The Yardstick of Social Validity: Evaluating Quality of Life as Perceived by Adults without Disabilities

Elizabeth B. Kozleski Deanna J. Sands University of Colorado at Denver

Abstract: Adults without disabilities were surveyed using the same instrument that was used to investigate the quality of life for adults with developmental disabilities. Survey results suggest that some quality of life indicators may be inhibitors to achieving satisfactory quality of life. Other indicators may enhance or serve as contributors towards a positive quality of life. Differentiating between inhibitors and contributors may help service providers to focus services for individuals on those factors that will directly contribute to change in quality of life status. Using data from a sample of the typical population ensures that our programming efforts will support community inclusion for individuals with developmental disabilities.

The Yardstick of Social Validity: Evaluating Quality of Life as Perceived by Adults without Disabilities

In the field of developmental disabilities, Wolfensberger's (1972) concept of normalization has been instrumental in changing service planning, implementation, and evaluation over the past twenty years. The linkage between normalization and quality of life has been forged to the extent that as adults with developmental disabilities have access to the activities and rhythms of life that characterize the lifestyles of typical adults, it has been assumed that their quality of life will necessarily be enhanced. In the ensuing years Wolfensberger (1991) has expanded his focus beyond normalization to the construct of social roles. In essence, he suggests that merely mirroring the activities of individuals who belong to the community group is not sufficient to gain entry and acceptance into that group. In addition, Wolfensberger (1991) proposes that if individuals with developmental disabilities are to be valued and, through being valued, attain community membership, advocates must create opportunities and experiences that prompt community members to perceive individuals with developmental disabilities in positively valued ways. Thus, deinstitutionalization, the advent of supported

Correspondence concerning this manuscript should be addressed to Elizabeth B. Kozleski, School of Education, Campus Box 106, PO Box 173364, Denver, CO 80217-3364.

employment, the development of residential opportunities for individuals with developmental disabilities that provide housing for small numbers of roommates and the increase in community participation may all be said to have their philosophical roots in the principal of normalization. In a broad sense, Wolfensberger's notion of normalization may be viewed as a method of establishing social validity or the degree to which the outcomes of services have met a socially derived standard of accomplishment.

As the field has become increasingly oriented towards normalization, quality of life indicators have been used to measure the degree to which individuals with developmental disabilities have gained access to and become members of their communities. Accordingly, the effectiveness of services for individuals with developmental disabilities have come to be measured by the degree to which quality of life has been enhanced. Quality of life indicators continue to be refined but have been defined by Kibele (1988) as personal health, control of the physical environment, social interactions and personal decision-making. In 1990, Vogelsberg added employment, leisure, membership in a community, and family relationships to the quality of life indicators. Boone and Stevens (1991) have an even more inclusive list: (a) socio-economic status; (b) independence/interdependence; (c) the ability to form and maintain relationships; (d) an accessibility to others who are willing to form and maintain relationships; (e) the opportunity for personal development and fulfillment; (f) the opportunity for participation in social, community, and civic activities; (g) the opportunity to be productive. The extent to which the lives of individuals with developmental disabilities match those of their typical peers on these dimensions can be said to be a measure of their quality of life and hence a measure of the social validity of the services.

Increasingly, quality of life indicators are viewed as a more accurate vardstick by which to evaluate services than merely questioning consumers on the degree of their satisfaction with services received which has been a typical method of establishing social validity (Hawkins, 1991). Indeed, many researchers have found that consumers rate favorably services from mental health, medicine, social services and developmental disability agencies (Bornstein & Rychtarik, 1983; Furqua & Schwade, 1986; Sands, Kozleski & Goodwin, 1991) although these services may not assist the consumer in achieving a quality of life that matches their typical peers. Indeed, it appears that social validity may be measured only if direct consumers (persons receiving services), indirect consumers (such as the general public who may benefit indirectly from the service), and service providers share in the evaluation of services.

Therefore, if the developmental disabilities field continues to measure services by quality of life indicators, then it seems that we have the obligation to define the parameters within which typical community members achieve these quality of life indicators. In doing this, it would seem that service providers could more accurately tailor their efforts towards community inclusion and rely less on their personal values that may or may not reflect the values and cultural expectations of the community as a whole.

Geller (1991) has defined social validity as the degree to which an intervention program addresses an issue of social importance and, in its implementation, does not create socially unacceptable side effects. Schwartz and Baer (1991) suggest further that one technique to establish social validity should be the affirmation that the goals and outcomes of a given program or intervention are valid. These authors suggest that the behavior of community members be used as a model to establish service goals. In the case of quality of life indica-

tors, it would seem that a valid measurement of quality of life indicators must include a description of the typical population in relationship to these quality of life factors. This description of the typical population is complicated by the rapidly changing demographics of various regions in the United States. Such social demographics as socio-economic status. race, ethnicity, gender, marital status, age, and education have all been shown to impact longevity, independence, the ability to form and maintain relationships, the accessibility to others who are willing to involve themselves in relationships, and the other quality of life factors enumerated by Boone and Stevens (1991). Thus, establishing and maintaining information about quality of life indicators by regions will assist service providers in designing and implementing services that support individuals with disabilities in achieving valued status in their local communities.

In our study, we sought to establish a yardstick by which outcomes of services to individuals with developmental disabilities could be measured. By providing descriptive data on the typical population in Colorado using questions that were used to evaluate services to individuals with developmental disabilities, we were able to describe how typical members of the community fit within the standards used to evaluate services to individuals with developmental disabilities.

Method

Sample

One hundred and thirty-three individuals without disabilities completed a 14 page survey. The survey participants fell into three categories: (a) individuals who were approached at random on a shopping street in downtown Denver, Colorado; (b) individuals who were contacted through community organizations throughout the Denver metropolitan area; and, (c) students at either an urban campus in Denver, Colorado or a small town campus in Greeley, Colorado. In all instances individuals completed the survey voluntarily, receiving no compensation for their participation. The mean age of the survey participants was 33 years of age, with ages ranging from 18 to 70 years of age. Two-thirds (66.9%) of

the respondents were women and one third (32.3%) were men. The annual income for these individuals ranged from less than \$5,000 to over \$50,000. The mean income was approximately \$17.500 per year.

Forty percent of the respondents worked full time, another 14% were part-time workers. Three percent of the sample were unemployed, 37% were full time students or employment trainees, 1% was retired and 3% were volunteers. Of the survey respondents, 18.8% lived in Denver, 18% lived in Boulder, 10.5% lived in Greelev and the rest lived in 21 different suburbs of Denver. Forty-seven percent of the respondents were never married, 40.6% were married, 15% were divorced and one individual was widowed. The respondents reflected the racial mix of the Colorado population: 89.5% were white, 1.5% were Black, 6% were Hispanic, and 3.2% were Asian or other. When asked to list their primary caregiver, 80.5% listed themselves as primary caregivers. Another 17.3% listed a parent/spouse or other relative as the primary caregiver. One person listed a foster family member, another listed a friend and a third individual listed no one as primary caregiver. More than half of the respondents (60.2%) indicated that they were a member of a consumer/advocacy group such as Greenpeace, the National Association for the Advancement of Colored People, the Audubon Society, or Amnesty International. Another 39.1% were not a member of any advocacy group.

Instrument

The Consumer Satisfaction Survey (Temple University, 1988) instrument was designed to evaluate consumer satisfaction with services provided through developmental disability agencies. As originally used, the survey examined consumer satisfaction with current services as well as the quality of individuals' lives as measured by responses to items grouped into six areas: (a) services received; (b) satisfaction with those services; (c) independence/interdependence, (d) community activities, (e) productivity, and (f) needs for supports, services, and assistance.

For this study the instrument was modified for use with a non-disabled sample. In order

to tailor the instrument for use with individuals without disabilities some of the survey items required rewording; some items needed to be deleted. To determine the scope of the changes, a group of adults who were not familiar with the field of developmental disabilities completed the survey and provided feedback regarding the transparency of each item as well as its applicability to individuals without disabilities. On the basis of this feedback minimal alterations were made to the instrument.

To the greatest extent possible, questions in each survey category were not changed. However, two categories of change were made. Items specific to the nature of an individual's disability were deleted. For example, the item "At what age did you become disabled?" was removed. Where a service that had been listed on the original survey was disability specific service, a parallel nondisabled service was substituted. For example, one question asked survey participants to indicate if they were members of any consumer/advocacy group. This item then listed examples of such organizations. In the original survey the examples were organizations such as the Association of Retarded Citizens and People First. The modified survey asked the same question but the examples listed included Green Peace, the Audubon Society as well as disability specific organizations.

The Administration Process

Survey instruments were distributed by a master's level research assistant through classes at university campuses, at community organization meetings, and to individuals randomly selected on an urban shopping street. Participants were asked to complete the survey at their leisure and return it by mail in a self-addressed, stamped envelope that was provided. Instruments were distributed and returned over a three month period of time. Out of the 150 survey instruments that were distributed, 133 were returned (89% return rate).

Results

Data Analysis

Data were entered into SPSS PC+ (SPSS, Inc.). The analyses were primarily descriptive and yielded frequencies and percentages as well as measures of central tendency and variability (where appropriate).

Services and Satisfaction

This section began with general questions regarding the individual's satisfaction with his or her current living, job and/or school situation. Additionally, respondents were asked to comment on the convenience of the transportation available to access those work and school settings.

Housing. Fifty-five percent of the sample lived in either a single family home or mobile home in a neighborhood setting. Five percent lived in similar housing in rural areas. Thirty-eight percent lived in a multi-family home or an apartment. Finally, 3% lived in a rooming house or residential hotel. Fifty-six percent of the sample preferred to remain in their current living situation. Another 19% wanted to relocate geographically. Fourteen percent wanted to move to a different housing situation, such as from an apartment to a house. Another six percent wanted to remain in their current home but wanted to make some adjustments to their situation such as changing roommates or increasing their pri-

General Satisfaction. Of the participants (n = 72) who were working either on a full-time (40%) or part-time basis (14%), all were somewhat or very satisfied with their current work placement. All individuals who were working reported that transportation to and from work was convenient. Of the 49 (37% of survey respondents) participants who were attending school, all reported that they were somewhat to very satisfied with their school programs. Further, all these individuals found transportation to and from school to be convenient.

Forty-eight percent of the survey participants reported being very satisfied with life in general; another 40% were somewhat satisfied, seven percent were neither satisfied nor dissatisfied, and five percent were somewhat dissatisfied. When asked to comment on their level of satisfaction with leisure time, people were less positive. Thirty percent were very satisfied, 43% were somewhat satisfied, 10% were neither satisfied nor dissatisfied, 16%

were somewhat dissatisfied and one person had no opinion. Transportation to and from leisure activities was very easy for 91% of the respondents.

Experience with Service Systems. In addition, this section gathered information on individuals' experiences with various funding or service systems. Table 1 lists the types of services that respondents were asked to evaluate. The evaluation criteria used for each service included whether respondents had experience with the service and, if they had experience with the service, their satisfaction with those services. The results show that, with the exception of public education, a majority of the respondents had no experience with these public and private agencies. Additionally, in the area of public education, 69% of the respondents reported satisfaction with their educational experience and 12.1% were dissatisfied. Of the respondents who had experience with job training or scholarship programs funded through federal and state monies, 30.4% were satisfied and only 3.5% were dissatisfied.

The Services and Satisfaction section went on to examine the services that survey participants were receiving at the time of the survey and the consumers' general satisfaction with those services (see Tables 2-6). Information was gathered on five areas of service delivery which included the following: educational services, health services, individual support services, transportation, and caregiver support services. Tables 2 through 6 list the services received in each of the five categories and the degree of satisfaction reported by the consumers who received those services. Respondents ranked their answers according to a five point scale with 1 being very satisfied and 5 being very dissatisfied. For the purposes of the tables, the satisfaction percentage was derived by collapsing the response choices of (1) very satisfied and (2) satisfied. The dissatisfied column represents both the (4) dissatisfied and (5) very dissatisfied responses.

Of the services listed only general medical services (53%), dental services (70%), health insurance (65%) were used by more than 50% of the total sample population (see Table 3). Between 40 and 49 percent of the total sample population used the following services: (a) post secondary education (41%) (see

TABLE 1 **Experience and Satisfaction with Support Services**

Service Agency	No Experience	Application Pending	Application Denied	Received & Was Satisfactory	Received & Was Dissatisfied
Aid to families with dependent					
children	93	.9	1.7	3.5	.9
Public education	16.4	.9	1.7	69	12.1
Medicaid or medical					
assistance	85.3	0	0	12.1	1.7
Federal or state job training or college scholarships &					
grants	61.7	.9	3.5	30.4	3.5
Public welfare	90.1	0	1.9	5.6	1.9
Maternal and child					
health programs	96.5	.9	0	1.8	.9
Community mental					
health	91.3	0	.9	6.1	1.7
HUD section 8	97.4	.9	0	.9	.9

Table 2); (b) transportation services to and from daily activities (49%); (c) transportation to and from non-daily activities such as shopping (43%); and (d) transportation to and from leisure activities (47%) (see Table 5). Table 3 shows that between 20 and 39 percent of the total sample had received the following services within the last year: (a) general or specialty hospital services (32%); (b) emergency health services (27%); and (c) payment or provision of medications (22%). A variety of services were received by between 11 and 19 percent of the total sample population. These services included after school tutoring, summer school, adult education, vocational/ technical education, payment for provision of equipment/supplies, child day care services, mental health, physical therapy, and selfhelp/support group. Finally ten percent or less of the total sample population used the following services: protective/legal services, occupation therapy, home health/visiting nurse, income assistance, homemaker services, financial management assistance, community support services, adult education, medicaid, genetic counseling, family counseling, parent training and genetic screening.

Satisfaction with Services. In general, trans-

TABLE 2 Percent of Satisfaction with Educational Services

Educational Service	Percent of Sample That Used This Service	Satisfied or Very Satisfied	Neutral	Dissatisfied or Very Dissatisfied
After school tutor	18	54	30	8
Summer school	14	78	17	6
Adult education	10	40	20	10
Vocational/technical education	12	45	30	5
Post secondary education	41	82	13	3

TABLE 3
Percent of Satisfaction with Health Services

Health Services	Percent of Sample That Used This Service	Satisfied or Very Satisfied	Neutral	Dissatisfied or Very Dissatisfied
General or specialized				
hospital	32	89	2	7
Emergency health	<u> </u>			
services	27	84	5	5
General medical				
service	53	84	10	3
Dental services	70	85	8	7
Health insurance	65	77	14	9
Medicaid	8	64	36	0
Payment for provision of equipment &				
supplies	13	58	32	10
Genetic counseling	4	50	50	0
Payment or provision				
of meds	22	62	28	10

portation services received the highest level of consumer satisfaction (n = 86%) with medical services being rated as the second most satisfactory (n = 72%). The large category of individual support services which included such agencies as mental health and protective

and legal services ranked third overall in consumer satisfaction with a mean of 60.8% of the individuals who used these services being satisfied or very satisfied (see Table 4). Educational services received a mean 60% satisfaction rating from consumers who had used

TABLE 4
Percent of Satisfaction with Individual Support Services

Individual Support Services	Percent of Sample That Used This Service	Satisfied or Very Satisfied	Neutral	Dissatisfied or Very Dissatisfied
Mental health	14	75	15	10
Protective/legal				
services	10	53	33	14
Physical therapy	11	67	20	13
Occupational therapy	4	67	33	0
Home health/visiting				
nurse	4	60	40	0
Income assistance	7	56	33	11
Food assistance	4	33	50	17
Homemaker services	4	33	50	17
Self-help/support group	11	87	7	7
Financial management				
assistance	5	57	43	0
Community support				
services	7	78	22	0

TABLE 5 Percent of Satisfaction with Transportation Services

Transportation Services	Percent of Sample That Used This Service	Satisfied or Very Satisfied	Neutral	Dissatisfied or Very Dissatisfied
Transportation to and from				
school, work or other				_
daily activities	49	83	11	6
Transportation to and from				
non-daily activities				
(shopping, medical				
treatment)	43	86	10	4
Transportation for leisure				
activities during the week	47	86	11	6
Transportation for leisure				
activities during the				
weekends	47	89	10	2

these services within the last year (see Table 2). Finally, caregiver support services received an overall 50% satisfaction rating from individuals who had received those services (see Table 6).

The service categories were ranked in the following order from most dissatisfaction with to least dissatisfaction with: (a) Caregiver support (15.75%); (b) individual support services (12.71%); (c) health services (6.92%); (d) education (6.4%) and (e) transportation (4.5%). Where dissatisfaction was expressed by survey participants, the reasons were ranked in the following order from most mentioned to least mentioned: (a) the service was too expensive, (b) not enough services were available, (c) the services were of poor quality and not suited to individual needs were both mentioned equally as often; (d) the services provided lacked respect for

the dignity of the individual and the service listed didn't help were mentioned with equal frequency.

Support | Services | Assistance Needed

Respondents were also asked to identify services or supports that they would like to have. The instructions encouraged respondents to select those services and supports "that you would need most to foster independence, community involvement and productivity.' Given the categories of education, employment, health, individual support services, transportation and caregiver support, respondents identified two high need areas: health and, to a lesser extent, transportation. Sixty-four percent of the respondents indicated that additional general medical services were needed. Seventy percent of the respon-

TABLE 6 **Percent of Satisfaction with Caregiver Supports**

Caregiver Supports	Percent of Sample That Used This Service	Satisfied or Very Satisfied	Neutral	Dissatisfied or Very Dissatisfied
Child day care services	11	67	27	6
Family counseling	7	60	20	20
Parent training	4	33	50	17
Genetic screening	4	40	40	20

dents identified dental services as a need. Sixty-three percent indicated a need for additional health insurance. About a quarter of the respondents identified a need for mental health or counseling services. In the area of transportation approximately one third of the respondents indicated additional need for transportation for work and daily activities. About one quarter of the sample indicated they needed transportation for leisure services. Although the overall categories of education and employment supports were not identified as high needs areas, 34% of the respondents identified post secondary education as a need. Another 28% identified employment services as a need.

Independence | Interdependence

This section examined the degree of independence attained by the survey participants. Independence was measured by the amount of input the survey participants felt they had in decisions regarding where they lived, their leisure activities, and their activities of daily living. Finally, participants were asked to evaluate the importance of independence in their quality of life and to rate themselves on the level of independence they felt they had achieved in their own lives. Table 7 illustrates the levels of choice experienced.

Making Choices. The survey participants reported the highest levels of unassisted choice making in the areas of banking (96%) and choosing how to spend their own money (91%). Survey participants also indicated a high level of independent choice-making around the following activities: (a) giving consent for medical care (78%), (b) choosing their job (77%), (c) choosing the agencies they access for services or support (73%), and (d) paying their own bills (69%). Finally, 68% of the survey participants indicated that they chose their personal decorations for their living space unassisted; 65% chose, without assistance, their weekend or evening activities. 59% chose their roommates without assistance and 46% chose where they lived unassisted. In categories where survey participants made choices with assistance, that assistance was primarily from personal friends and family members, not from paid agency personnel. For instance, in the categories of choosing where to live, with whom to live, and employment, only 2% of the survey population indicated that they made those choices with assistance from agency personnel. Where survey participants did not participate in making choices about living and employment options, they reported that those decisions were made either by family members, agency or school staff, or legal guardians.

Self-evaluation of independence. Finally, participants were asked to examine their personal degree of independence and then rank the importance of independence in their own lives. Eighty-eight percent of the survey participants ranked their degree of independence as a one or two on a scale of one to five (where one is totally independent and five is not independent at all). Only five percent ranked themselves at three or four. Two percent of the participants reported themselves as not independent at all. Although their perception of their personal degree of independence was quite high, the survey respondents indicated that the goal of independence was very important to 68% of the respondents and was somewhat important to 29%. Only three percent reported being neutral on this topic. Not one respondent viewed the concept of independence as unimportant.

Integration

This section of the survey asked participants to quantify the number of times they participated in activities that are typical of life in American communities. Seventy-one percent of this sample voted in the last election. Results of questions regarding socialization and community activities are reported in Table 8. Fifty-two percent of the survey respondents visited with close friends and relatives more than two times each week. Another 35% visited friends and relatives between once or twice a week and two to three times per month. Thirteen percent visited friends and relatives less per month. All of the respondents fell into one of these categories; no one reported never visiting their friends. Twenty-one percent of this sample shopped for food more than twice a week. Another 74% shopped anywhere from once a week to two or three times a month. Only 5%

TABLE 7 Percentage of Consumers By Levels of Choice in Life Activities

Did You Choose:	Unassisted	With Assistance	No, Someone Else Made This Choice	Other, Not Applicable
Where you live?	46	42	10	2
Your roommate/s?	59	6	13	0
Your job?	77	10	0	12
What you do on weekends and evenings?	65	34	2	0
Do you give your own consent for medical			_	
care?	78	15	5	2
Do you decide on your own decor?	68	32	1	0
Do you do your own banking?	96	3	0	1
Do you pay your own rent?	69	17	13	2
Do you usually decide how to spend your				
disposable income?	91	8	1	0

shopped once or less than once per month. Only 19% of the respondents reported eating out at a restaurant more than twice per week. Thirty-nine percent ate at restaurants one to two times per week. Another 29% ate at restaurants two to three times per month. Finally 8% reported dining out once or less than once per month. All respondents had eaten at a restaurant at least once during the last year.

The attendance of this sample at religious services was primarily clustered into one of three categories: one to two times per week (39%), once or less than once per month (26%) and 27% who reported never having gone to either a church or synagogue in the

TABLE 8 Percentage of Participation in Community Activities

Activity	More Than Twice Per Week	1–2 Times Per Week	2–3 Times Per Month	Once or Less Than Once Per Month	Never
Visit with close					
friends, relatives or					
neighbors	52	21	14	13	0
Shop at a supermarket	21	61	13	5	0
Eat at a restaurant	19	39	29	8	0
Attend a church or					
synagogue	5	38	6	24	27
Shop at a mall or					
other retail store	9	31	34	26	0
Go to a bar or tavern	4	9	9	43	36
Go to the bank	8	37	38	15	2

TABLE 9

Percentage of Respondents Attending Recreation and Leisure Activities in Last Year

Activities	More Than 11 Times	Between 4 and 10 Times	Between 1 and 3 Times	Never
Go to movies	32	41	22	5
Live theater	6	17	51	26
Music performance	7	12	31	49
Sports events	21	21	42	17
Athletic clubs	32	11	8	50
Community grps.	30	12	30	39

past year. All of the survey respondents had shopped in a mall or other retail establishment once or more during the previous year. Twenty-six percent had shopped once or less than once per month. Thirty-four percent had shopped two to three time per month and 31% had shopped one to two times per week.

Approximately 18% of the respondents reported going to a bar or tavern between twice a month and twice a week. Only four percent went to bars or taverns more frequently. Another 43% reported going to a bar or tavern once or less per month. Fully 36% of the sample had not been in a bar or tavern in the past 12 months. Going to the bank was an activity that nearly all of this sample had completed at least once during the past year. Seventy-five percent went to the bank between twice a week and three times a month. Only 8% went more frequently and 15% went to the bank once or less per month.

Activities

Table 9 provides the results of questions pertaining to the respondents' levels of participation in typical leisure activities over the past year. Of the six activities listed in Table 5, half of the respondents had never gone to music performances or athletic clubs or facilities. About 40% had not participated in community or civic groups. A quarter of the sample had not attended a live theater performance in the past year.

Ninety-five percent of the sample had attended movies. The frequency of attendance was spread out over all three categories. About a third of the sample attended films

more than 11 times a year, another 41% had attended films between 4 and 10 times over the course of the year. Approximately another quarter of the sample had attended the movies between 1 and three times. Over half of the sample had attended live theater performances between one and three times during the past year. About a third of the population had seen a live music performance between one and three times. About 42% of the sample had attended a sports event anywhere from four times to more than 11 times. Thirty-two percent of the population reported attending an athletic club more than 11 times over the course of the year. While 30% of the population had participated in a community group more than 11 times, another 30% had participated in these groups between one and three times.

Degree of Satisfaction with Activity Levels. Table 10 shows the degree of satisfaction the survey participants had with their level of participation in the listed recreation and leisure activities. More than two-thirds of the population reported that their current levels of activity for visiting close friends, shopping at supermarkets, eating at restaurants, attending church, shopping at malls, going to bars and banks was about right. Of these activities, about a third of the sample wanted to increase their frequency of visiting with friends and attending church or synagogue. Less than one fifth of the population wanted to decrease their activity levels for food shopping and eating out.

Almost two-thirds of the sample indicated that they would like to increase their attendance at theater performances. About 40% reported that they would like to increase

TABLE 10 Level of Satisfaction with Attendance Frequency of Various Community Recreation and Leisure Activities

Activity	More Often	Right Amount	Less Often
Visit with close friends, relatives or neighbors	30	68	2
Shop at a supermarket	3	79	18
Eat at a restaurant	15	75	10
Attend a church or synagogue	30	70	0
Shop at a mall or other retail store	8	87	5
Go to a bar or tavern	7	84	9
Go the the bank	7	84	9
Go to movies	38	58	4
Live theater	63	34	3
Music performance		·	
Sports events	42	51	7
Athletic clubs	45	53	2
Community grps.	33	61	6

their attendance at the movies, sports events and athletic clubs. About a third of the sample indicated that they would like to increase their participation in community groups. More than half of the respondents were satisfied with their current levels of participation in movie attendance, sports events, athletic clubs and community groups. Less than ten percent reported a desire to decrease their participation in any of these activities.

Relationship between socio-economic status and participation in leisure activities. A chi-square analyses between socio-economic status and all recreation/leisure activities revealed significance between income and leisure/recreation access for only two categories: movie attendance and banking. Individuals with incomes between 0 and \$9,999 tended to attend movies more frequently than individuals in other income categories ($\chi^2 = 18.6$, d.f. = 6, p = .01). Individuals who fell into income brackets above \$10,000 tended to bank about once a week. Individuals who fell into the income bracket below \$9,999 tended to either bank more frequently (two or more times per week) or less frequently (less than once a month or never) ($\chi^2 = 9.3$, d.f. = 4, p = .05).

Personal Relationships. The last question in this section addressed both the numbers of individuals that this sample lived with and their relationship to those individuals. Eighty

percent of this sample lived with two or less family members. Forty-four percent did not live with their relatives. Of the 44% who did not live with their relatives about half lived with one other non-disabled individual. Less than one percent of this sample lived with someone who had disabilities.

The survey went on to explore the notion of neighborhood relationships. One question asked whether the respondents knew by name any members of the ten households that were closest to their own home. About 50% of the respondents knew the names of one to six neighbors. About a third of the sample knew the names of six to 12 neighbors. About 14 percent were unable to name any of their neighbors. More than a quarter of this sample had not visited with neighbors, either in their own homes or in their neighbors' homes. On the other hand, about 50% of the respondents had visited with between one and six of their neighbors. Finally, another quarter had visited with seven to ten of their neighbors. In the week prior to the survey, 52% of the sample reported having spent between 1 and 5 hours helping neighbors, family or friends. Another 30% had spent between 6 and 10 hours helping neighbors while 7% had spent between 11 and 40 hours had helping. Three percent had spent 41 or more hours helping while eight percent of the respondents reported having spent no

hours in this activity. The survey inquired about the number of friendships these respondents had with people with disabilities. Over half the sample had friends with disabilities who they saw on a regular basis.

Value of Community Involvement. The survev also probed the degree to which respondents valued community participation and involvement. In terms of importance, 20% of the respondents indicated that community involvement was very important. Fifty percent of the sample indicated that community involvement was somewhat important. Another 22% were neutral and the remaining 9% reported that community involvement was somewhat unimportant or not important at all. In addition, when asked how involved they were in community activities, five percent indicated they were very involved, one fifth of the sample was moderately involved, and about a third of the respondents reported that they were somewhat involved in their communities. About one quarter reported little involvement and another 17% were not involved at all. In the month prior to completing the survey, 42% of the respondents had not participated in any community. civic or volunteer work. A little more than a third of the respondents (38%) had contributed between 1 and 10 hours to community activities in that month. Seventeen percent had donated between 11 and forty hours to community activities and three percent of the respondents had donated between forty-one to eighty hours in the last month.

Discussion

Designing a process for achieving social validity in our services to persons with developmental disabilities must include the establishment of parameters of typical patterns and rhythms of life for people without disabilities. We suggest that taking the time to investigate these characteristics using the same metric that we use to measure outcomes for persons with disabilities is a key in delivering services that have social validity. Given that notion as a framework for our research, then examining our process for developing social validity as well as the outcomes of our descriptive study is essential.

The process of selecting a sample population in a local region that reflects the heterogeneity of the whole can be problematic. This sample is somewhat skewed towards individuals involved in post secondary education because one of the locations in which we selected subjects was an urban, higher education campus. We also over sampled women which may somewhat skew the results of the survey. However, the number of respondents indicates that people were willing to take the time to answer our lengthy survey, even though they were not connected to the field of developmental disabilities.

The six sections of this survey allowed us to investigate this sample on a variety of dimensions that impact quality of life including socio-economic status, personal relationships, participation in community life, access to, and outcomes of, public and private services. and productivity. A large majority of this sample were satisfied with the medical, dental and health insurance services that they already received but they wanted more of these services. Our companion study (Sands, Kozleski, & Goodwin, 1991) on persons with developmental disabilities had similar findings. That is, that medical, dental and health services were by far the most frequently used. that there was a high degree of satisfaction with what was received, but that people perceived that they needed more of these services. Our current study also found that public transportation was used by slightly less than half the persons sampled but a large majority of the sample wanted more of this service provided.

This sample indicated a high degree of independence in making decisions about typical adult activities. This group also greatly valued their independence. They demonstrated a wide range of variability in the activities they engaged in during non-working hours. Surprisingly, in a mobile and transient general population, there was a high level of involvement with family and friends. The degree of involvement in these activities in general was not related to socio-economic status. Thus making more money did not increase involvement in leisure activities nor did it increase access to or involvement in personal relationships. Nor did work satisfaction appear to be related to income levels either. In general this sample believed that community involvement was important but they did not report a high degree of involvement overall.

As we looked at our analysis of these data. we began to speculate on the quality of life indicators as identified by other researchers. It may be that certain quality of life factors such socio-economic status can be inhibitors to quality of life, if a basic level of that factor is not met (for instance, income below the poverty level). However, these same quality of life indicators may not be contributors to quality of life in the sense that increases in socio-economic status over a basic subsistence level may not increase the overall quality of life. For example, it is commonly assumed that persons in middle and upper socio-economic stratas experience a higher quality of life due to an increase in expendable income. This assumption has led us to believe that they participate in recreation and leisure activities with greater frequency. Our data suggests that this is not necessarily the case. In other words, socio-economic status and other indicators of quality life such as accessibility to others who are willing to form and maintain relationships, personal development and fulfillment and participation in social, community and civic activities are only loosely coupled.

Thus, our current conceptualization of quality of life may need to be far more complex than previously thought. Those factors which must be present to ensure basic levels of satisfaction should be differentiated from those factors that can enhance quality of life. Services then can be directed to inhibitors. if minimum levels are not available. For instance, an individual who is not currently employed may need to be supported in order to obtain employment to meet basic subsistence needs. Alternatively, where those inhibitors have been addressed, services can be funneled towards enhancing contributors, or those quality of life features that enhance general life satisfaction. Thus, supports can be channeled to increasing social opportunities, social relationships and recreation/leisure activities.

It seems to us that analyses such as the one presented here, of the habits and lifestyles of the general public, can assist us in achieving social validity in our services to persons with developmental disabilities. It is easy to lose perspective on what might be considered to be quality of life without a yardstick that can provide a guide for programmatic and service decisions

References

- Boone, H. A., & Stevens, E. (1991). Towards an enhanced family and child quality of life. In M. Krajicek & R. Tompkins (Eds.), The medically fragile infant. Austin, TX: Pro-Ed.
- Bornstein, P. H., & Rychtarik, R. G. (1983), Consumer satisfaction in adult behavior therapy: Procedures, problems, and future perspectives. Behavior Therapy, 14, 191-208.
- Fugua, R. W., & Schwade, J. (1986). Social validation of applied behavior research: A selective review and critique. In A. Poling & R. W. Fuqua (Eds.), Research methods in applied behavior analysis: Issues and advances (pp. 265-292). New York: Plenum
- Geller, E. S. (1991). Where's the validity in social validity? Journal of Applied Behavior Analysis, 24, 179-184.
- Hawkins, R. P. (1991). Is social validity what we are interested in? Argument for a functional approach. Journal of Applied Behavior Analysis, 24, 205-214.
- Kibele, A. (1988). Occupational therapy's role in improving the quality of life for person's with cerebral palsy. American Journal of Occupational Therapy, 43, 371-377.
- Sands, D. J., Kozleski, E. B., & Goodwin, L. D. (1991). Whose needs are we meeting? Results of a consumer satisfaction survey of person with developmental disabilities in Colorado. Research in Developmental Disabilities, 12, 297-314.
- Schwartz, I. S., & Baer, D. M. (1991). Social validity assessments: Is current practice state of the art? Journal of Applied Behavior Analysis, 24, 189-204
- SPSS, Inc. (1987). Data Entry II. Chicago: SPSS,
- Temple University (1988). A national survey of consumers of services for individuals with developmental disabilities: Final survey instrument. Unpublished instrument. Washington DC: National Developmental Disabilities Planning Council.
- Vogelsberg, T. (1990). Supported employment in Pennsylvania. In F. Rusch, (Ed.), Supported employment: Models, methods, and issues. Sycamore, IL: Sycamore.
- Wolfensberger, W. (1991). A brief introduction to social role valorization as a high-order concept for structuring human services. Syracuse, NY: Training Institute for Human Service Planning, Leadership and Change Agentry (Syracuse University).
- Wolfensberger, W. W. (1972). Normalization: The principle of normalization in human services. Toronto: National Institute on Mental Retardation.