughter in a residential facility when she became too big for one person to care for in such things as lifting, transferring, and changing. Once a month she rides a bus four hours, sleeps in the lobby of the school, and then spends the next day with her daughter.

Kissa had a dream of opening a state of the art developmental center for persons with behavior difficulties. She wanted to receive an education so she could get a job that would support her. "I felt like I didn’t want to be on the system just because of the fact that people generally look down and you feel bad about yourself."

She transferred to the university from a community college where she had become socially active, and formed friendships there that she still maintains. Prior to coming to the university Kissa did not expect to make many friends, but she did expect to make acquaintances.

**In-college experiences.** Kissa’s social life at UNT has slowed. "I am a senior in my special education classes; therefore, there is a lot of research and that type of thing. So I don’t get to socialize as much as I used to.” She eats lunch and studies with her classmates.

In special education, because it is a structured program, you are with the same group of people basically all the way through. Because of that you go out to eat,
you talk, you laugh, you study together and that sort of thing. Therefore, I really
doen kind of have a clique. It’s the whole class, but it is still a clique. I do feel like
I fit in. I think we are all the same type of people, caring and compassionate and
really concerned about the handicapped society and how we can help. We have
similar goals and similar interests and similar dreams, which makes us fairly
close.

She attends the special education majors club twice a month. “It is very informative.
They talk about autism or different topics that’s in the special education field.”

Kissa lives with a roommate in Denton. Her apartment is within walking distance
of campus, as walking is Kissa’s primary mode of transportation. Her roommate has a
car and provides transportation to the grocery and to visit her boyfriend. “It is nice to
have a roommate, but you don’t want to kill her with ‘take me here, take me there, be my
chauffeur.”

Kissa’s roommate is the sister of her boyfriend and was responsible for
introducing them.

I was in the Chat sitting there, and his sister came and approached me. We started
talking and we became friends and then one weekend she said, “do you want to go
to Arlington?” And I said fine. I met her brother and her brother asked me out on
a date and I said, well OK.

With her boyfriend and his friends Kissa participates in Dungeons and Dragons, goes to
movies, bowling, or plays darts.
She does not participate in campus activities, “Basically, I just don’t think of it. I guess if someone asked me to do something, I would do it, but otherwise I just don’t think about it.” She is aware of social opportunities on campus as she reads the paper and bulletins. However, she rarely attends.

I pretty much chose what I want to do. I mean I probably would if someone asked me if I wanted to go to the football game or something. I would say ok, fine let’s go, if I didn’t have anything else to do. It is not that I am opposed to it. If it were a frat party thing or something, I am not going to do that. That is just not who I am. I don’t want to get drunk and rowdy.

Kissa feels that the thing that holds someone back is “their own fear of trying, their own fear of people, their own fear of failure, just fear in general. Socially, I have never had a problem. I am a very friendly person, and I just meet people.” She is satisfied with her current social life, but feels it is impacted by her personality, age, and preferences.

Part of it is just that I am busy or haven’t thought about doing certain things on campus. If Stephen King came to campus, I would be the first one to get a ticket because I love Stephen King. So maybe it was more like my interest level.

She feels that socialization is dependent on attitude. “Yes, I have a visual impairment. Yes, there are things I need help with, but, no, I am not handicapped.”
Jewell

**Background.** Jewell has been legally blind since birth but the impairment was not progressive. She has no sight in one eye and tunnel vision at approximately 20/83 in the other. The neurological problem was not correctable by assistive devices.

I can tell that things are there. Sometimes I see them far away, straight ahead. I can tell where the lights are, whether they are cars, motorcycles, stop lights. Two lights on the front of an object is a car, especially if they are coming at you.

Jewell ambulates with a cane, both for visual difficulties and due to a secondary impairment of cerebral palsy.

Jewell had mixed opinions about her high school social life.

I wanted to do social stuff, but it was the typical, normal, everyday things. I didn’t want to go making out with people in the back of cars. I wasn’t interested in dating because I hear the sob stories every week about who broke up with whom, and I was like is, this pity party time or are we in class? I wanted social stuff, but not that.

She did not even try to fit in to the high school mold. She felt that her visual impairment was not the cause of taunting, but rather it was because she “was vocal about what they were doing was wrong.”

Neither of Jewell’s parents attended college, nor did they expect her to go to college.
Honestly, if you want my opinion, they didn't expect me to get this far. I don't think that they expected me to get through high school. I think my mom probably expected my brother to be taking care of me.

She has not seen her biological father since 1984, but maintains occasional contact with her mother who lives 30 mile from campus. Her grandparents, her grandmother especially, always wished for Jewell to go to school.

In-college experiences. Jewell transferred to the university from community college, where she completed her associate degree. After several changes, she is majoring in criminal justice, with a particular interest in criminal offenders.

She is satisfied with her minimal campus social involvement. "I must focus on getting out of here. I don't think disability has anything to do with it. It is just that I am 26 years old and a senior and I have been in school for 7 years." She expected UNT to be a "suitcase college" and for there not to be a lot of social activity. In general, her social activity is limited by transportation, "not getting to get where I need to go, and having to use other people to do it." She is learning to use the SPAN public transportation system, but does not do so yet.

Jewell walks to campus and stays on campus between classes. She frequents the union and often visits with Kip and Jill or other campus friends. She views her fit at UNT as "middle of the road; I am not really conservative, and I am not really liberal. I don't dye my hair pink except at Halloween."

In her nonschool time, Jewel is active in her church, draws action figures, and writes mystery novels. Her primary social network is made up of her roommates whom
she met at church and other friends from the church. She attends church two times a week and more for social events.

Jewell is a caring friend to others, but she hesitates to depend on others for reciprocity. When asked about whom she could call to confide in, she replied that she just talks to herself. "I do what is called talking to myself. People think it's weird. I don't think it is weird. I have been doing it for years. I do it out loud." Telling others, she feels, only leads to hurt feelings. "Sometimes I long for human companion, but one where we know each other's minds a little, being able to tell them what I felt and it wouldn't hurt them."

Although Jewell is satisfied with social life, it has not been what she expected. "I expected it [social life] to be like what I saw on television, where you went there and you partied and you did work." She is aware of some campus opportunities through the paper and bulletins, but feels unaware of many activities because of lack of advertisement. "I don't hear a lot of advertising except for football games, and like I said, there is life outside of football." She frequently views the art displays or listens to the campus musicians. However, she is not interested in other campus activities.

Jewell does not feel a fit on campus but feels that fit is related to one's own attitude.

If a relationship is failing, there is problems on both sides of the coin. I was trying to get out, trying to find a niche for my life, and trying to get a degree. I don't think disability has anything to do with it.
David

**Background.** David, born with sight, lost his vision in two separate childhood accidents. His right eye was clawed out by a fighting rooster when he was 3 years old. Then, when he was 11, an exploding gun shell shredded his left eye. Both eyes were replaced with prosthesis.

David grew up south of Dallas in a rural area. His family home was on five acres, his grandmother lived in the next house, and they all had barns and horses. He graduated from high school with honors after competing on the swimming, cross country, and debate mock trial teams. He did not attend high school functions such as dances and sporting events, but rather “hung out” with his brothers and their friends at the stock sale. He was satisfied with life in high school, “I didn’t have any problems. Everybody knew me, that is for sure.” He expects that he received privileges, because of his visual impairment, that other students did not get. “I guess me being blind, they thought I was late because I got lost or something. I probably wouldn’t have been late if I could have seen.”

However, according to David, “The teachers at my school kind of took me under their wing. I guess they thought I had a lot of potential.” His teachers helped him secure scholarships to attend college. One teacher introduced David to Jerry, a friend of hers. Jerry was a graduate of the University of North Texas and was also blind. He told David stories of the Greek life of partying, drinking, and chasing women, and occasionally studying.
In-college experiences. David initially shared an apartment with Bobby, a student who was also blind. Bobby had graduated from the same high school as David, although they had not been friends.

I didn’t really have a home anymore because my mom left and my dad was gone and my brothers had gone and lived in different places. I didn’t live in the dormitory because dormitories shut down during Thanksgiving and Christmas and I would have to find some place to go. He [Bobby] showed me how to get around campus.

David moved out of Bobby’s apartment after a couple of months.

I got my own place, started hanging out with other people and, come to find out, there were purple-haired people and men dressed as women and I would go up to Fry Street and hang out and talk to people. I could go down the street and I was only 18 and the place down the street sold me beer. I would buy beer, order pizza. And then I would go to Fry Street and hang out with people and go home. Somebody would come home with me and we would just party every weekend. Then I met my wife and she calmed me down a lot. I was about to fail out of school.

David did not know what to expect at college.

I thought these college students were just bums and they just go to school and their parents pay for everything. Then come to find out there were a lot of people that were working through school. So it was a culture shock for me from what I thought college was and what it really was.
David is now a 23-year-old senior majoring in business computer information systems. He is an honor student and has received the business majors club scholarship. His wife is also a student, and they coordinate class schedules to assure care of their two children.

David ambulates on campus with Ace, his assistive animal. Caring for an assistive animal is time consuming, although having a dog increases David's independence.

I don’t like taking a cane somewhere I am not familiar. That’s one good thing about dogs, you don’t have to worry if you don’t know where you are at. With Ace, I don’t have to be as conscious about what is going on. I just kick back. I know most of the time he is going to stop at the street. He is not going to run me over a trash can. On the whole it is a lot easier. It’s more freedom. There’s a lot of responsibility to him. People think that, when you get a dog, that the dog is trained and that’s it. He weighs 90 [pounds]. Getting in and out of cars, getting under tables, under desks—it’s not the easiest thing in the world. Even if I didn’t have a dog, I wouldn’t sit at home. I would go up to the store on my own. I would walked to the Flying Tomato or something. I am not going to be trapped in a house because I don’t have a dog.

David is the only person in his immediate family pursuing higher education, and feels stigmatized by his family for his efforts. “My parents are more into the mind set of let’s just let the kids grow up and do whatever they want to do.” Contact with his family of origin has diminished since he has been in college. “My mother doesn’t ask, I tell her
about my grades. For the first couple of years I didn’t even tell her what my grades were, and she didn’t ask. She didn’t ask in high school either.” His relationship with his brothers has weakened since his college attendance. “We are a lot different now. We aren’t near as close as we used to be because of it. I am very different than I was then. They don’t say anything about it.”

During the summer months, David plays on a regional area beepball team. He attends practice once a week and travels to tournaments on weekends. He is also involved in a church and occasionally socializes with church friends.

The majority of David’s social life involves his wife, his proclaimed best friend. They enjoy watching movies, but usually at home.

It’s a lot of visual stuff. In the movie theater I have had people complain to the ushers for me to be quiet. Well, if I am sitting in a movie theater and I can’t find out what is going on, I am just going to go to sleep.

He also likes to exercise, take walks, and loves to watch professional football on television.

David attributes his social integration to his personality.

I would just talk to anybody. I don’t care who they are. That’s why I just sit outside and talk to people. That’s how I met so many people. I didn’t care who they were. I met people through the Office on Disabilities Accommodation.

He was a member of Alpha Phi Omega, a civic fraternity, and of Pi Sigma Epsilon a professional marketing organization, but he is no longer involved with either of those organizations. He does occasionally participate in recreational swim on campus but
finding out about other activities is a barrier. “You can’t read the UNT Daily, so you
don’t know about it.” He and his wife still occasionally “go out and go to Fry Street and
hang out. I go inside and order pizza. Just because I can’t see isn’t going to stop me.”

Kip

**Background.** Kip was diagnosed as legally blind when he entered the first grade,
although no cause was known. Because of his visual impairment, Kip had a visual
resource teacher but attended integrated classes. “I never had many friends. It seems like
everybody avoided me because I was different.” In high school he remembers being
called “blind boy” and other taunting names. At graduation he vowed never to go to
school again.

When he graduated, Kip continued trying to deny his visual impairment.

I wouldn’t make any friends, because to get friendly with somebody, to go places,
to visit outside of work, I had to tell them that I didn’t drive and all of that. So I
never had many friends in my working life.

Prior to attending the university, Kip was active in a blind bowling association.

He was the national champion for the partially sighted division for five consecutive years.
He would still bowl with that group except that the Dallas league disbanded last year.

During his second marriage, Kip’s life spiraled downward. He became depressed
and drank excessively. His failing health led to pneumonia and eventually to a diabetic
coma. The internal hemorrhaging of the eye worsened his sight and reduced his
employment options. He chose to return to school after the probability of total blindness
became imminent. He chose to return to pursue a degree in rehabilitation, with the hope of working with children with visual impairments.

I want to work with visually impaired kids, to try to help kids like me that are in that denial thing. Kind of toughen them up a little bit when they are young so that they can take those hard knocks and not have emotional damage from it.

In-college experiences. Kip lives with his sister and brother-in-law, about 25 minutes from campus. His sister is a UNT student, and he rides to campus with her. To accommodate both schedules, he arrives about 9:00 a.m. and is on campus until 5:00 p.m.

Kip is a member of Golden Key National Honor Society and the North Texas Rehabilitation Association (NTRA) student branch. He received the Dallas Chapter NTRA scholarship this year and was honored at a luncheon. He used to be a member of ACCESS, a social group for nontraditional students. “We tried and tried this last spring, I got burnt out on it because we would have meetings and we would advertise and have all these posters and just a couple of people would show up.” He is aware of other activities from reading the newspaper but usually does not attend due to a lack of transportation.

Kip has made friends at UNT but he has limited himself.

I haven’t made friends with anybody that doesn’t have a disability. I never really had what you would call a best friend I think a lot of it is my fault because I only let people get so close, like I had this wall around me. I would like to see people I know every place that I go. You know, know them well enough so that I can sit and talk to them about anything other than how are you doing in this class.
Kip also attributes his lack of many friends to his attitude about his age, which is 49 years, and to students’ misunderstanding of his impairment. He moves fluidly, and at first one does not realize his difficulty.

I have had friends that tell me that they thought I was stuck up when they first met me or been in class with me. I would never speak. They would say, I spoke to you before and you just go by, like I didn’t exist. Well, that’s because I didn’t see them. And lots of times in my life I have been embarrassed because somebody said hi and I thought they were saying hi to me, when they really were saying hi to somebody behind me.

His vision fluctuates between 20/400 and 20/600 with his blood pressure. To control his diabetes, Kip takes insulin injections two or three times a day. Insulin needs depend on diet and exercise. He admits that he fails to adhere to the recommended diet and that he smokes cigarettes. His sight is not improved by corrective devices and, due to retinopathy, the condition is worsening.

He was unsure how social life would be, due to his age. “I was thinking I don’t know how I am going to like being around all those 20 year olds all the time. I think my age has just as much to do with it [fitting in] as my visual problem.” Kip bought a home exercise machine rather than using university facilities because “I think those young guys would intimidate me. They would make me feel like a skinny old man.”

Kip hoped to make friends, but is bored with his current social life. “I visit there [ODA] just about every day. A lot of times I don’t need anything, I just know the people in there and they know me. It’s nice to go someplace where you are recognized.”
On weekends, he rarely leaves home. "I don’t think I have been out from the house on the weekends for over a month." A major barrier to his social life is not driving. When I was living here [near campus], I used to go to the movies and go out to get something to eat. You know, whatever I wanted, I would go there. I would walk there or take the trolley. On Saturdays and on Sundays it didn’t run. It about kills me to ask anybody to do anything for me or take me anywhere. [Not driving] compares to being dead and being alive, that’s about how much difference in our society. In our society, if you don’t drive, you are just about dead. You really are, and I don’t like it. You can say that going through life with disability is even more stressful than going through life without a disability, because it affects every aspect of you life. I would like to do it over again without a disability.

Narrative Profiles of Students with Congenital Mobility Impairments

Spike

**Background.** Spike was born with arthrogryposis, which limits his mobility and dexterity. In high school, his best friend was his younger brother, and they had few other friends. Neither of Spike’s parents graduated from college. They encouraged him to attend college and to obtain a degree in computers, a job they considered accommodating of his impairments. After graduation, Spike briefly attended Tarrant County Junior College (TCJC). He did not develop friendships and was eventually suspended because of grades. "In high school I didn’t do very good, and, like I told you, I got kicked out of TCJC. It is really a miracle that I made it this far."
Spike later entered the University of Texas at Arlington (UTA) with the goal of becoming a history teacher. He worked as assistant wheelchair basketball coach and developed many friendships through that involvement. The members of the team became his primary social group, and his outlook on life began to change, in part due to his interactions with the team members.

At UTA, I was around people every day that had the same kind of problems that I did, and we just kind of clicked. You are together everyday. It was kind of like a little brotherhood. They taught me it doesn’t matter what other people think. When we were in Arlington, everyone knew who you were because we won four titles.

He did not expect to be socially active when he transferred because he chose the university for degree purposes.

If the school was OK, then that was fine. I knew I wouldn’t spend too much time socializing up here and that I would be spending time in Arlington. I knew a lot of people at UTA on the basketball team, and I expected to be lonely [at UNT] and I wouldn’t know anybody.

In-college experiences. Spike transferred to the university from another 4 year institution to complete his teacher certification requirements. He is a 25-year-old senior anticipating graduation.

Although UNT is better than he expected, his primary social group has not changed. “A good friend of mine transferred up here. So that was cool, and then I started seeing people.” He still spends most weekends off campus with friends from UTA. They
go to clubs, play pool, or go to Casinos. "My really good friend that I go out with is worse than me. He is in a wheelchair. If we can get in free because of our disabilities, we just do it. Free valet parking and that stuff."

Spike lives on campus and occasionally participates in dormitory activities such as picnics, attending football games, or outings. He has tried to be more active on campus. He came to UNT with the goal of starting a wheelchair basketball team. For over a year, he worked toward this goal, but finally gave up. He was also interested in joining the billiards club.

I think you have to go out of your way to find out what is going on. Some of the clubs I have seen, they are busy doing their thing, and if you don't want to join they don't care. Like I was going to join the Billiards Club and I went and they didn't care if I was there.

Spike misses the network of students with disabilities that he experienced at UTA. He has made campus friends through the ODA, including Kip, Jill, and Mary. He would be interested in participating in a club or organization specifically for persons with disabilities. "What I don't like is they [UNT] don't have any physical fitness stuff here for people with disabilities." However, he has though used recreational facilities to work out.

Spike is an independent in self-care and driving a car. He does not feel that his disability interferes with his leisure pursuits. However, disability does somewhat interfere somewhat with socializing because people react to his disability. "There will
always be a barrier there, some people won't ever change. I used to be really worried about what people thought of me. [Now] I am satisfied with my social life.”

Rena

**Background.** Rena was not socially active in high school, nor was she satisfied with that experience. She had no debilitating stories of her high school experience, only that her peers were indifferent and that she had no friends. She belonged to the local United Cerebral Palsy, but because she lived with her elderly grandmother, she did not have transportation to attend functions. She made some friends at a vocational training program the summer between high school and college attendance. She was not particularly expected to attend college, and neither parent attended a university. She entered the university unsure of what to expect. “I didn’t really know how people would react, because like, in this age bracket, like they are self-centered. I know I am.”

**In-college experiences.** At freshman orientation, Rena met a man with cerebral palsy. He was succeeding in school and encouraged her. His major was rehabilitation, as was hers initially, and she too has been successful. Her success is demonstrated by her induction into Golden Key National Honor Society. She has recently changed her major to business computer information systems in hope of making more money.

Rena is a 22-year-old female with cerebral palsy. She is restricted to a wheelchair for mobility and requires attendant care 24 hour a day, 365 days a year. Rena is verbal, but her speech is labored and difficult to understand.

Her primary social activities occur off-campus. She spends most weekends with her primary social group at the country home of a friend. The group consists of a doctor
and several persons she met through a vocational program before entering the University of North Texas. Beyond good friends, Rena enjoys the privacy she has in the country. "I like to go out for the weekend, because there I have my own room and an intercom; when I need them, I can call."

Rena's other off-campus activities include visits with her grandmother a couple of hours on Saturday and occasional visits with her father. Rena loves to go to the mall to shop or to just "hang out". She also attends many movies and loves to write and read poetry. Other noncampus activities include volunteering for the Department of Human Services and involvement with her church. She belongs to United Cerebral Palsy of Arlington and REACH, but does not attend functions, primarily due to lack of transportation.

She participates in few campus activities, but by choice. By the time movies come to the Lyceum, she has seen them. As for dormitory activity, she is just not always interested. "Last week they did finger painting. There is no way I am doing that." She would, however, like to participate in a fitness program for persons with disabilities.

Living with an attendant both inhibits and enhances Rena's social life. She identified one 50-year-old attendant as her best friend. Rena does not drive, and thus her attendants transport her to off-campus activities. Additionally, she must be pushed in her wheelchair for mobility. On the downside, being accompanied by an attendant can interfere socially. "Oh, I think because I have CP they look at me differently because I have an older lady with me."
Rena is satisfied with her social integration and perceives fit on campus.

I am kind of shy. I don't like a big group. I do a lot better one on one. Some people talk down to me, but not when I am on campus. I think they see me going to class and they realize that I am making my own decisions.

Fred

Background. Fred was born in West Texas. Cerebral palsy resulted from lack of oxygen at birth. His twin brother, born first by 45 minutes, is "what one would call normal." At birth, Fred's mother was told, "Your son will be disabled physically and mentally and mentally, he will always be about a one year old. That means you will always have to change diapers. Why don't you put him in the state school." He attended special education classes until sixth grade. "In the seventies they did a lot of early childhood studies. So if one came to Lubbock, I was in it."

In junior high school, Fred served as manager for the football team. "I asked him [coach] about it and he talked to my family and made it sound like it was his idea. And in eighth grade instead of adaptive PE [physical education] was in athletics, and worked out with the team."

Fred's family moved to California because of his mother's job. He attended regular school, but was not satisfied with his social life: "I wanted to [date], but like everyone already had a boyfriend. One girl asked me to marry her, but I was a freshman, so I said no." He did attend his senior prom but otherwise was not socially active.

During high school, he initiated and planned the first handicapped awareness program for his school.
I started my program handicapped awareness week. I use handicapped because we all are handicapped in some way, and I think if I had a disabled awareness week, I would be saying look at these people--don’t you discriminate, but it is okay for me to discriminate.

Fred’s parents both attended college, and they encouraged him, but “They didn’t know if it was possible.” His brother has completed college. Fred attended a community college after high school. People on campus were indifferent to him. Additionally, he was raped by a casual acquaintance.

The thing about dating is I had a bad experience with a guy, and I am afraid of some girl saying that I am gay or that I am not man enough. It was a hush hush thing so that is why I am, that is part of the reason why I don’t like meeting new people.

The benefit of community college attendance was that he continued his interest in handicap awareness programs.

After high school, I did one at my community college. Where I took the president around, I made her wear mittens, use a walker, and see how do you do this. And she said I have been saying we need automatic doors but we didn’t have money.

But now I am going to make some money, so now they have automatic doors.

Fred has not continued friendships from high school nor community college.

Anticipating return to a Texas school, Fred expected “it to be more fun [than California] because most people grew up in Texas, so we would have a lot in common. People are more accepting here. It’s like they don’t care if you have a disability or not.”
In-college experiences. Fred is a 22-year-old sophomore majoring in special education, a long-time dream. He is active in the College Republicans, about which he learned from the College Democrats. "The College Democrats had a table and I registered to vote and the president of the College Republicans stopped by and we were talking about things and she said you should come to our meetings." He enjoys the College Republicans because "it is nice to know that I am not the only one."

When asked about going to collegiate football games, Fred replied "all of them, there is a whole group of us. To me I was raised to live football if you are a player or not." He is not interested in attending concerts or the special education majors club due to a lack of interest and is unaware of recreational swim or gym opportunities. He was interested in joining a fraternity, but that was financially prohibitive. Fred would like to be more involved by starting an Optimists Club on campus.

Fred is integrated into the community at his dormitory. He has made many friends. "We all sit out in the lobby. Like at two o’clock in the morning, there is nothing to do so we say like why don’t we go to Wal Mart." He enjoys his friends because he can be himself around them. "It’s like they laugh with me, not at me. And very many people don’t know it is okay to laugh with me. Like if I am falling a lot, they would take my Coke and smell it, to see if it has alcohol in it." He is not involved with any off-campus activity.

Fred perceives no barriers to socialization other than driving. "I would go a lot more places, meet a lot more people." He is very satisfied with his social life at UNT and finds, "They treat me mentally okay, but they open doors for me, they help me when I
need help. And they just look out for me. It's like they don't want me to fall down.” He appreciates that assistance.

He feels that the main barrier for people with disabilities is attitude.

If they think the world owes them something and I would say would be it [barrier] because if you have a bad attitude, disabled or not, no one is going to like you.
And those who do, it's like doing it just to earn brownie points.

Mary

Background. At birth Mary was diagnosed with arthrogryposis. “They told my mom my legs were on backwards.” Mary’s knees hyperextended and did not flex. Her muscles were scarred, resulting in only 40 to 60 percent usable muscle. Additionally, her hands were not aligned at the joint. Three reconstructive surgeries prior to age three returned functional use of her joints but required that she wear full leg braces until age 12. The surgeries left large scars on her arms and legs and consequently, she preferred to wear long sleeves and pants. In elementary school, her mother insisted that she wear dresses, which resulted in other kids asking questions about the scars. She coped:

I became almost popular because I told them that men wearing masks and having knives cut me. Which was no lie, because the doctors were wearing masks and they had knives. Growing up, the thing I missed the most. When everybody would come in to watch the movies, they would sit on the floor, and you know, when you sit down the back of your thigh will touch the back of your knee. Mine wouldn't do that. My legs just don't bend that far. That is what I missed the
most, not that I couldn’t run as fast or do all the other stuff—I couldn’t sit on my legs like that.

During high school, Mary’s father retired from the military and the family returned to West Texas. “Daddy told me it was very segregated. I know what that means—officers over here and enlisted men over there. That’s not what that was. I was 16 and very naive.” She attended football games, pep rallies, and wrote for the school paper. She did not feel as though she fit in, not because of her disability, but “I didn’t fit in with the goat roper stuff, and I have never had my name on a leather belt to this day.” In high school she remembers, “People recognized me by the part in my hair because I walked around with my head down all the time.” Immediately after high school she attended a small Bible college and became involved in interpreting for the deaf.

When I signed my voice didn’t shake. If I am interpreting in front of 2,000 people and have a spotlight on me, it is no big deal. It doesn’t bother me at all. So that [interpreting] helped me get over a lot of things with talking to people.

Mary worked as an interpreter until carpal tunnel syndrome restricted her abilities.

In-college experiences. Mary is now a 38-year-old single mother. Her four year old daughter, Alexis, demands much of her time. “Sometimes when I am feeling really stressed, getting on the floor and playing with the baby is really a stress relief.” Additionally, she occasionally cares for the children of her younger sister, and financially assists her mother.

Away from campus, Mary volunteers at a senior center and is involved with the singles group at her church. The group members socialize by getting together at
someone's home, as child care is an issue for most. She also has a good friend out of town whom she visits occasionally. She has maintained her friendship with her Bible college roommates through the years, although recently only by telephone.

Mary works at ODA as Interpreter Coordinator. She works 30 to 40 hours per week and has made many campus friends through her job. Mary and Alexis arrive on campus at 8:00 a.m. Alexis attends the campus child care center until 5:00 p.m. Most of Mary's socializing takes place between class.

My daughter and I spend a lot of time walking to school. It is nice to have people who walk up and say, oh hi Mary, how are you doing? They are from this class or that class. Or a lot of the socialization is just like in 5 or 10 minute increments here and there to help you get through the day, more so than the big 2 or 3 hour party or whatever. I think I almost, maybe not enjoy it more, but I almost get more benefit from that than I do the big 3 hour thing.

Given time and money, Mary would be interested in other campus activities. She would particularly like a fitness program if offered before 5:00 p.m, or if child care was provided. "I would like to find something that I could participate in fully, something physically exerting."

When Mary came to UNT she did not expect much socializing.

I didn't expect it to be as good as what it is. I didn't realize that there was over 2,000 nontraditional students who are undergrads. I didn't expect there to be that many. I thought people my age would be graduate students. But I was pleasantly surprised that I can be very different as far as religious beliefs and yet still have a
good time with them. I still find a lot more common ground than differences. I have found a lot of people like me who for various reasons are going back to school, who have some of the same goals, some of the same experiences. So coming to college has certainly widened or increased the variety of my friends. I have friends that don’t even want to sign.

Narrative Profiles of Students with Acquired Mobility Impairments

Jill

Background. Jill was born in West Texas. Neither of her parents finished high school and did not encourage her to attend. “I didn’t ever dream of going to college. I never did, even when I graduated from high school.” She was socially active in high school—“maybe too social”—and soon after high school she became pregnant. She was a single mother for about 6 years before marrying. She and her husband were socially active and loved to dance, bowl, swim, do aerobics, and snow ski. Only five years later, he was murdered in a robbery attempt at their business. With two young children, Jill turned to alcohol and partying to cope.

In 1989, Jill went to the hospital for routine gall bladder surgery. A reaction between hepatitis and the anesthesia damaged her cerebellum. She awoke the second day after surgery unable to walk and numb except for the left side of her face. The injury alerted her to the danger of her lifestyle: “The disability caused me to change, so there is a positive side to this.” After her injury and with encouragement from a friend, Jill entered community college where she earned her associate degree.
It was really frightening because I had not been in school since I graduated in '69 and that was '91, so that was about 23 years had gone by, and then I had a disability now, which made it even harder. I had to learn to stand up on my own, to be able to go to the bathroom by myself, because nobody was going to do that for me. I had to learn to tie my own shoe laces, get dressed on my own and everything.

Initially, Jill had an attendant initially.

It was just a mess. She would say, I wish you would watch the same soap as I do. I was like excuse me? Or she would have lunch with her husband and wouldn’t come over. I would be sitting there waiting for her to come over to fix me something. They wouldn’t show up. She sometimes wouldn’t call. When I had that bad fall using the walker, she drove me to the hospital that day and she didn’t show up the following day.

In-college experiences. From community college Jill transferred to the university to major in rehabilitation. She was apprehensive about coming to UNT.

I thought, I am going to a university that has over 20,000 students and I came from El Paso Community College (EPCC) and that was pretty large. I thought, gee, I am just going to get swallowed up at the university.

She expected life at UNT to be “hectic, stressful. I had heard that Denton was a very racial town from people that came to either UNT or TWU [Texas Woman’s University]. I was wondering how I would be treated because I am Mexican American.”
Jill shares an apartment with her daughter, son-in-law, two grandchildren, and a 17-year-old son. They live in Denton about 5 miles from campus. Because of numbness and impaired balance, Jill does not drive. She uses an electric wheelchair for mobility and walks for short distances using a four post walker.

When I am sitting I am fine. The only time I get dizzy is if I go and try to get something and then I try to back up real fast or I will turn around real fast, and it's like, whoa. It's not a good feeling. It really isn't.

She is dependent on the Denton SPAN system for transportation. A typical one-way commute is one to one and a half hours. Jill must leave campus by 5:00 p.m. to catch the last bus home in the evenings. Saturday service is available only from 9:00 a.m. to 3:00 p.m. and there is no Sunday service.

Other daily tasks impact her life.

Everything takes me longer. That's why I have to get up early, too. It takes me about an hour and a half, when before it would have taken me about 45 minutes to an hour. I have to get up and transfer from the bed to the chair, then to the chair to the bathroom, get dressed and everything. It takes awhile.

Jill maintains contact with only one high school friend, her daughter's godmother. Her best friend is a woman she met at the community college. Although geographically distanced, they maintain frequent telephone contact. She has a cousin nearby with whom she spends occasional weekends, and other than that, she tends to stay home.

Jill is active in her community. She is the reigning Ms. Wheelchair Texas and was subsequently recognized by the Hispanic Chamber of Commerce for that and other
accomplishments. Much of her community involvement is related to advocating for the
gine of people with disabilities. She is on the SPAN-ADA Compliance Board and
ponds meetings at REACH. She would also like to be more involved in her church, but
due to lack of transportation, this is limited. “My daughter knows that I like to go to
church. If you are not going to offer to take me, I am going to be damned if I am going to
even ask you for a ride.”

Jill is a dedicated student. Her high grades have earned her membership in the
Golden Key National Honor Society. She expects to graduate in May 1997 and continue
toward her master’s degree. Additionally, she is an active member of the North Texas
Rehabilitation Association, where meeting times were changed to accommodate for her
transportation restrictions.

Jill arrives on campus about 9:00 a.m. and stays until 5:00 p.m. Between classes
she spends time at the student union, eating lunch, studying, or visiting with friends. Two
of her best campus friends are Kip and Jewell. Additionally, their social group consists of
people who have been or are currently note takers for classes and other students with
disabilities.

We just sit around on occasion. That is our socializing during our breaks when
we are not in class. As far as eating off of campus. Sometimes you want to go off
campus and you always have to ask can we get the wheelchair in and is there an
accessible bathroom?

Jill is interested in being involved in extracurricular activities, but again is limited
by transportation. “I cannot attend meetings; any things that are after 5 o’clock, I cannot
go to. It's hard. I would like to be more involved in the organization, but I just can't do it.” She considered a sorority but felt she was too old. Transportation limits her attendance at collegiate athletic events.

I was going to come to three home games this past semester, but then they changed the hours for the trolley. And I wouldn't have gotten to stay and watch the game. Because they [games] start at 2 and I would have to leave at 2 to get home.

She is unaware of some activities such as intramurals. “I think it is geared more toward the young generation than it is for nontraditional students like myself.” She learns of social opportunities from reading the school newspaper. “I just read about things I wish I could do. Everything is I wish, I wish, I wish.” She is aware of the open swim opportunity but has not participated. “I have to have somebody with me. I would have to ask somebody, and there is changing and everything.” She is not completely satisfied with her level of social activity “because there is still that wanting to do something besides just having to go home.”

Although anxious initially, Jill has been somewhat satisfied with UNT. “Once I got in school it was better because I started interacting and making friends and was involved with school.” She has not experienced the racial discrimination about which she was warned and perceives that she fits on campus. “I have been told that I am well respected and admired. I have had students tell me that I am an inspiration to them.” She attributes her satisfaction to being able to be assertive and asking for what she needs. Attitude also contributes to her success.
We all have problems and it is just overwhelming. You get out of bed, and you made it here, so pat yourself on the back for it. If you really didn’t want to, you wouldn’t have gotten out of bed and you wouldn’t have made the effort to get here. That alone is an accomplishment for you. So feel good about that.

Her advice on succeeding is,

not to be afraid and if you need help, ask for it. There is nothing wrong about asking for help. I know that we all try to be real independent, but, hey, there are times when you need help. We are not asking for sympathy or pity; we are just asking for a little bit of help.

Joshua

Background. Joshua was an active high school student. He dated, played sports, and attended most school functions. He was injured two weeks after his high school graduation. “I dove into a pool, hit my head on the bottom. I broke my neck at C4-5. I am quadriplegic now.” In the hospital he was told he would never move again. He has, however, regained some shoulder and arm function. Consequently he has been able to drive with hand controls and to feed and shower himself with minimal assistance.

I have a couple of splints I can shave with and brush my own teeth and things like that, but as far as showering, using the restroom, or getting in bed or moving to different chairs or different things like that, I need to have somebody there with me all the time.

In-college experiences. “Because I have my parents doing everything for me, if I wasn’t living at home, I would need somebody to help do basically everything as far as
getting ready to go.” A combination of his parents’ competing work schedules, his need for daily physical exercise, and the one and a half hour commute requires that Joshua get up by 5 p.m. His father assists him with stretching exercises and onto his exercise bike. He rides for about an hour each day. After classes, two times a week, he has another two hours of occupational or physical therapy.

Joshua’s relation with his family is more than convenience and assistance; they are quite close. His brother has been his best friend since childhood. “We don’t get to see each other near as much as we would like to...Whenever we get to see each other we have a good time.” He and his younger sister also have a good relationship. “I love her to death. We do things, we go to the movies together and stuff like that. She has several friends and I get along with all them and I take them to the movies.”

Much of Joshua’s social life revolves around the church and his friends from there. Joshua grew up active in the church and continues that activity. He goes to services twice, works with the youth group, and attends Bible study, all in a typical week. The lack of physical access has not deterred him. The youth program is on the third floor, and there is no elevator. Bob, his attendant and friend, carries him up two flights of stairs. The church is constructing an elevator and has purchased a lift-equipped van since Joshua’s accident.

Joshua maintains some friends since high school graduation and his injury. These close friends encourage him.

I don’t have hardly any friends now that I didn’t know before my injuries. I have met a lot of people that I am friends with now, but most of the people that are in
my life now were in my life before I got injured. A lot of times I will say well, I

  can’t go do that, and they make me go. They want me to be as much like them.

They all feel comfortable helping do whatever I need done. I don’t feel

uncomfortable asking people to help me do different things.

Bob is paid eight hours a week by the Texas Rehabilitation Commission to assist

Bob is also a social companion.

I like to hang with Bob, he has kind of opened my eyes to different things as far

  as--oh, we’ve gone to museums and things like that. Things I didn’t think I’d ever

care to do. He was my Sunday School teacher when I was a sophomore [in high

  school]. After that we started becoming friends. He used to let a whole bunch of

us come out to his house and we would make our own pizza and watch movies

  and so we thought he was cool for doing that.

Joshua comes to campus three days a week, and attends a community college the

other two days. He schedules his classes as close together as possible and goes home

immediately after class.

I meet somebody in each class, it seems like. We will talk and sit around and

visit. Because we’re so busy in trying to get out of here and go straight home. I

don’t have any time to go do things.

He would be interested in various campus opportunities if not for the commute. “I am

sure I would come to football games and stuff like that. But it’s such a long drive that I

don’t come.”
Another barrier to socialization is academic load. "Since my work load, now that I am getting into my upper classes, it's so full I don't have any time to do anything."

As for disability's influencing Joshua's social life,

It was funny we were supposed to write papers over these different poems by a guy named Willard Owen. It's called "Disabled." I was writing my paper down at the bottom. We were supposed to write little comments about it, and I said that it was really hard being disabled because you are different from everybody whether you want to be or not. A lot of people want to try to be different. I find for myself, a lot of people--I don't know if it is about them--they are scared to look at me or something like that. But then a lot of other people aren't, but either way once you are friendly with them, it seems like things kind of take care of themselves. I am friendly, so I just try to be myself around people. Hopefully they will not hold my disability against me.

Some people are uncomfortable meeting Joshua but,

I kind of relate to them. I try not to get mad because, whenever I was in high school there were several people at our school that were in wheelchairs, and I can kind of remember I was kind of scared of them. Some of my friends would push them down the hall, and I was scared. I didn't want to hurt them or something like that. So, kind of, from me remembering how I felt, I don't hold it against people when they feel uncomfortable. I just try to make them see that I am normal; other than I can't walk, I am normal.
Entering college, Joshua did not expect to be socially active. "I guess I never really expected one [social life on campus] because I knew I would be driving and going straight home." He fits in as far as he cares to.

I don’t know. I don’t have any special thing I can say to you other than I just feel myself as being a normal person. I sit around instead of walk around. I just try to live my life the way that I want to live and just enjoy myself.

Jeremy

Background. Jeremy was a freshman majoring in physical therapy when he suffered a spinal cord injury.

Yeah, I dove off the back of a boat and hit a sand bar. It happened pretty quick though. I didn’t feel any pain. I just floated to the top, and my friends turned me over and told me what had happened and tried to stabilize me and pulled me out to the beach and they Care Flighted me to the hospital and the rest is history.

The cervical injury resulted in quadriplegia and the use of an electric wheelchair for mobility. He has not developed enough triceps return to drive an automobile, but he owns a lift van so that others can drive him.

Before his injury, Jeremy lived a typical middle-class life. He was active in high school, dated, partied, and played football. His parents expected him to attend college as his biological and step-parents had done.

My dad and mom really pushed me. They pushed and pushed and I didn't like it then and I kind of moaned and groaned about it and I think it helped me with this injury in a lot of ways. They were always pushing me, and they said do the best
you can do at everything. They didn't say you have to be the best, just be the best you can be, and that keeps me going. It keeps me wanting to do the best that I can with what I have to work with.

Jeremy moved out to his own apartment after high school graduation and began to drink and use drugs extensively. After a year, he entered the University of Tulsa. He lessened his chemical usage, but still enjoyed partying with his friends.

I used to be a lake freak and always went there. A friend of mine had a boat and my roommate had a boat and we used to go out almost everyday after class so I miss that. That is a large part of my life. Athletics was a large part of my life and, like I said, we just went and used to do a lot of rock climbing and backpacking and that's been the thing in my life that I haven't been able to replace by doing other things.

His interpersonal relationships were strained.

I wasn't quite friends with women very often. I was interested in them romantically or sexually, but I never knew how to get close to a girl and be a friend without those feelings coming in. And friendships with men also. I have always been able to be around people my own age, but I always had problems with older adults, males. Always older adult females I have been okay with and respect their authority as far as teachers and stuff like that. But I don't know what that was all about.

In college experiences. Jeremy is a 26- year-old junior, majoring in rehabilitation.

He lives in College Inn, an atypical dormitory setting where each apartment has its own
outside entrance. His dormitory, meals, and books are paid for by the Texas Rehabilitation Commission. He receives Pell Grants to pay his tuition, and he also receives Social Security.

Upon arrival at UNT, Jeremy did not know what to expect, but he did not expect to be socially active.

Oh man, I didn’t know how I was going to get around campus. I didn’t know if I was going to need someone to go with me. I didn’t know how I was going to take notes, how I was going to write papers. I didn’t know anything. I just came up here. The biggest fear I had was living on my own. I didn’t have the call light in the hospital to call for the nurse. I didn’t have a call box to yell at my parents if something happens, so that was a nerve-wracking deal, but once I did it a few times, it was okay, and as time went on I have gotten more and more comfortable with it. I still wasn’t very secure at all. I didn’t know, coming up here was the first time I was out and associating with my peers. I had always been in a hospital environment or in a family environment. I hadn’t been out socially really at all. It was really, you know, breaking the shell and a whole lot of stuff. Getting out and learning how to talk to people and getting used to the looks, you know, and people just checking me out and they don’t gawk at me like I am a freak—it’s just a human nature thing to look from interest. But it took me a while for me to get used to that and to know how people were going to react. It took me a while to have confidence enough to open up and say hello with a smile on my face and not be so timid and embarrassed to talk to people. Because I was, honestly, that was a
big thing. I was embarrassed. I didn’t know how they were going to react to me, what they would think of me. It was just kind of trial and error here and there. I never dreamed that I would be in a fraternity. Whenever I was walking around [pre-injury], I was anti-fraternity.

He began making friends at the dormitory and in classes.

But, like I said, living in a dormitory, I meet so many people because there is everybody coming in and out and I see them every day come by my room every day at a certain time and you just say, hey how are you doing. And eventually you start conversations and friendships.

Because of everyone’s busy schedules, Jeremy sees his parents, sister, and grandparents only on major holidays or special occasions. They telephone more often to support each other. Visiting family and friends is inhibited by his need to pack so many adaptive devices. Doing so for an overnight is prohibitive. He does maintain a number of pre-injury friends.

They are friends I had before I got my injury. They are still living in Tulsa, but they have stuck with me. They still come down to see me, and they stuck with me through rehab. They encourage me, you know really, that is what I needed—a lot of moral support.

After his injury, Jeremy began attending AA meetings. He explains, “I just made a decision that I know I had a tough enough time without having a bad attitude and doing drugs and drinking.” He has developed and maintains close friends from this group.
That is a real important part of my life, obviously for the sobriety, but also because that is a group of men that I can open up and talk to about anything and everything and they don’t judge me. They just pat me on the back and tell me that is everything is going to be all right and give advice if I ask for it.

Jeremy pledged a fraternity this past fall. “I looked at their beliefs, their traditions, and their creed and what they stood for and I liked it. And I thought it would be a neat opportunity to get involved and to get some experience that I couldn’t get elsewhere. I was real self conscious about eating at a restaurant but I am getting better. Like we had our first formal and I didn’t eat because I didn’t want to be fed in front of all those people.

He is sometimes afraid.

I get scared going to those things too [fraternity socials], and at the last minute I say, nah, forget it. I’ll stay home. But once I get out there and go I meet people in sororities and fraternities and I see people now all over campus that I can just stop and say hey to. The thing that makes me get up and go every day is that I know there is a reason that I am in this chair and that I need to find ways that I can help other people, either by talking to them, helping them understand that I can. I don’t know. I just realize that this is fate and I just have to do the best that I can. When I first meet people, especially in a large group, it’s easier for them to shy away from me. But you know, like I say, an hour or two into it and everybody starts to get comfortable and I start talking to a few people here and there. You know,
before you know it there's people coming up and talking to me. It is awkward for me and it's awkward for other people at first, but I try to understand that.

One good friend, Lori, puts Jeremy to bed when he misses his attendant and helps to feed him. He also has good friends from his dormitory. He cannot enter and exit his room independently; however, he chose to stay where he is:

They offered to move me to another dormitory where I could, but I chose not to because I like it, and I will just live with it. I got some people who are around who will just let me in or if no one is around I go up to the office and they will let me in and set me up to work. We have barbecues outside before the games and we would do that then we would go over [to the game]. I used to sit out. Since our rooms go out to the outside, I just sit outside my door and there are always a lot of people standing around talking and that is a lot of the ways I have met so many people. They took me out for my birthday. They took me to a comedy club. We get groups together and we just go out and do stuff. Usually on Thursday night, we will all go to Fry Street and go to Cool Beans and hang out and that's a lot of fun. I see people all the time coming in and out of Cool Beans that I know from class, or I meet them there. And that is just a lot of fun getting out there, and there's just so many people you know you just always see so many interesting people and meet new people. I just feel like listening to all kinds of music.

Several of my friends here are music majors and enjoy going to watch bands here play or go to Dallas. Whatever I can afford. Money is tight, so we do a lot of stuff. That helps that I am not drinking anymore because at Cool Beans I don't
have to spend any money. They give free Cokes out to designated drivers, so I’m set. So that is a good cheap form of entertainment.

Brian is one of Jeremy’s best friends.

We always do things together, and we talk to each other about things we don’t talk to everyone else about. We trust each other with some information we may not want to tell other people, and we trust that it won’t go any further.

They met in government class and live in the same dormitory.

As far as dating, it hasn’t really happened. I don’t have enough security or confidence for that to happen right now. Really, I just keep everything on a friendship level. Obviously, like I mentioned, romantically I don’t have a romantic relationship. I have had girls that I have been interested in and actually girls that have been interested in me. But I get to know them and everything goes great, but then I push away because I get nervous. It gets too close for me and I push away. You know I have some great friends that are girls, and I hang around with them. Its just that I can’t get over the chair and how to approach relationships with somebody. I miss that. I miss having that close companion to be able to talk to, to be able to relate to, to share that part of my life with.

Jeremy attends a campus Alcoholics Anonymous group, but the number of people present fluctuates such that he prefers a noncampus group. Other than AA and his fraternity, the only on-campus activity he participates in is volunteering at ODA four or five hours a week, reading books on tape. He has not attempted other campus activities.

His fraternity participates in intramurals, but he hesitates.
If I am watching professional sports and seeing what they do, that is okay because that is what I used to do. But going out and watching guys my own age pick up a game—it is harder for me to watch because I used to be able to just get right in there.

He hasn’t returned to water sports,

I just never have gotten in the water since my injury. At first I was scared, but now it’s like it’s not a big deal, it’s more like I just don’t want to take my shirt off and put a swim suit on and get out in the middle of a public pool. That’s probably the real reason I haven’t.

Jeremy perceives his main barriers to be time and money, with the lack of time primarily caused by his adherence to an attendant schedule.

Having an attendant come in every morning, I have to get up three hours early every morning. It really doesn’t hinder my social life that much. He usually comes at ten at night but I have a friend that can put me to bed if we go out or stuff like that and she really doesn’t mind doing it and she does it real well. The first fall I got here, I had some unreliable attendants. I had no way of calling and I had to call to my suit-mate across the way to call someone. If I wanted to stay up and hang out with my friends, I can’t. He [attendant] comes at 10 and I have got to go to bed. I have to have someone help me [eat] and my attendant comes in the morning and the afternoon my study attendant helps me. Dinner, if I eat dinner, I will just eat with some friends, and they help me. I can’t use my arms, so I have
to have someone feed me. I have tried it with adapted things, but I can’t get it up
to my mouth without flopping it around.

Jeremy is enjoying his increase in independence. There are still obstacles to
overcome, but with supportive friends he is positive about the future. All in all, he
perceives that he fits in and is accepted socially on campus.

First when I got here, I felt like people were gawking at me, but I think that was
my own insecurity. I didn’t know how people were going to feel about me. I was
scared out of my mind, and I was having to be around all these people all at once.
It wasn’t just that anybody was gawking at me, it was just me getting used to
getting out amongst my peers, and as time went on it got better. And now instead
of driving [his wheelchair] with my head at the ground, I am able to drive with my
head in the air, and I say hi and smile at everybody and talking to people and
seeing people I know on campus and it has been really cool. And I don’t know
how it happened. I don’t think it is anything really special that I’ve done. It’s just
taking the risk, just one step at a time, and like I said, it’s getting better all the
time.

Nicole

Background. Nicole attended the University of North Texas for two years. She
lived in an apartment with a friend, and they were socially active. Her roommate was a
cheerleader and dated a football player. So they partied with the team and “hung out” on
Fry Street. She did not belong to any campus organizations; however, she did attend
fraternity parties.
We had a lot of parties ourselves. It was pretty much a big social life. Us, and not really going to school kind of thing. My friend Jessica, we were always every night of the week out doing something. Always at Rick's, always at the State Club.

Then while home for summer break, and on her 21st birthday, she suffered a spinal cord injury in an automobile accident. The T12 injury resulted in paraplegia and a life change. For two years Nicole worked on her rehabilitation, learning to live life from a wheelchair. One of those years she lived with her father and three brothers in rural East Texas. She then moved to the East Coast to participate in an intensive outpatient rehabilitation program.

**In-college experiences.** Inspired by a friend she met in rehabilitation, Nicole returned to college. She has changed her major and is readjusting to college. She has lost contact with many campus friends and the peers she was with in the accident.

He [driver] and I were real good friends and had been for a really long time. And we were like the best friends that a guy and girl could be to each other. And then, after we had the wreck, pretty much we don't hardly talk to each other.

She remains close with one pre-injury friend not associated with school, and with her pre-injury college roommate. They continue to socialize.

Nicole lives in Dallas and commutes to campus three days a week. She was anxious about returning to college.

I was really nervous coming back because—to see a lot of these people that I knew before, that maybe knew and maybe didn't know what had happened to me. And
their reaction—I was kind of nervous, and the first couple of times I came to school I just came to school and left right away, because I didn’t want to see anybody that I knew before and I was really happy that all my classes were over here and not over there where everybody is. When I got hurt, Mindy and Jessi my friends were still up here, and so a lot of people we knew actually knew what had happened, but I had not seen them since it happened. I know one good friend, John, he was our neighbor. Mindy called him and told him what happened. John and I had dated, you know. She told him what happened, and he would never call her back, and that was weird, because for all he knows I could be dead. But I haven’t seen him. My main goal now is to get out of school. I mean I am 22 and that is not old, but it’s not 18 or 19 anymore. I am ready to graduate and start so called life. It is a lot different. I do still go out, but not as much, and I am a lot more responsible about it. I don’t know if I grew up or got a slap in the face. I am not saying I don’t drink, because that would be a lie. I do, and a lot of my friends drink. It’s just now, when we are staggering, sloppy, we call my mother to come get us or something.

Other aspects of her social life are different now too.

It took me a while to realize that and now, you know, going to restaurants, it is different because I don’t get to sit in the chairs. I mean I could if I wanted to but it is so much trouble to do that. When I to the movies, I always sit in the movie chair, I mean I say I am paying for this big chair, and I’m going to sit in it. In that
way it does change, and people do still look at you different and stare and little
kids come up to you and stare.

Nicole has a steady boyfriend who is a major part of her social life. She met
Mark at a Dallas night club.

Some guy asked me one time [to dance]. I said no, because I was in a bad mood
anyway because it was so boring. So he came over there and he just like started
heckling me. He was like, why don’t you get some self-confidence about
yourself. And I was sitting there looking at him, and I had my hair all done up
and nice clothes on and I was looking at him and you could just tell that he was
agitating me. I mean it was a good thing because that is when I met my boyfriend.
He saw this guy doing this to me and he walked up between us and said hi my
name is Mark and I said thank God, get away from me little boy. I mean I don’t
want to dance, so leave me alone.

Occasionally, Nicole volunteers for a rehabilitation hospital. She visits area high
schools to discuss “Think First,” a prevention program geared at reducing traumatic
injuries in teenagers. Texas Rehabilitation Services has not begun assisting with her
finances, so she works part-time in a family business. She maintains other family
connections through her mother’s frequent visits, and occasional visits with her father.
Her family members are all supportive of her return to school, but she does not feel that
they influence her social integration.
Nicole feels that her chair can get in the way of socializing.

At first it did a lot to me psychologically, like it was really bad. I thought like no boys are going to want to go out with me, and I am different in a chair. And I kind of realized that, so what, people who won’t talk to me because I am in a chair, I probably don’t need to talk to them anyway.

She can typically participate in activities in which she is interested. Nicole enjoys going to movies, sporting events, clubs, and out to dinner. Although encouraged by many, she is not interested in wheelchair sports.

She explains her primary barrier as:

The thing that bugs me most is just that. Not really that it is harder for me to do things, but just that it is just more time consuming. Like say I am at the movie and I was to get popcorn--I probably am not as much going to get it now as I would have before, because I have to transfer out into my chair, and then I have to carry it back without spilling it. It is things like that.

Nicole feels that she is adjusting back to school and is generally accepted.

I just made this revelation this morning. I was noticing before--like before I was hurt--that when I was walking on campus people didn’t really say anything to you, like guys. Then I was coming in this morning to class, and this guy, he said hi how are you and I said hi. It was kind of like a courtesy thing. They will hold the door and I think thanks, I’m through it now. Or when I am a block away [from a door], they stand there and wait for me. I don’t feel like an outcast or anything,
but I think that is because of the classes I am taking people are used to people in wheelchairs, but I hadn’t really run across anybody mean or anything.

To get the most out of college, Nicole suggests this:

Get involved as much as you can because that makes you happier than anything. Cause eventually, people get to know you, and they realize you are just the same as they are—you’re just sitting down. And I have realized that, the people at first are real kind of, you know, what do I do, what do I say to you. But then, when they get to know you and your personality comes through, they don’t even see it [wheelchair] or whatever.

**Angie**

**Background.** Angie was not expected by her family to attend college. Her parents both worked in the fields of South Texas. Angie and her siblings assisted them from a young age. She was average academically throughout high school and had many friends through her involvement in high school activities.

Soon after high school graduation the family moved from South Texas. Angie began working in an aircraft factory, where she had developed many good friends. An on-the-job injury to her spine and wrists left Angie unable to continue her job. Surgery repaired the wrist damage, but her back still impairs her activity. Due to the complication of diabetes, she has been unable to undergo the fusion surgery required to repair her vertebra. The spinal injury has resulted in lower extremity impairment and weakness in the legs and knee. She has a back, brace but hesitates to wear it because of its bulkiness. She frequently is unable to participate in social activities because of pain.
In-college experiences. Angie entered the university after moving to be closer to doctors. She lives with her mother and five siblings, two of whom are currently university students. Her family is her primary social group, and her mother is her best friend. “We have conversations, we watch movies, we go out to the mall, we go to church together—that kind of stuff. She and her family have been to university functions, but they more frequently attend activities related to their church. She has other friends from church but sometimes declines offers to go out.

Well, sometimes, because they ask me to go out and go somewhere, like to dance in Dallas. I like to dance, but I can’t right now, and I just have to be sitting down. I am not going to be able to stay out with them all night. [Consequently], they don’t invite me anymore.

Since moving to Denton, Angie has not maintained prior friends and finds her current life boring. “I don’t have a lot of friends. I go to church still, like in high school I had a lot of friends. I used to go to their house, and they would come to mine, but now I don’t. In her leisure she enjoys reading religious books and singing. She would like to have friends to “hang around and talk.”

The Texas Rehabilitation Commission paid for Angie’s tuition and books until she dropped out of college due to uncontrollable pain. She is now a 31-year-old sophomore, paying her own expenses. She works 15 to 20 hours a week in a campus job. She talks with people at work, but has not developed any friendships that generalize away from work. She comes to campus for class and work. She does not socialize at the union or belong to any campus groups. When asked, she was unaware of many social
opportunities, such as intramurals, open recreation, and the University Program Council. However, she is interested in those things. She does not consider herself as fitting in, although she attributes this more to being Hispanic than to having a disabling condition.

Melody

**Background.** Melody had worked for over 25 years as a medical technician. The injury resulted while she was doing a routine task she had done many times before. She injured her C4/5 vertebra. She now has severe pain, restricted range of motion in her neck, and debilitating headaches.

She hated her job and was hoping to change.

Over the years I turned into somebody that wanted to be creative, and you can’t do that when you work in a place like that. I had thought about going back to school but I really didn’t see any way possible financially. She had always hoped to finish college, as each of her siblings had. It [desire for education] came from childhood somehow, and I am not too sure how my folks did this, because I don’t remember hearing this, to make good grades and do good and get an education.

Neither one of them have been to college. I have a sister has a master’s in elementary education, she’s a teacher. My brother has a bachelor’s of art. He’s an artist. My older sister has a Ph.D. in nutrition, and she graduated from law school.

I felt undereducated in my family with my siblings. I really wanted to go to college right after high school, and I didn’t get that opportunity. I went later to TCJC and got an associates degree. I wanted to return to college, and I took classes on and off.
In-college experiences. Because of the injury, Melody is unable to continue her previous occupation. She has started back to school in hopes of finding a job. She said, "I really thought I had to go to college in order to make a living". She initially entered the university pursuing a rehabilitation major, but through a class assignment learned of opportunities and changed to aging. She felt a fit in the aging program.

A lot of the students there are older anyway. And the younger ones have to be nice to old people, otherwise we kick them out. And sometimes I think that the age was more my perception than anybody else's. It was my point of view. Socially, Melody expected students to be more friendly.

Somehow I had forgotten that I had aged, and the majority of the people would be very, very young. And I couldn't think of anything to talk to them about at first. I learned. After my first day, I really didn't want to go back the next day. What really got me is that people that came into the classroom that knew other people—they would start talking to them, and they didn't think to include new people into their conversations. I saw it happen to several people, so I don't know that it was just me.

Melody was grieving the death of her fiancé at the time she returned to college. She had mixed expectations about socialization.

I am not going to hang out on Fry Street or anything. Probably— I don't know— it was probably if you think in terms of a 100 percent, probably 80 percent of me expected that [being socially active] and wished that it would happen.
At 52 years of age, Melody is finally a senior. She commutes 40 miles to campus rather than moving here.

I would have to give up a lot where I live now. My friends and family live in Fort Worth, and if I am here, I am trying to make new friends, I probably wouldn’t be going to Fort Worth that much. So, it’s like I couldn’t have both.

She has not joined any clubs. She was invited to join Golden Key but felt she couldn’t spare the $50 fee. Other clubs tend to meet on days when she is not on campus. As for other activities on campus, Melody has attended one collegiate football game. She is interested in open swim but has not pursued that activity due to the hours available.

She has made one good friend through campus activities. Melody and Mike met working on a class project. Mike has graduated now, but they have maintained their platonic friendship. She is fine with having only made one good friend “I didn’t come here to make friends; my friends are in Fort Worth.”

Melody’s other close friends are those she had before entering school. She has known Diane for over 25 years and Debbie for over ten. Melody has been active in a Teddy Bear Club for over 11 years. She and Debbie attend conferences, exhibits, and just meet to talk about bears in person or over the Internet. She has actually met and dated three men after communicating through the Internet.

Prior to her injury, Melody was very active. Now she is afraid to exercise.

It has put a dent in my exercise program. I am a little afraid to try some of the things that I used to do. Aerobic dancing, I used to do that three or four times a week. I would like to get some roller blades. I love to skate [but] there is a big
fear about re-injury. I have turned to college and learning to use my computer and reading and socializing with friends a lot more, rather than the physical activities I used to do.

Melody maintains fairly close contact with her family. She lives in the same apartment complex as her daughter and grandson and she sees them several times a week. Her parents and brother live a few miles from her, and she visits them two or three times a month. She does not think that her family in any way interferes with her social life, and they are supportive of her return to college.

Melody’s social life in general has changed since she entered school. “I go a lot more places by myself now. And I meet more people, where previously I might just decide to stay home and not do that.” Her satisfaction is based on her expectations.

If what I expect is to go somewhere and have fun, then we do that and it’s great.

If I had some agenda, like I wanted to do something and it doesn’t happen, then I can get kind of upset about it. A lot of it has to do with knowing about what we are going to do before we do something.

Relation to the Model of Undergraduate Socialization

One purpose of this study was to determine the effectiveness of Weidman’s (1989) model in explaining the socialization process of students with physical disabilities. The categories of Weidman’s model provided the core categories of the findings. Individual profiles demonstrated the variability of how students integrate into the university community. Clustering of responses led to subcategories that further described each core category. Table 4 presents the individual levels of influence from various
### Table 4

**Perceived Normative Influences**

<table>
<thead>
<tr>
<th>Name</th>
<th>Background</th>
<th>Off-campus</th>
<th>On-campus</th>
</tr>
</thead>
<tbody>
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<td>Family expect</td>
<td>Precollege involve</td>
<td>Social expect</td>
</tr>
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<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Ryan</td>
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</tr>
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<td>-</td>
</tr>
<tr>
<td>Jewell</td>
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<td>-</td>
</tr>
<tr>
<td>David</td>
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<td>0</td>
</tr>
<tr>
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<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Rena</td>
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</tr>
<tr>
<td>Melody(^9)</td>
<td>+</td>
<td>+</td>
<td>0</td>
</tr>
</tbody>
</table>

**Note**: + = strong influence or multiple indicators of this experience; - = negative influence or lacking this experience; 0 = experience may be present but has neutral influence; 1=onset of disability after high school graduation; 2=nontraditional aged
sources. Strong influence (+) existed when a person reported positive interaction with the identified source. Neutral (0) represented minimal involvement with the source, but the participant expressed little to no influence from that source. Negative (-) influence was perceived when a student had no involvement with a source or had received negative pressure from that source.

**Background Influences**

Experiences occurring prior to college attendance such as precollege socialization, parental socialization, and goals and expectations for college were considered as background influences. Researchers on the social integration of undergraduate students have consistently espoused the necessity of knowing who the student is at admission (Pascarella & Terenzini, 1991; Weidman, 1989). Weidman suggested economic status, collegiate goals, family expectation, and prior social interaction as predictive of collegiate socialization.

**Parental socialization.** Only 2 of 10 students with onset prior to high school graduation perceived their families as expecting or socializing them to attend a university. Four of 6 students with onset of disability after high school graduation perceived expectation from their families to attend a university (see Table 4). The 2 people with post-high school onset of disability and who were not expected to attend a university by their parents, were both nontraditional aged and Mexican American.

**Precollege socialization.** Each of the students with onset of disability after high school reported living a typical high school life. They were in organizations, on sports teams, and very satisfied with their high school socialization. Participants with onset
prior to high school graduation reported a different story. They had limited or no activity in school-sponsored programs, and few reported high school friends. Sibling as best friend was a common theme. Persons with onset prior to graduation spoke of taunting and isolation experienced in school. Although stigma differed among cases, the lack of prior socialization was evident for these participants. However, the lack of high school socialization was not perceived as negatively influencing campus socialization.

Four students attended special education programs in elementary school. Early in their lives high school graduation was only a dream, and college attendance was not considered. Kissa lived at a school for persons with visual impairments until age 16. She perceived no expectation of college attendance from school employees. Fred was the only person with special education experience who was expected to go to college.

Student's social expectation. The predominant precollege expectation for campus socialization was not to be socially active. Explanations of minimal social expectation included academic goals, commuting, lack of desire, and child care responsibilities. Four participants had come to the university without previously attending a community college. Three of these students expressed an uncertainty about what life on campus would entail. Jewell expected not to be socially active based on television shows about collegiate socialization.

Students who entered the university after attending a community college attributed expectation to social experiences they had at previous schools. Nine students had negative expectations of socialization, two were neutral or unsure, and only one person in this study expected to be socially active on campus (see Table 4). Examples of these
expectations follow. Kissa had made many minority friends at community college. She had enjoyed learning about different cultures and hoped to continue that interest at the university but not necessarily to be socially active. Similarly, Spike had developed a close connection to students with disabilities at his previous college. He expected to maintain his previous relationships rather than developing new ones. Fred expected the university to be better than previously experienced at the community college. He had not socialized or perceived fit at the community college and actually experienced negative interactions with his peers.

Students who lived outside the city limits attributed their lack of social expectation to commuting. Commuter students planned to come to campus only on days on which they had classes and to leave after classes were completed. Jane had commuted to her previous college, and she accepted the barrier that commuting caused to social interaction. She did not expect her level of campus involvement to change from what she had previously experienced.

Students with onset of disability after high school graduation were anxious about attending college and adjusting to the differences in themselves. They were concerned with how they would manage the tasks of college life. Nicole, returning to the university she had attended before her injury, was concerned about seeing people who had known her before. She planned not to linger on campus to reduce the likelihood that would make contact with past acquaintances.

Six of 16 participants were considered of nontraditional age; that is over 26 years old. They typically came to campus with strong academic goals and had neutral or
negative social expectations (see Table 4). No participant spoke of coming to college to become independent, to separate from parents, or to make friends.

In-college Normative Pressures Off Campus

The university community, particularly a metropolitan university, cannot be viewed as an isolated environment. During college attendance, students have continued to interact with persons and organizations away from college (Weidman, 1989). Involvement with off-campus organizations and friends has been assumed to interfere with campus integration (Astin, 1996).

Family relations. Five students lived with their families of origin. Four students did not perceive socialization as influenced by this arrangement; choosing to live with their families was more of an economic or convenience issue. Joshua was very involved with his family, both as a recipient of assistive care and intrapersonally, yet he perceived no influence from his family concerning his social activity. An exception to this finding was Angie, who remained actively involved with her family. She identified her mother as her best friend and her siblings as her primary social group. The campus and off-campus activities she mentioned all involved her family. When asked about participating in other campus activities, she immediately discussed how she could involve her siblings in the activity. It was unclear, however, if the relationship was a barrier to her social integration or was a result of the lack of social integration. She was socially active prior to college attendance while continuing to live with her family.

Eight students lived separate from their families. They discussed occasional visits and telephone calls but did not perceive family interaction to influence their socialization
decisions. Nicole discussed a change in her family interactions after her injury. She expressed the realization of how important family is and the need to maintain close relationships.

A second family influence, that of raising children, became apparent. This influence was not restricted by age. The youngest participant spoke of the demands of raising his children, responsibility that negatively influenced his social activity on campus. Mary told that participation in social activities was restricted to 8 a.m. to 5 p.m. when she had available child care. Child care, however, was not however solely an imposed restriction. Students with children living at home told of their choice to spend social time with their children and/or spouse rather than attending campus events.

Off-campus activities. Church and volunteering were the most frequently mentioned noncampus activities. Five people were intensely involved with churches, attending several times each week and identifying additional social activity with persons from the church. Four of five of these persons identified their best friend as being someone from the church.

Six persons identified volunteer responsibilities off campus. Three students associated their volunteer work with class assignments, although two had continued beyond the class requirement. Jill and Mary both volunteered for causes related to advocacy for persons with disabilities. Jane was the only student who perceived volunteering as influential in campus socialization, because the time committed to her volunteer responsibilities restricted some other activities.
Other occasional involvement in noncampus activities also seemed not to influence social integration. Jeremy attended weekly Alcoholics Anonymous meetings. He reported trying to attend campus meetings, but his needs were not met. He thus continued attending his precollege group without restricting his social activity on campus.

Three men participated in sports programs off campus. Participation in the sports was seasonal and committed little time each week. Consequently, no one perceived their sport participation as restricting campus activity.

Only three students had jobs. Two of those with jobs were the only participants not receiving financial assistance from the state. Only Nicole worked off campus. She commented that she occasionally curtailed her off-campus social life due to work responsibilities. However, she did not feel that work interfered with her opportunity to be involved on campus, and she felt that she probably would not increase campus activity if she quit work. For the two persons with on-campus jobs, work relationships were influential for Mary, who made many friends through her work in the Office of Disability Accommodation. In contrast, Angie made no friends at work and perceived no influence on her social integration from work relationships.

Fourteen persons received either Texas Rehabilitation Commission or Texas Commission for the Blind assistance for educational expenses. An average of 77 percent of their educational expenses was being paid for from this assistance. Including all 16 participants, educational expenses were paid for by the following sources: state (68.5%), grants and loans (17%), self (12%), other family members (1.5%), and scholarships (1%).
Commuting was cited as a barrier by all students who lived outside the city limits. Additionally, those students dependent on public transportation told of not attending campus activities due to lack of transportation. Those students who resided on or within walking distance of campus did not attribute activity choices to transportation to the degree expressed by persons living farther from campus. Whether it be the commute or reliance on public transportation, opportunity was perceived to be inhibited. Jeremy told of his change in opportunity after purchasing a van. Even though he did not drive, he had available transportation and reported no problem finding someone to drive him. Kip expressed a reduction in campus social activity after moving out of the city limits.

**Off-campus peers.** Those persons who expressed strong interaction with off-campus peers subsequently had lower levels of peer interaction on-campus. Twelve persons identified off-campus peers as their primary social group. Melody discussed a conscious decision to maintain precollege friends at the expense of developing few campus interactions. As the oldest participant in the study, she had precollege friends with whom she had socialized for more than 10 years. Joshua continued high school friends because to living 56 miles from the campus and his friends' comfort with providing needed assistance to accommodate his disability. Joshua required extensive assistance with eating and personal care, such as transferring from his wheelchair and toileting. His continued high school friends, also associated with his church, had learned to provide this assistance.

Kissa and Jewell also associated with noncampus peers as their primary social group. However, these friends were met through campus acquaintances. Kissa spends
much of her unobligated time with her boyfriend who was not associated with the
university. Their meeting was arranged by his sister, who was a student at the University
of North Texas and who later became Kissa’s roommate. Jewell spends most of her time
with people from her church. She learned of the church from someone she met on
campus.

Attendant care. Three persons utilized paid attendant care. They each required
assistance with such tasks as transferring into or out of their wheelchairs, feeding, and
dressing. Rena required 24-hour-a-day attendant care. Jeremy and Joshua received only
8 to 9 hours of paid care per day, but paid care was supplemented by family or friends,
and independence was increased by the use of electric wheelchairs. Joshua lived with his
family, who provided much of his care. He perceived no barrier to his social life due to
the need for care. Jeremy discussed the issue of being stranded in his chair or bed if his
attendant failed to come as scheduled. Jeremy, however, found reliance on an attendant
to interfere with his social life. To adhere to the attendant’s schedule Jeremy had to be
home each evening by 10 p.m. or spend the night in his wheelchair. He had adjusted to
this by developing a friendship with someone from his dormitory who willingly assists
him in the absence of an attendant. Also, he could not enter or exit his dormitory room
unassisted. When unattended, he asked workers in the dormitory office to let him into or
out of his room. This certainly impaired spontaneous activity. Rena spoke both
positively and negatively about her dependence on attendant care. Without an attendant
she supposed her social life would be greatly inhibited, as she would be immobile without
assistance. From a different perspective, her attendants were typically much older than
her, and their presence in a social situation was sometimes inhibiting. Rena identified one of her attendants as her best friend although there was a 30 year age difference.

**On Campus Normative Influences**

Weidman’s (1989) model identified campus influences as academic or social, formal or informal. Further categorization of campus elements included academic major, perceived fit within major, opportunity for extracurricular involvement, and campus peers. These campus pressures were assumed to shape the social integration of students. For students with physical disabilities architectural access has also been reported as a campus factor (West et al., 1993).

**Academic.** One half the sample represented high academic achievement. Six participants were members of the Golden Key National Honor Society, and two others carried grade point averages over 3.5. Honor status was not specific to disability type; however, five of eight honor students were over the age of 26. Two nontraditional aged students did not indicate strong academic goals. Of those, one student also working full-time, and one student was as yet to declare a major.

Fifteen participants had declared majors, and seven were members of academic majors clubs. Much of the discussion of socialization within the major centered on group class projects, study groups, and casual interactions between classes. Several students told of choosing to study rather than participate in social activities when asked, particularly in relation to taking senior-level courses within their major.

**Accessibility.** No participant in this study perceived physical accessibility as a barrier to social integration. They discussed the inconvenience of elevator keys and
sometimes having to take longer routes to find building entrances, but no inconvenience was perceived as restricting of participation in desired activities. David, totally blind, spoke positively about the access on campus. He took walks around campus because of the appropriate access to sidewalks, lack of low hanging limbs, and few obstacles such as construction on sidewalks. Jill told that she and campus peers sometimes opted to eat lunch on campus, where it was easily accessible, rather than to eat off-campus where access was frequently a barrier.

Not being able to drive was stated by ten participants as a significant access issue. Lack of transportation was stated as an inhibitor to involvement and interaction with peers by all participants who could not drive. Several examples were given of activities that people desired but could not participate in because of unavailable transportation after 5 p.m. or on weekends.

Campus peers. The 16 students who participated in this study reported little social stigma; rather, they reported perceived acceptance and reciprocal relationships with nondisabled peers. The majority of the participants were pursuing degrees in human service fields (see Table 3) and assumed their peers to be more accepting of persons with disabilities. Fifteen of 16 participants reported forming relationships with classmates, particularly those with the same majors. However, these relationships appeared to end on campus and not to generalize beyond academic connections.

The persons who had developed friendships on campus that extended beyond class interests formed friendships with persons with other similar interests such as extracurricular activities. Jeremy pledged a fraternity after learning of it’s ’s purpose.
His fraternity brothers have become his primary reference group. Fred has developed friendships on campus with people who share his love of sports.

A small group of study participants identified each other when asked about campus friends. These persons—Mary, Kip, Jill, Spike, and Jewell—reported spending time between classes talking and visiting. When asked about noncampus interaction they each reported the lack of available transportation as a barrier to socializing together off-campus but said that they did occasionally visit by telephone. Kip reported that he had developed no friendships with students without disabilities.

Spike and David each spoke of having one precollege friend who attended the same institution. Neither of the precollege friends had been a high school friend; rather, the friendships had developed between high school and this college enrollment. Both Spike and David told of initially socializing primarily with the precollege friend. Socialization then diminished as they developed new friendships. Ryan both continued a close relationship with a noncampus peer and developed strong involvement with college peers. He was, however, the only student attending a university in the same town from which he had graduated high school.

Time on campus. Four participants lived in college dormitories. All dormitory residents told of meeting new friends through the casual interaction of “hanging out” around the dorm. Two of the four left campus on most weekends, and although they identified campus integration, they had lower campus interaction than the two dormitory residents who stayed on campus on weekends. Each of the two weekend leavers spent weekends with friends established prior to college attendance.
The transportation restrictions of persons unable to drive also resulted in increased time on campus. Five participants reported spending approximately 9 a.m. to 5 p.m. on campus. Their schedules were dictated by car pooling or public transportation. These persons identified peers with whom they ate lunch and socialized on campus. However, none of them reported that this interaction generalized away from campus. Four students remained on campus only for class or library usage. None of the four expressed involvement with extracurricular activities or peers, other than related to class assignments.

**Extracurricular activity.** No nontraditional-aged student expressed active participation in campus-sponsored extracurricular activities. Both Jill and Kip expressed interest in campus activities which they did not pursue based on perceived age incompatibility. All expressed a desire for adult activities or an organization for nontraditional-aged students.

Three persons were active in extracurricular activities outside of their academic major. Each discussed the development of friendships and acceptance associated with their involvement. In all cases, strong association with off-campus peers correlated with neutral to negative involvement with extracurricular activities (see Table 4).

Over half the participants were unaware of extracurricular activities such as open recreation or intramurals. Others reporting interest in swimming or working out had been inhibited by the need for physical assistance to dress, to enter the pool, or to use weight equipment. Eleven students expressed an interest in participating in a fitness program specifically for persons with disabilities. Mary clarified her interest in a fitness program
by stipulating that the program would have to occur prior to 5 p.m. or provide child care.

Kip, Jill, and Jane agreed with the 5 p.m. restriction due to transportation.

**Intrapersonal Characteristics**

The process of socialization is mediated not only by normative pressures, but also by the intrapersonal characteristics of each person (Weidman, 1989). Implications of living with a disability may have influenced the development of intrapersonal characteristics of these students to a degree undeterminable by this study. Yet many of the unique intrapersonal aspects of these students contributed to their social integration on campus.

**Personal attitude.** Ten participants have lived virtually their whole lives coping with the implications of disability. They shared how they had learned to accept the attitudes of peers and to accept for themselves the responsibility of obtaining the social lifestyle they desired. All told of coping becoming easier with time and reported that now impairment did not hold them back from most activities.

The importance of personal attitude in becoming integrated was a consistent theme. As Jane said, “You can't just draw back and hope that someone is going to approach you and start talking to you.” In this study, perceived self-responsibility crossed gender lines. Participants of both genders told of being patient and understanding of persons without disabilities and of empathizing with their discomfort in initial interactions with persons with disabilities. It is hard to determine the onset of persistence; however, this sample represented great perseverance. Ten of the participants cited personal attitude as their greatest asset to social integration. Regardless of age,
severity, or onset, participants discussed the need for persons with disabilities to initiate social interaction and the responsibility to make nondisabled persons feel more at ease with those interactions. However, the participants in this study were students who volunteered to discuss their social lives, and the majority were seniors who had already demonstrated a high level of self-determination to reach senior status. Joshua recalled that before his injury he felt awkward when encountering a person in a wheelchair. He now uses that memory to understand people’s reaction to him. He simply tries to be himself and allows people to get to know more about him, beyond the fact that he uses a wheelchair.

**Minority group affiliation.** Two students of Mexican American heritage expressed apprehension related to racial prejudice. Neither felt that they had experienced discrimination, but one participant noted the lack of Hispanic peers with whom to associate as a reason for not developing campus peers.

Five students in this study spoke of their relationships with other students with disabilities. Jill, Spike, Mary, Kip, and Jewell named each other when identifying their campus friends, supporting the contention of minority group affiliation. Spike longed for the strong group affiliation he had shared with persons with disabilities at a previous college. He attributed that affiliation with a sense of belonging, worth, and personal development.

**Implications of disability.** Unanimously the participants in this study reported that tasks of daily living take longer. Spontaneity was reduced by the need to take medical or assistive equipment when spending the night away from one’s primary residence.
Another example was having to transfer into one’s chair, then into a car, and back out again just to go for coffee. Of course, the process was repeated to go back home.

Kip, Jewell, and Jane, each visually impaired, told stories of peers misinterpreting their nonverbal communication. Each told of passing students on campus but not being able to distinguish their faces. The peers interpreted this as lack of interest rather than lack of vision.

Perceived fit. For nontraditional-aged students, age was a frequent influence on perception of satisfaction and integration. Of the 7 participants who were over the age of 26, only 2 perceived a positive fit at UNT. The majority, 4, perceived somewhat a fit. They felt accepted academically and within their academic major, but not within the student body as a whole. In contrast, 5 of 9 traditional-aged students perceived an overall fit at UNT and none had a negative perception of their fit. Although only 1 participant expected to be socially active, 14 students expressed somewhat or positive satisfaction with social life on campus.
SUMMARY, CONCLUSIONS, DISCUSSION, AND RECOMMENDATIONS

Summary

In response in part to the Americans with Disabilities Act, facilities of universities have been made architecturally accessible to students with physical disabilities, and the number of undergraduate students with physical disabilities is increasing. Previous literature left it unclear whether students with physical disabilities were socially integrated into the university community. Social integration has been shown important to the personal and academic development of undergraduate college students (Astin, 1996; Christie & Dinham, 1991; Kuh, 1995; Pascarella & Terenzini, 1991). Additionally, social integration has been found to be positively related to persistence (Astin, 1984; Kuh et al., 1991; Nora & Cabrera, 1996; Tinto, 1987) and perceived self-worth (Baxter-Magolda, 1992; Kuh, 1993; Terenzini et al., 1994). However, recent research has challenged the accepted value of social integration for nontraditional students (Metzer & Bean, 1987; Murguia et al., 1991; Nora & Cabrera, 1996). The findings of these studies suggest that nontraditional students may be influenced by variables not currently addressed in college impact models.

The purpose of this study was to increase the understanding of what students with physical disabilities perceive as influencing their social integration and their perceived level of satisfaction with social integration on campus. From in-depth interviews with 16
undergraduates with physical disabilities, the model of Undergraduate Socialization (Weidman, 1989) was tested and challenged.

Data were collected through in-depth interviews. Each interview followed the general direction as set forth in the interview guide (Patton, 1990) to solicit student perceptions of how parents, friends, physical accessibility, academic pressures, and implications of disabilities influenced social integration. Verbatim interview transcripts were subjected to constant comparison analysis (Glaser & Strauss, 1967) to develop the emerging categories and themes of influence.

Explanation of Model of Undergraduate Socialization

The categories of influence within Weidman’s (1989) model were generally supported by the stories of these participants. Participants in this study were influenced by background, off-campus, intrapersonal, and on-campus pressures. Differences were revealed among the members of this sample as to what constituted the subcategories within the model.

Pre-college normative pressures. Although background characteristics were perceived as influential, the influence of two background characteristics consistently differed from the direction reported by Weidman (1989). Across student characteristics of age, residential status, and economic stability, positive precollege socialization and parental socialization did not explain college integration or persistence. Persons with onset of disability prior to high school graduation were more socially active now than in high school. Persons with post-high school onset perceived their integrating differently now.
Pre-injury socialization seemed not to make the students more comfortable with social situations, and they told of hesitation and anxiety about relearning how to socialize.

What appeared to be influential was the individual student's goal for college attendance. Both traditional- and nontraditional-aged students reported that instrumental goals of college attendance were more important than was campus social activity. This was expressed through negative expectations for campus socialization and as a rationale for socialization decisions.

In-college normative pressures off-campus. Involvement with off-campus groups was found to negatively influence social integration. Participants of this study involved with volunteer organizations, church, and peers reported lower levels of involvement with campus activities. Relations with families had mixed influence. Parental relationships were not influential, whereas child care responsibilities were found to negatively influence campus integration.

Attendant care was perceived as both positively or negatively influential on social integration. Participants first identified that, without attendant care, they would have no socialization and thus, that, care was a positive influence. In contrast, reliance on attendant care reduced spontaneity and freedom of choice. Decisions to socialize had to be balanced by the availability and scheduling of attendants, often restricting social opportunity.

An additional off-campus influence was transportation. Several participants in this study were unable to drive and thus relied on public transportation or friends to
access the campus. The barrier of transportation was reported to result in the decision not to attend an activity rather than to trouble a friend.

**In-college normative pressures on-campus.** Consistent with Weidman’s (1989) model, campus social and academic experiences influenced integration. Living on campus was associated with increased social integration. Academic goals and requirements for studying were reported as influencing decisions to participate in social opportunity. Several participants spoke of conscious choices not to socialize but rather to spend time on academic tasks.

Campus influences specific to being a student with a physical disability were also identified. One presumed campus influence for persons with physical disabilities was architectural access. Physical accessibility of buildings and grounds on campus was not perceived as a barrier to social participation for any participant in this study. A second assumed influenced was the negative influence of nondisabled students attitudes toward persons with disabilities. Again, neither the attitudes nor the behaviors of campus peers were perceived as influential on social integration.

**Intrapersonal characteristics.** The second purpose of this study was to identify how students with physical disabilities perceived their own disability as influencing their social integration. Generally, implications of disability were not perceived as inhibiting. Participants tended to perceive themselves as in control of their social activity and repeatedly stated that disability was not influential. Participants related that their perceived self-responsibility was more influential than the actions of peers, architectural access, or contending with implications of disability. One influential aspect of disability
was that implications of disability resulted in routine tasks taking longer. This would on occasion lead to the decision not to participate in an activity, because of the inconvenience of time.

The third purpose of the study was to determine perceived satisfaction with the social integration of undergraduates with physical disabilities. Only one participant expected to be socially active, and he was. Generally, participants were satisfied with their level of integration into the social community of the university while reporting relatively low levels of involvement. They told of perceived control over involvement and satisfaction with choices they made related to their social involvement. Persons who lived on campus, were involved in extracurricular activities, or were academically integrated reported the highest levels of satisfaction. Two persons expressed strong dissatisfaction. Each reported a desire to be more socially involved on campus.

Conclusions

Social integration has generally been accepted as a contributor to personal development and retention, particularly for traditional students (Kuh, 1995; Pascarella & Terenzini, 1991; Tinto, 1987). However, the process of becoming integrated and even the desired depth of integration vary. The primary purpose of this study was to determine whether students’ with physical disabilities perceptions of influences on their social integration agreed with the factors of Weidman’s (1989) Model of Undergraduate Socialization. Conclusions follow that relate to the model’s explanatory value for students with physical disabilities. What emerged from this study was the extension of
subcategories within the model and identification of the strong influence of intrapersonal characteristics.

Precollege Normative Influences

Precollege social experiences shaped the goals and expectations of students entering the university. For students with onset of disability prior to high school, limited pre-college socialization was followed by low expectation for collegiate socialization as stated in the model. However, this influence did not last however. Students overcame the lack of social experience and became socially integrated on campus to a satisfactory level on campus. The story of students with onset of disability after high school graduation differed. These persons had been socially integrated in high school, participating in sport teams, in clubs, and with a network of peers. They did not expect, however, to be socially integrated on campus as the model suggested. Rather they perceived a lack of social experience since their injuries and like the students with pre-high school onset, held low social expectations. Thus, for persons with later life onset, post-injury rather than pre-college socialization may be influential on social expectation.

In-college Normative Influences Off-Campus

Parental socialization and relationships were not perceived as influential. Students tended to interact infrequently with their families of origin. Even when living with families, students separated and developed their own social lives.

Living with children was seen as an important influence in social decisions. Students with the responsibility of child care chose time with their children over campus socialization. To better explain the off-campus pressures influencing the socialization
process of students with young children, the model category of Parental Relations might better be labeled Family Relations. This would broaden the perspective of the model to include persons with differing family relationships.

The strongest off-campus influence identified was transportation. Both reliance on public transportation and commuting were negatively related to campus social integration. Transportation convenience and time were considered in the student’s decisions to be socially active. Adherence to transportation schedules resulted in students spending increased time on campus. Access to the university would appear to be an off-campus influence for commuters as well as for persons who do not drive.

In-college Normative Influences On-Campus

The university environment has improved for persons with disabilities. Architectural accessibility has improved, and the negative influence has decreased. Similarly, campus peers without disabilities were not seen as inhibiting social opportunity for students with disabilities.

Residence was socially influential. Living in a dormitory was positively influential. Dormitory residence resulted in increased awareness of opportunity, introduction to peers outside of the classroom, and extended time available to socialize. For students living on campus the barriers of transportation and scheduling were not influential. The time scheduling of an activity was influential in decisions to participate in extracurricular activity by students who did not live on campus. Off-campus residents were aware of activities but were unable to attend because of child care or transportation barriers.
Intrapersonal

The strongest influence perceived by the participants in this study was that of personal attitude. Students who accepted self-responsibility and demonstrated self-determination were able to overcome pressures such as the lack of precollege socialization, transportation, or physical independence. Weidman’s model presented intrapersonal characteristics as a process in the interaction of other pressures. Intrapersonal characteristics appeared to be a stronger element than previously indicated. It must be noted that the findings were based on the stories of participants who possibly represent higher self-responsibility than others in the Phase I sample. By volunteering they demonstrated their willingness to commit time to volunteer for the interview process and to discuss their social lives.

Discussion

The findings and conclusions of this study both support and challenge the Model of Undergraduate Socialization (Weidman, 1989) and previous literature on college impact. Attinasi (1989) suggested that college impact models had been developed without consideration of the students’ voice. The findings from this interpretive study are discussed in light of previous literature.

Precollege Normative Pressures

Tinto (1987) had found that students eager to make new friends adjusted to college better than persons anxious about the challenge or the negative aspects of
integrating into a new experience. Precollege socialization was reported to increase campus social integration due to lessening anxiety (Tinto, 1987). The majority of participants were neither eager nor anxious to make new friends at college. Participants with recent injuries were anxious about relearning how to socialize. This anxiety negated the positive socialization effects of having been socially integrated in high school. Students approaching college socialization with a newly acquired injury had not practiced socializing in their new situation. Students with onset of disability prior to high school graduation had minimal precollege socialization. Entering college they were neither eager nor anxious about socially integrating. Rather, they had low expectations of socialization, resulting from negative precollege experience.

Terenzini et al. (1994) found precollege characteristics to be a reliable influence only during the first year of school. This could partially explain the minimal influence of precollege pressures on the social integration of students with disabilities in this study. Each had been in the university for more than one year.

Students with increased commitment to educational goals were less interested in social aspects of the university. This finding was consistent with previous findings related to nontraditional students (Metzer & Bean, 1987; Villella & Hu, 1991). Goal commitment was also influential for traditional-aged students. After years of facing stigma, discrimination, and isolation, these students may have accepted as fate their lack of social opportunity and, rather, committed themselves to academic goals.
In-college Normative Pressures Off-campus

Off-campus pressures were not perceived unanimously by the participants in this study as influencing social integration. The participants implied that the choice to participate in off-campus rather than campus activities preceded the actual participation. Thus, off-campus participation was not perceived as the reason for nonparticipation on campus. Whether off-campus activity influenced decisions to socialize on campus or whether off-campus activity was a result of lack of campus socialization was indeterminable. It is logical that more time off-campus reduces time on campus (Astin, 1996). What has been lacking in previous explanations has been individual choice. The participants in this study told of choosing activities based on interest. No one reported participation in any off-campus function chosen over campus activity.

Persons with physical disabilities were more likely to reside with family (Falvo, 1991) and one half of the participants in this study did. Weidman (1989) discussed the power of family pressures in determining the socialization process of undergraduates. However, in this study, families of origin were not perceived as influencing social integration. Minimal influence was due to successful separation from families of origin (Tinto, 1987). For the nontraditional-aged students it was likely that separation may have preceded college attendance, minimizing influence even further. Separation from family of origin was also increased by the participants’ lack of financial dependence on their families. The majority of educational expenses were paid by state assistance and other financial aide sources. The combined indicators of separation contributed to the minimal influence exerted by families of origin.
Separation from family was excepted by Angie, who was still heavily enmeshed with her family of origin. Her enmeshment was possibly increased by living with the family, being geographically distanced from pre-college peers, and lack of exposure to a racially similar peer group with which she desired interaction (Murguia et al, 1991).

One family pressure did influence socialization—that of child rearing. Each of the persons with young children expressed that the responsibility of child care overrode interest in social activity, supporting findings by found by Nora and Cabrera (1996). Students with child care responsibilities were more enmeshed with their families, regardless of proximity to campus. They discussed not only being responsible for child care, but also preferring to spend time with their children, again indicating the influence of personal choice in socialization decisions.

Attendant care was presumed to interfere with social opportunity (Falvo, 1991; Treischmann, 1988). Persons dependent on attendant care reported a restriction of time available for social integration. They had to go to bed, get up, and eat on a predetermined schedule or find someone other than their attendant to provide needed assistance. A related issue was the dependence on transportation sources. Transportation was a major influence on the social lives of persons unable to drive themselves. Whether transportation dependence was on public transportation, specialized trip service, or car pooling, social opportunity was inhibited. This finding is consistent with previously identified barriers to integration of persons with physical disabilities (Carter et al., 1995; Falvo, 1991).
In-college Normative Pressures On-campus

As found in previous studies (Christie & Dinham, 1991; Hays & Oxley, 1986; Pascarella, 1985) all four dormitory residents developed friendships with other residents. One potential benefit of living on campus is time available for social interaction (Astin, 1984; Christie & Dinham, 1991); so too is access to campus peers with whom to develop friendships (Kuh et al., 1991). Both benefits were expressed by the dormitory residents in this study.

Social contact with peers within academic major was reported. Wilson and Newcomb (1966) suggested the influence of similar values, goals, and interests in peer group formation. These interactions, however, had not generalized beyond academic interactions, indicating that academic major may not be a sufficient common interest for the development of peer reference groups.

A reference group identified within the sample was that of a network of persons with disabilities. Repeatedly, participants discussed their interactions with the Office of Disability Accommodations. Several volunteered there on occasion and one person worked there. Other students told of “hanging out” or being asked to telephone a new student who had a similar disabling condition. This affiliation could be attributed to minority association (Murguia et al., 1991). Although representing different disabilities and levels of severity, each person had experienced life with a disability. Murguia et al. (1991) discussed the importance of minority students associating within their group, association being one means of integrating, and Fine and Asch (1988) suggested that persons with disabilities constitute a minority group.
West et al. (1993) discussed the inhibiting effect of physical accessibility on the integration of students with physical disabilities on campus. Historically, accessibility has repeatedly appeared as a barrier to the lives of persons with physical disabilities (Penn & Dudley, 1980; West et al., 1993; Yerxa & Locker, 1989). Over 20 years have elapsed since the passage of the Rehabilitation Act of 1973 and the subsequent requirement that universities become accessible. Supported this decade by the enactment of the Americans with Disabilities Act, the benefits appear to be surfacing. Certainly there were complaints such as keyed elevators and nondisabled persons using reserved parking spaces, but these students unanimously reported no barrier to participation due to physical accessibility.

The participants of this study did not perceive lack of social acceptance or discrimination from their peers, as was previously reported in the literature (Fichten & Bourdon, 1986; Fine & Asch, 1988; Haring, 1991; Hartman, 1993). Rather, they perceived uneasiness on the part of their peers. The uneasiness was lessened, however, when the student with a disability initiated interaction with the peer. After nondisabled peers got to know the student with a disability, no attitudinal problems were perceived.

Intrapersonal Characteristics

Functional integration as identified by Haring (1991) has been achieved for the participants who shared their stories here. It must be noted, however, that these persons may represent the exception among persons with physical disabilities. High school graduates with disabilities still enter college at a much lower rate than their nondisabled peers (C. Henderson, 1995). These students are nearing the end of their undergraduate studies. They represent people who have already overcome great adversity to arrive
where they are. They spoke readily about their personal drive and determination. This appears to be a strong influence on the social integration of students with physical disabilities. If they were interested in an activity, they pursued it. Interest was mediated by available time, commuting, studying, or adhering to the schedules of personal care attendants. None of these issues, however, were attributed to nonparticipation or seen as insurmountable.

The participants in this study expressed confidence in their competence to interact. This was demonstrated by their continued discussion of initiating interpersonal interactions and attempting to lessen the uneasiness of nondisabled peers. Bedini and Henderson (1993) had also found perception of self-responsibility among 30 women with physical disabilities.

Students with physical disabilities may best be described as nontraditional. This fits consistently with Bean and Metzer’s (1985) definition of nontraditional as a student with reduced interaction with the university. Weidman’s (1989) model was intended to explain socialization for all undergraduates, regardless of age, residence, or course load. The categories of background, off-campus, and on-campus normative pressures do provide a broad parameter for the socialization process. However, for students with physical disabilities, interactions with campus activities were influenced more by intrapersonal characteristics of personal drive and determination than by environmental pressures.
Recommendations

The implications of this study span students with physical disabilities, university personnel, and rehabilitation practitioners. This preliminary understanding of the factors perceived by students with disabilities as influencing their social integration stands as a catalyst for future studies.

Students With Physical Disabilities

Students with physical disabilities in or entering a university might heed the advice of the participants of this study to take the risk and become involved. The success of the participants in this study demonstrates the pursuing of goals over major barriers.

The students told of being introduced to campus and having their anxiety lessened by associating with the Office of Disability Accommodation. Although primarily an academic support service, the ODA was an avenue for peer development. When the students were asked to project the advice they would give an incoming student with a physical disability, they unanimously suggested that students become involved and do what they want to do. They advised that, if possible, students without independent transportation live on or near campus.

University Personnel

Administrators within higher education are faced with demands of reaching an ever more diverse student population. In this consumer-driven society, meeting the diverse needs and interests of these students is paramount. Although students with disabilities sometimes choose to participate in segregated activities such as fitness training, segregated activities cannot be seen as the only solution. As shown in previous
research, extracurricular activities provide students, not only an avenue for achieving overt goals such as increasing physical fitness, but also an avenue to meet new peers and to experience persons with differing backgrounds (Christie & Dinham, 1991; Kuh, 1995).

Student affairs personnel will be faced with providing extracurricular activities to meet the diverse needs and interests of nontraditional students. Activity selection, leadership qualifications, promotional techniques, and scheduling may require a new approach in order to reach these new students. Transportation and child care may be necessary to attract students to campus activities. In large higher education institutions, finding a niche, a peer reference group, may result from participation in a disability-specific group. Another option might be to provide activities targeted at older students or students who remain on campus all day and are currently sitting in the union drinking coffee.

**Rehabilitation Professionals**

For the professionals working within rehabilitation fields, a need was shown for reaching students with disabilities prior to college enrollment. Programs are needed to enhance the development of attitudes and skills expressed by these participants as essential to successful college integration. Early outreach could result in students entering college with high expectations of social integration. This could increase their actions of self-responsibility and initiation of participation.

Inclusive social opportunities at an early age can also reduce the uneasiness of their campus peers that is perceived by students with physical disabilities. Professionals could facilitate social interactions, thus taking the responsibility of initiation away from
youth both with and without disabilities, until each is more comfortable with social
situations. Additionally, educational and recreational programs facilitated to teach
assertiveness or allow someone with a disability to practice social skills could help young
persons with disabilities to develop the initiative and perceived competence associated
with collegiate social integration.

Future Research

The CHART was administered as a means of segmenting the level of handicap
resulting from the disabling condition. The scores from the CHART, however, did not
however, aid in that process. This could have been due to the extended time since onset
of disability for the majority of the participants in the study. Over time these persons may
have learned to adjust to and cope with their impairments. Although physical
independence scores ranged similarly to the initial sample, no appreciable relationship
existed between physical independence and social integration scores. Social integration
scores were high even for the most physically restricted participants. The two persons
with the lowest physical independence scores each scored 100 on the social dimension.
Conversely, the two lowest social integration scores were by people who scored 100 on
the physical independence section. Future studies related to social integration might use a
tool more sensitive to the social integration indicators related to campus. An example is
the College Student Experience Questionnaire (Pace, 1991). This quantitative measure
would provide a numerical social integration score normed to other college students.

Severity of disability did not evolve as influential in this study. However, future
studies might narrow the sample by focusing on age, specific impairment, age of onset, or
use of a personal care attendant. Additionally, the influences of students in their first year of university attendance may differ.

Through concentration of a few variables, deeper, more consistent themes may emerge. It is recommended not to include both mobility and visual impairments in the same study. They had differing implications of disability. Also, a strong difference emerged between persons with an onset prior to high school graduation and those with onset after high school graduation. Persons with earlier onset may have developed coping mechanisms that influence perception. Persons with later onset have memories of pre-injury social involvement with which to compare their current involvement, or they may still be in the process of adjusting to the disability.
APPENDIX A

INTERVIEW CONSENT FORM
Interview Consent Form

Information of Primary Investigator
Jan Hodges
Physical Education Building, 209
817-565-2545

Major Professor
D. Barry Lumsden, Ph.D.
Professor,
Higher Education

This study is concerned with the perceived effect of disability on the social experience of students with physical disabilities, at the University of North Texas. The study is being conducted as partial fulfillment of the doctoral degree requirements of the primary investigator. This is a preliminary step in enhancing the social involvement of future college students with physical disabilities.

As a participant in this study you will be expected to participate in at least one interview session with the primary investigator. If necessary, additional interviews may be scheduled to increase the depth of information, or to pursue new avenues.

The information gathered in this investigation will be held in the highest confidentiality. Only the primary investigator (and typist) will have access to the names of participants. All interview transcripts will be edited to include pseudonyms for all participants. The tape recordings and the written transcripts will be secured in a locked private office. All reporting of data will be done using pseudonyms. The procedures of this study have been cleared through the Institutional Review Board at the University of North Texas.

Participation in this study is completely voluntary. You may withdraw at any time without penalty, prejudice, or loss of benefit and for any reason. To withdraw from the study please contact the investigator and indicate whether or not you wish to have all of your data obtained to date returned to you.

I acknowledge that I have read and understand the above information and agree to the stipulations here in.

Printed Full Name ___________________________ Signature ___________________________ Date ____________
APPENDIX B

CRAIG HANDICAP ASSESSMENT AND REPORTING TECHNIQUE
Craig Handicap Assessment and Reporting Technique

Please answer the following questions in relation to your life as a student.

I. What assistance do you need?

1. How many hours in a typical 24-hour day do you have someone with you to provide assistance?
   ____ Hours paid assistance
   ____ Hours unpaid assistance

2. Not including any regular care as reported above, how many hours in a typical month do you occasionally have assistance with such things as grocery shopping, laundry, housekeeping, or infrequent medical needs like catheter changes? ____ Hours

3. If used, who takes responsibility for instructing and directing your attendants and/or care givers?

II. Are you up and about regularly?

4. On a typical day how many hours are you out of bed?
   ____ Hours

5. In a typical week, how many days do you get out of your house/apartment/dormitory room and go somewhere?
   ____ Days

6. In the last year, how many nights have you spent away from your residence (excluding hospitalizations?)
   ____ None
   ____ 1 - 2
   ____ 3 - 4
   ____ 5 or more

7. Can you enter and exit your residence without any assistance from someone?
   ____ yes  ____ no

8. In your home, do you have independent access to each your sleeping area, kitchen, bathroom, telephone, and TV?
   ____ yes  ____ no
III. Is your transportation adequate?

9. Can you use available transportation independently?
   _____ yes _____ no

10. Does available transportation allow you to get to all the places you would like to go?
    _____ yes _____ no

11. Does available transportation let you get out whenever you want?
    _____ yes _____ no

12. Can you use available transportation with little or no advance notice?
    _____ yes _____ no

IV. How do you spend your time?

13. How many hours per week do you spend working in a job for which you get paid?
    _____ Hours per week

14. How many hours per week do you spend in school working toward a degree (hours in class and studying)?
    _____ Hours per week

15. How many hours per week do you spend in active homemaking including parenting, housekeeping, and food preparation?
    _____ Hours per week

16. How many hours per week do you spend in home maintenance activities such as yard work, house repairs, or home improvement?
    _____ Hours per week

17. How many hours per week do you spend in ongoing volunteer work for an organization?
    _____ Hours per week

18. How many hours per week do you spend in recreational activities such as sports, exercise, playing cards, or going to movies? (Please do not include time spent watching TV or listening to the radio.)
    _____ Hours per week
19. How many hours per week do you spend in other self-improvement activities such as hobbies or leisure reading? (Please do not include time spent watching TV or listening to the radio.)

______ Hours per week

V. With whom do you spend time?

20. With whom do you live: (check all that apply)
   ____ alone
   ____ with spouse/significant other
   ____ children (how many_____
   ____ other relatives (how many______
   ____ roommate (how many______
   ____ attendant (how many______

21. If you don't live with a spouse or significant other, are you involved in a romantic relationship?

   ____ yes  ____ no

22. How many relatives (not in you household) do you visit, phone, or write to at least once a month? _____

23. How many business associates do you visit, phone, or write to at least once a month? _____

24. How many friends (nonrelated) do you visit, phone, or write to at least once a month? _____

25. With how many strangers have you initiated a conversation in the last month?

   ____ none
   ____ 1 - 2
   ____ 3 - 4
   ____ 5 or more
APPENDIX C

DEMOGRAPHIC PROFILE SHEET
Demographic Profile Sheet

Please provide answers to the following questions. Your responses will be held in confidence, and used for the purposes of this study only.

Age

Sex  Male  Female

Racial or ethnic identification (check one)

___ Euro American  ___ African American
___ Asian American  ___ Pacific Islander
___ Mexican American  ___ Hispanic
___ Native American  ___ Other

Classification in college (check one)

___ Freshman  ___ Sophomore  ___ Junior  ___ Senior

Major

Residential Status (check one)

___ live on campus
___ live off campus, in Denton city limits
___ live outside Denton city limits, less than 15 miles from campus
___ live more than 15 miles from campus

Marital Status

___ Single  ___ Divorced
___ Married, living separately
___ Married, living together  ___ Unmarried, living together

Semester and year in which you first enrolled at:
(answer all that apply)

a community college
a university/college
UNT
What percentage of your college expense this year is paid by:

___ Texas Rehabilitation Commission  
___ Scholarship  
___ Parents/Family  
___ Self  
___ Other_________________________

Total should equal 100%

Please provide answers to the following items to best describe your disabling condition.

Primary Diagnosis (check only one)

___ Cerebral Palsy  
___ Spinal Cord Injury  
___ Spina Bifida  
___ Multiple Sclerosis  
___ Muscular Dystrophy

__Amputation  
___ Visual Impairment  
___ Hearing Impairment  
___ Head Injury  
___ Other (please specify)

Secondary Diagnoses (check all that apply, if any)

___ Cerebral Palsy  
___ Spinal Cord Injury  
___ Spina Bifida  
___ Multiple Sclerosis  
___ Muscular Dystrophy

__Amputation  
___ Visual Impairment  
___ Hearing Impairment  
___ Head Injury  
___ Other (please specify)

Mobility (check only one)

___ ambulate independently  
___ ambulate with assistive device (please specify___________________________)
___ manual wheelchair user  
___ electric wheelchair user  
___ assistive animal  
___ other (please specify___________)
Verbal Communication

___ no impairment
___ speak slowly
___ nonverbal
___ other (please specify)

Other- Please provide additional implications of your disability
APPENDIX D

ACTIVITY PARTICIPATION FORM
Activity Participation Form

For each of the following university activities place the appropriate number in each column to:
I. Indicate the frequency of participation you have had on average at UNT.
II. Indicate with whom you generally attend.
III. Indicate who initiated the activity.
IV. Indicate how satisfied were you with the activity.

<table>
<thead>
<tr>
<th>Event</th>
<th>I. Frequency</th>
<th>II. Attended</th>
<th>III. Initiated</th>
<th>IV. Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1=Daily</td>
<td>With</td>
<td>Initiated</td>
<td>Satisfaction</td>
</tr>
<tr>
<td></td>
<td>2=2-4x Week</td>
<td>0=Alone</td>
<td>By</td>
<td>1=Very</td>
</tr>
<tr>
<td></td>
<td>3=2-4x Month</td>
<td>1=1 other</td>
<td></td>
<td>2=Somewhat</td>
</tr>
<tr>
<td></td>
<td>4=2-4x Semester</td>
<td>2=2 or more</td>
<td></td>
<td>3=Neutral</td>
</tr>
<tr>
<td></td>
<td>5=Once</td>
<td></td>
<td></td>
<td>4=Not</td>
</tr>
<tr>
<td></td>
<td>6=Never</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Collegiate Athletic Event
- Club Meetings
- Films/Theatre/Concerts
- Intramural Event
- Open Rec/Swim
- Union Game Rm
- Greek Event
- Other
Interview Guide

Participant Code Number____________________

Date___________________________

Purpose of Interview:
Tonight/Today we are going to spend about an hour discussing what you perceive as influencing your social life at UNT. I am conducting these interviews as part of my dissertation research. Hopefully this study will lead to a better understanding of what affects the social life of students with physical disabilities. This may lead to future research that may enhance the experience for future students with physical disabilities.

Format:
All subjects we discuss tonight will be held in confidence to the purposes of this study. Transcripts of this interview will be coded with an identification number specific to you. I will be the only person with access to the names and code numbers. As was noted in the consent form you signed, participation is totally voluntary and you may choose to withdraw at any time.

I will be using two tape recorders as we talk. If you are comfortable with the lapel mike, it really helps with clarity on the tape. Also, I will jot notes from time to time. Don't be alarmed by this, I might be noting a question I don't want to forget, or making a note to myself about something to review on the tape.

I have a series of questions that I would like to ask so that I have the same information from everyone I interview, but I don't want us to be restricted to these questions. As you think of things that will enhance my understanding of what influences your social life, please bring them up.

Before we begin you may choose a pseudonym to be used in the interview and in reporting.

Pseudonym________________________

Do you have any questions about the study or process?
Interview Guide

Interviewer Note: Clarification of Profile Sheet
(Prior to interview, jot down any items from Phase I that need further explanation and which are not provided for in the interview guide)

Introduction

___ To begin, take a few minutes to describe yourself to me.

___ Describe your typical school day, from waking up, to turning off the lights to go to sleep.

   Probe: Time to groom and dress
   Time to eat
   Time in transit:
       (enter for profile where they live: if you commute how long does it take)
   Driving/parking
       (Do you drive/have a car)
       Getting into accessible entries
       Putting in/taking out chair
   Schedule related to personal care assistant
   Medical/disability specific care
   Leisure
   Class time

___ How does this differ on a Weekend day?

___ How much time do you spend on campus during a typical week?

Intrapersonal

___ What did you expect College Social Life to be like when you came to UNT?

   Probe:
   How did you develop this expectation?

   Did you expect to be socially active/inactive at school?
Were you aware of the social opportunities at UNT?

Did your parents/siblings attend a university?

Describe your high school social activities.

What kind of social activities do you enjoy?

__Were you socially active in high school? Tell me about your social life then.

Where you satisfied with your social life in high school?

How is it different now?

Why?

Institutional

__How do you now perceive Social Life at UNT?

Probe:
Describe your current social life.

How is it different than or the same as you expected?

Do you feel as if you fit in? How, How not?

Do you think you are treated by nondisabled students similarly/differently to how they treat other nondisabled students? Explain.

To what degree are you satisfied with the social opportunity at UNT?

__What type social opportunities are you now aware exist on the campus?

Probe: Greek
Dormitory
Intramural

UPC
Religious
Academic Clubs

Which do you participate in? (Refer to APF)

How did you learn about these opportunities?
Which if any of these would you be interested in pursuing? Why?

Why would you be/not be interested in participating in extracurricular activities?

How has participating in (add any previously mentioned) affected your campus life?

Describe the architectural accessibility of the UNT campus, in relationship to your disabling condition.

Describe your primary social network?

Are they students at UNT?
Other universities?
High School friends?
Where did you meet these people?
Class
Extra-curricular activities
Residence

What do you do together?

Do you have a best friend? Describe him/her and your involvement with him/her.

Has your group of friends changed since attending UNT?

Describe your satisfaction with the number and depth of your current social network?

What do you do when you have nothing you have to do?

External

Explain your social activity away from campus.

(Enter from profile residential status)

Why did you decide to live where you live?
(Enter from profile marital status____________________)

Is spouse/significant other UNT student?
Is spouse/so student elsewhere?

___How does time with family affect your campus social life?

Probe:
How often do you spend weekends with your family/parents?
What do you do?

___In what ways have you maintained contact with your high school friends?

Probe: Any attend UNT

___Describe other social groups outside of campus in which you participate?

Probe:
Disability specific groups

___How does your work affect your social life?(refer to CHART)

Probe:
Time
Work acquaintances

Intrapersonal

___If you have a personal care attendant, how does that impact your social life?(ask only of those who identified attendant on DPS)

Probe: Time
Schedule
Privacy
Please summarize what you feel affects your campus social life?

Probe: knowledge of events
       access to facilities
       time
       friends
       competence
       implications of your disability
       fitting in
       barriers
       other

What do you see as UNT’s biggest asset for people with disabilities who want to become socially active?

What do you see as UNT’s biggest barrier for students with disabilities who want to become socially active?

What would you tell an incoming student who has a disability similar to yours?

Are there any other aspects of the social life at UNT that you would like to share with me?

Do you feel the questions asked provided a clear picture of your social life since becoming a student at UNT?
REFERENCES


with spinal cord injury living in the community. Archives of Physical Medicine and Rehabilitation, 73, 552-557.


learning and personal development through out-of-class experiences. San Francisco:

Mosby.

Department of Education.

LeCompte, M. D., & Preissle, J. (1993). Ethnography and qualitative design in

SAGE.


McKeown, B., MacDonell, A., & Bowman, C. (1993). The point of view of the

profile/disabil.html


University of North Texas. (n.d.). *ODA disability codes for class roles*. (Available from University of North Texas, Office on Disability Accommodations, Suite 318, University Union, Denton, TX 76203).


