

COMMUNITY INTEGRATION AND QUALITY OF LIFE: A COMPARISON OF PERSONS WITH PSYCHIATRIC DISABILITIES IN HOUSING PROGRAMS AND COMMUNITY RESIDENTS WHO ARE NEIGHBOURS

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ABSTRACT

Fifty-one persons with psychiatric disabilities in housing programs in the Ottawa-Carleton area were compared with a matched sample of 51 community residents on several aspects of community integration and subjective quality of life. Matching criteria included sex and location (i.e., living within one square block). Results showed persons with psychiatric disabilities reporting lower levels of social contact with neighbours and general life satisfaction than community residents. Both groups showed similar levels of physical presence and sense of community in the neighbourhood. Implications of the findings for planning and improving community mental health services are discussed.

HOUSING FOR PERSONS WITH PSYCHIATRIC DISABILITIES: COMMUNITY INTEGRATION OR SOCIAL ISOLATION

Deinstitutionalization has formed the cornerstone of mental health policy and services over the past three decades in North America (Mechanic & Rochefort, 1990). In the U.S., the census of psychiatric patients in mental hospitals has decreased by 80% between 1960 and 1986 with the release of 400,000 patients into the community (Morissey, 1989). Although deinstitutionalization was instituted a few years later in Canada, proportionally similar levels of reduction in the number of patients in institutions are reported, with over 40,000 patients discharged (Rochefort, 1992). In response to this significant change in mental health policy, services have been developed to support the large numbers of deinstitutionalized patients living in the community (Aviram, 1990).

A major objective of community mental health services is to integrate individuals with psychiatric disabilities into the community by helping them develop natural support networks and assume normal roles alongside non-disabled community members (Fellin, 1993). Up until now, specialized housing programs have been one of the most widely used mechanisms for promoting this integration (Nelson & Smith Fowler, 1987). A number of housing models have been developed including board and care homes, halfway houses, group homes, cooperative

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housing, and supervised apartments (Trainor, Morrell-Bellai, Ballantyne, & Boydell, 1993). Some types of housing such as board and care homes are simply custodial in nature while other forms offer rehabilitation in addition to shelter.

The demand for specialized housing for this population has exceeded the supply with many persons with psychiatric disabilities relegated to living in sub-standard housing, hotels, and boarding homes or finding themselves homeless (Fisher, Tessler, Manderscheid, & Sommers, 1992). Recently, housing programs have come under criticism as having failed in their mandate of integrating persons with psychiatric disabilities into the community (Carling 1990, 1992; Ridgway & Zippel, 1990). Critics of the segregated housing approach argue that it actually serves as a barrier to integration by promoting stigmatization and social isolation. Instead, a new paradigm of housing is proposed whereby individuals with psychiatric disabilities are provided the necessary support to live in normal housing. This type of living situation encourages them to adopt normal roles in the community, lessening their distance from other community residents (Blanch, Carling, & Ridgway, 1988; Ridgway & Zippel, 1990).

The extent that specialized housing for persons with psychiatric disabilities serves to impede community integration is unclear. Studies suggest that persons with psychiatric disabilities in housing programs achieve a range of community integration that is influenced by neighbourhood, program, and individual characteristics (Kruzich, 1985; Segal & Aviram, 1978). A large majority of persons in these programs are able to access basic and personal resources in the community (e.g., shopping, eating, medical treatment), but fail to use community facilities on any kind of regular basis and report minimal social interaction with other community residents (Mowbray, Greenfield, & Freddolino, 1992; Segal & Aviram, 1978; Sherman, Frenkel, & Newman, 1986).

Overall, it appears that individuals in housing programs are present in the community to a limited extent but remain socially isolated from others. Findings in these studies suggest that housing programs have fallen short of achieving their main objective of integrating individuals with psychiatric disabilities into the community. However, the picture remains incomplete as it is not known how the level of integration achieved by tenants in housing programs compares to other community residents, particularly those who are neighbours. Surprisingly, no research has examined this issue. In the context of the current debate over specialized housing versus independent living, a comparison of the community integration of persons with psychiatric disabilities living in housing programs and their neighbours would seem to merit investigation.

Such comparative research would help evaluate the degree of social isolation experienced by persons with psychiatric disabilities in specialized housing programs and clarify the extent that housing programs might contribute to this isolation. For instance, if community residents experience similar levels of community integration as tenants of housing programs, the integration of tenants may be tied more to neighbourhood characteristics than to living in a housing program. On the other hand, if community residents who are neighbours have higher levels of community integration than housing program tenants, specialized housing may be serving to segregate tenants from their neighbours. In order to better understand the community integration of this population, the present study compared the com-

munity integration of tenants in community mental health housing programs to their immediate neighbours.

Until now, the concept of "community integration" for persons with psychiatric disabilities has been defined somewhat narrowly by researchers. Specifically, it has been operationalized as the cumulative frequency of use of community resources and participation in community activities in a self-initiated manner (e.g., going to a shopping area, using a community centre, visiting a church, engaging in work) (Kennedy, 1989; Kruzich, 1985; Segal & Aviram, 1978). This definition is limited in that it involves simply physical presence in the community and fails to focus on active involvement with other community members. It can be argued that true community integration for persons with psychiatric disabilities entails much more than accessing community resources or participating in community activities. It requires going beyond mere presence in the community to interacting and developing relationships with others who are non-disabled.

Therefore, in comparing the community integration of persons with psychiatric disabilities in housing programs and community residents who are neighbours, the present study used a broadened definition of community integration that included psychological and social aspects contributing to integration, in addition to physical presence. Psychological aspects to community integration termed psychological integration in the study, involved an individual's "sense of community" in relation to neighbours and their neighbourhood (McMillan & Chavis, 1986). Four elements are proposed as being central to sense of community: experiencing membership in a neighbourhood, having an emotional connection with neighbours, being able to fulfil needs through neighbours, and exercising influence in the neighbourhood (McMillan & Chavis, 1986). Research has shown that having a sense of community with neighbours is positively related to social contact with neighbours (Unger & Wandersman, 1982), participation in neighbourhood improvement activities (Davidson & Cotter, 1989; Florin & Wandersman, 1984), and problem solving in the face of neighbourhood difficulties (Bachrach & Zautra, 1985).

Social aspects to community integration referred to as social integration in the study, entailed social contact with neighbours (Unger & Wandersman, 1985). The inclusion of social contact with neighbours in the definition of community integration provided some indication of the extent of social support accessed from non-disabled community residents living in proximity. Social contact with neighbours has been found to be related to various types of community involvement including use of local facilities (Alhbrandt, 1984), participation in block associations (Wandersman & Giamartino, 1980), and participation in other types of community organizations (Unger & Wandersman, 1982).

The study also investigated physical integration based on the original definition of community integration developed by Segal and Aviram (1978). This form of integration referred to participation in activities outside of one's residence, reflecting physical presence in the community.

Another important indicator of the success of persons with psychiatric disabilities living in the community is their quality of life (Baker & Intagliata, 1982;

Lehman, Ward, & Linn, 1982; Pinkney, Gerber, & Lafave, 1990). Quality of life has been defined as the "goodness of life" from subjective and objective viewpoints (Lehman et al., 1982). Subjective quality of life simply refers to personal satisfaction with one's life. Objective quality of life involves access to resources in such areas as housing, work, relationships, and health.

A number of studies have examined the quality of life of persons with psychiatric disabilities living in the community (Baker & Intagliata, 1982; Lehman, Possidente, & Hawker, 1986; Pinkney et al., 1990). Only one study has compared the quality of life of this population to subgroups of an American national sample of the general population and it did not include a comparison with individuals living in the same neighbourhoods (Lehman et al., 1982). Therefore, the present study was also planned to examine the subjective quality of life of persons with psychiatric disabilities in relation to community residents who are neighbours.

In sum, the objective of the present study was to clarify the extent of community integration and quality of life of persons with psychiatric disabilities living in housing programs relative to community residents who are neighbours. Specifically, it was intended to contrast the physical integration, psychological integration, social integration, and general life satisfaction of these two groups.

METHOD

Participants

Persons with psychiatric disabilities. The respondent group of persons with psychiatric disabilities consisted of tenants of community mental health housing programs located in residential neighbourhoods in the Ottawa-Carleton area. All housing programs for persons with psychiatric disabilities listed in a registry of community mental health housing programs in Ottawa-Carleton (Canadian Mental Health Association, Ottawa-Carleton Branch, 1990) were approached to participate in a survey on community integration of persons with psychiatric disabilities. Of 27 programs listed in the registry, 20 agreed to participate.

Depending on availability, up to five tenants per housing program were randomly selected. Eligibility criteria for participating in the original survey included (a) having received previous psychiatric treatment and (b) having lived in the residence for at least one year. Of 133 selected tenants meeting these eligibility criteria, 82 agreed to participate representing a response rate of 62%. Of these 82 tenants, 75 were identified as eligible for the present study based on having neighbours within one square block of their residence.

Community residents. Community residents were matched with the initial sample of persons with psychiatric disabilities on the variables of sex and location of residence. A telephone directory of the Ottawa-Carleton area which provides listings by addresses was used for the sampling (Might's Greater Ottawa City Directory, 1993, 1994). Matching by location of residence involved living on the same square block as a community mental health housing program. In order to match as many of the persons with psychiatric disabilities as possible, two mail surveys of community residents were undertaken.

In the first mail survey, three community residents living within one square block of housing programs were randomly selected for each eligible person with psychiatric disability interviewed in the first study. Two hundred and twenty-five community residents were sent a questionnaire in this first survey. Thirty-two questionnaires were sent back because householders had moved ($n=31$) or had ill health ($n=1$). Of the remaining 193 sampled households, 78 (40.4%) returned their completed questionnaires.

A second survey was conducted to find matched community residents for the remaining unmatched persons with psychiatric disabilities. A total of 72 households were randomly chosen in the same way as the first survey. Four questionnaires were sent back as a result of the addressee having moved. Of the remaining 68 sampled households in the second survey, 40 (59%) returned their completed questionnaires.

Final study sample. A small number of persons with psychiatric disabilities responded to the interview in French ($n=14$). Similarly, only a small number of community residents completed a French version of the mail survey ($n=16$). Given the small number of obtained matches that would have also included language as a matching criteria ($n=6$), it was decided to exclude Francophone respondents in the matching process. Persons with psychiatric disabilities living in independent living settings ($n=4$) were also excluded from the matching process since the intent of the study was to compare persons with psychiatric disabilities in specialized congregate living settings with community residents. The first survey resulted in 40 matches. A further 11 matches were made from the second survey. In cases where more than one community resident matched a person with psychiatric disability, only one was chosen randomly as the match.

The final study sample included 51 matched pairs of persons with psychiatric disabilities and community residents. A comparison of the two groups found them to be similar in age. However, the two groups differed on length of residency in the neighbourhood, with persons with psychiatric disabilities having had a shorter residency in the neighbourhood ($\bar{X}=57.92$ months, $SD=45.16$), than community residents ($\bar{X}=107.76$ months, $SD=118.16$), $t(99)=-2.81$, $p<.01$. Not surprisingly, the two groups also differed on employment status with more persons with psychiatric disabilities not working, $\chi^2(6, N=100)=63.48$, $p<.001$, than community residents. As well, persons with psychiatric disabilities had less formal education, $t(97)=-5.39$, $p<.001$, than community residents.

The final sample of persons with psychiatric disabilities that were successfully matched with community residents originated from 14 different housing programs. Ten housing programs ($n=39$) were board and care residences. These residences provided shelter, meals, and supervision, but no formal rehabilitation. The other four programs ($n=12$) offered a mixture of support and rehabilitation services in addition to shelter, meals, and supervision. The size of housing programs in which surveyed persons with psychiatric disabilities lived varied from 9 to 124 residents.

The modal psychiatric diagnosis as reported by persons with psychiatric disabilities or housing staff was schizophrenia (57%), followed by affective disorders (14%). Almost all persons with psychiatric disabilities (98%) had an admission to a psychiatric hospital or psychiatric ward of a general hospital. The average number

of admissions was four and the mean length of stay in hospital for the sample of tenants across all admissions was 30 months. As well, the majority (90%) were currently receiving psychiatric treatment or counselling.

The sample of community residents lived in a variety of dwellings that included single houses (33%), semi-detached or duplexes (25%), row houses (10%), and apartments (25%). A majority of community residents (55%) rented their home. As well, a majority (57%) were married or living as married while a minority (33%) had children under 18 years of age living with them. Finally, the average household income for the sample of community residents was in the range of \$40,000 to \$49,999.

Measures

Physical integration. A condensed version of Segal and Aviram's (1978) external integration scale was developed to measure physical integration. Specifically, the scale was composed of 12 items assessing an individual's frequency of involvement in different activities outside their household in the past month, such as eating in a restaurant, visiting a library, and walking in a park. Possible responses varied from never (0) to very often (4). The potential total score on the scale ranged from 0 to 48 with higher scores representing relatively higher levels of physical integration. Cronbach's alpha for the scale was 0.73 for persons with psychiatric disabilities and 0.74 for community residents.

Psychological integration. The 12-item sense of community scale developed by Perkins, Florin, Rich, Wandersman, and Chavis (1990) was used to operationally define psychological integration. Items in the scale presented statements to respondents about their sense of belonging, availability of help, feelings of influence, and emotional investment in relation to neighbours and the neighbourhood. Respondents were asked to determine if statements were true (1) or false (0) in describing their beliefs and attitudes in these areas. The possible total score on the scale ranged from 0 to 12 with higher scores representing greater psychological integration in the neighbourhood. Cronbach's alpha for the measure was 0.71 for persons with psychiatric disabilities and 0.71 for community residents.

Social integration. An expanded version of the scale developed by Aubry, Tefft, & Currie (1995a) was used to measure social integration. The scale included 13 items. Items in the scale asked respondents how often they had different kinds of social contact with neighbours ranging from fairly superficial (e.g., saying hello) to closer forms of contact (e.g., going out on a social outing). Response alternatives varied from never (1) to frequently (5). Potential total scores ranged from 12 to 60 with higher scores reflecting greater social integration. Cronbach's alpha for the scale was 0.87 for persons with psychiatric disabilities and 0.92 for community residents.

Subjective quality of life. The *Satisfaction with Life Scale* (Diener, Emmons, Larsen, & Griffin, 1985) was used to measure subjective quality of life. The scale has five items that ask respondents the extent that they agree or disagree with general statements about the quality of their life (e.g., "in most ways, my life is close to my ideal"). Possible responses ranged from strongly disagree (1) to strongly agree (7). The potential total score varied from 5 to 35 with higher scores

representing greater satisfaction and better perceived quality of life. The scale has been shown to correlate highly with other measures of subjective well-being (Diener et al., 1985) and perceived quality of life (Frisch, Cornell, Villanueva, & Retzlaff, 1992). Cronbach's alpha for the scale was 0.87 for persons with psychiatric disabilities and 0.82 for community residents.

Procedure

Persons with psychiatric disabilities. In-person interviews were administered to persons with psychiatric disabilities in their residences between February and July, 1993, as part of a survey investigating the community integration of persons with psychiatric disabilities living in community mental health housing programs. Lists of housing program residents' initials or room numbers meeting the study's eligibility criteria and judged by housing operators as able to be interviewed were used to randomly select participants. Selected persons with psychiatric disabilities meeting eligibility criteria were first approached by housing operators to determine their interest in meeting one of the interviewers to find out about the study.

Informed consent was obtained from persons with psychiatric disabilities by explaining the contents of the survey, demands on participants, voluntary nature of participation, and confidential treatment of gathered information prior to inviting them to participate in the study. A summary of the results of the interview survey was mailed to those respondents indicating their interest in receiving feedback on the study. Interviews took on average 60 minutes, ranging in length from 25 to 130 minutes.

Community Residents. Two mail surveys of community residents were conducted subsequent to the interviews of persons with psychiatric disabilities (i.e., October to December 1993; May to July 1994). Mail survey procedures that are part of the Total Design Method (Dillman, 1978) were closely followed in the design of the questionnaire and implementation of the survey. Each survey included an original mailing to sampled households and two follow-ups to households that had not responded. A summary of findings of the present study was mailed to those community residents who requested them.

In order to test for the presence of differences related to the method of administration, measures were administered by the two survey methods to a convenience sample of community residents ($n=30$) at least one week apart. Half of the sample was administered the mail survey first while the other half were interviewed first. No significant differences between type of administration were found for any of the measures. Correlations for the measures across the two types of administrations ranged from .70 to .93.

RESULTS

Within and Across Group Relationships

Table 1 provides a correlation matrix of the measures for each of the groups. As expected, most correlations between different types of integration within each group proved to be significant. Specifically, for persons with psychiatric disabilities, higher levels of social integration were associated with greater physical

integration ($r(51) = .29, p < .05$) and greater psychological integration ($r(51) = .46, p < .001$). Similarly, for community residents, more social integration was related to greater physical integration ($r(51) = .38, p < .01$) and greater psychological integration ($r(51) = .47, p < .001$).

Only one correlation emerged as significant between community integration measures and subjective quality of life for each of the two groups. Greater social integration was related to better subjective quality of life for persons with psychiatric disabilities, ($r(51) = .25, p < .05$). Greater psychological integration was associated with better subjective quality of life for community residents ($r(51) = .27, p < .05$).

Interestingly, three correlations were significant across the matched individuals from the two groups. As expected, the correlation between social integration across the two groups was significant ($r(51) = .25, p < .05$), with greater social integration of persons with psychiatric disabilities related to greater social integration of community residents. As well, higher levels of physical integration of persons with psychiatric disabilities were associated with greater social integration of community residents ($r(51) = .25, p < .05$). Finally, the relationship between quality of life was also significant for the matched pairs, ($r(51) = .32, p = .01$), with

TABLE 1

Intercorrelations between Community Integration and Quality of Life Scores for Persons with Psychiatric Disabilities and Community Residents

Variable	1	2	3	4	5	6	7	8
Persons with psychiatric disabilities								
1. Physical integration	1.00	.12	.29*	.08	.09	.11	.25*	.21
2. Psychological integration		1.00	.46***	.22	.10	.18	.21	.23
3. Social integration			1.00	.25*	.13	-.02	.25*	.21
4. Subjective quality of life				1.00	-.07	.15	.08	.32*
Community residents								
5. Physical integration					1.00	.12	.38**	.13
6. Psychological integration						1.00	.47***	.27*
7. Social integration							1.00	.15
8. Subjective quality of life								1.00

*** $p < .001$; ** $p < .01$; * $p < .05$

TABLE 2

Mean and Standard Deviations of Variables for the Two Groups

Variables	Persons with Psychiatric Disabilities ($n = 51$)		Community Residents ($n = 51$)	
	\bar{X}	SD	\bar{X}	SD
Physical integration	16.13	7.62	18.46	7.00
Psychological integration	7.36	2.56	7.54	2.44
Social integration	22.00	8.35	29.44	9.88
Quality of life	20.35	8.14	23.88	5.54

better quality of life for persons with psychiatric disabilities associated with better quality of life for community residents.

Between Group Comparison

A MANOVA found no significant differences between persons with psychiatric disabilities living in board and care homes and those living in supportive housing programs on the combination of different types of community integration and subjective quality of life. As a result, persons with psychiatric disabilities from both types of living situations were examined together in comparisons with community residents.

Table 2 presents the means and standard deviations of scores on community integration and subjective quality of life measures for persons with psychiatric disabilities and community residents.

A repeated measures MANCOVA was initially conducted to examine for differences between the two matched groups on the different types of community integration and subjective quality of life while controlling for differences on length of residence in the neighbourhood, level of education, and employment status. Regression of the covariates on the combination of dependent variables was not significant. As well, findings on the MANCOVA comparing the two groups on the dependent variables were the same as those found on a MANOVA. Therefore, results from the MANOVA are reported for the comparisons.

Overall, the MANOVA found significant differences between persons with psychiatric disabilities and community residents on the combination of community integration and quality of life measures, $F(4,47)=7.94$, $p<.001$. Following up the significant MANOVA, a stepdown analysis was undertaken to compare the two groups on individual measures of integration and quality of life. A stepdown analysis was utilized because of the significant correlations between many of the variables being compared (Tabachnick & Fidell, 1989). In testing for differences between the two groups using this type of analysis, an ANOVA on the highest priority variable is followed by a series of ANCOVAs with higher priority variables being entered as covariates for lower priority variables. The order of priority of variables in the analysis was based on the causal order of the variables as logically determined by the investigators. In particular, the order of the variables in the stepdown analysis was physical integration, social integration, psychological integration, and quality of life.

Community residents reported higher levels of social integration than persons with psychiatric disabilities after controlling for physical integration, stepdown $F(1,50)=18.96$, $p<.001$. As well, community residents perceived themselves as having a better quality of life than persons with psychiatric disabilities after controlling for physical integration, social integration, and psychological integration, stepdown $F(1,47)=4.20$, $p<.05$. The two groups showed no differences in the areas of psychological integration or physical integration.

Specific Differences in Social Integration

In order to identify specific aspects of social integration on which the two groups differed, matched *t*-tests were conducted on the individual items. Table 3

presents the means of social integration items for each of the groups and results of *t*-tests. Because of the relatively large number of comparisons, the α level for determining differences was set at .005.

As shown in Table 3, significant differences between the two groups were found on 6 of 13 items on the social integration scale with community residents reporting higher levels of social contact on these items. Differences emerged especially on activities involving closer forms of social contact with neighbours that would require spending more time with them.

An examination of means on individual social integration items shows individuals with psychiatric disabilities reporting the frequency for most types of social contact with neighbours as being between "never" and "rarely." Items in which more frequent contact is acknowledged by persons with psychiatric disabilities were only those involving the most superficial contact (i.e., saying hello, having a conversation on the street). In contrast, community residents describe the frequency for a majority of different types of social contact with neighbours as being between "rarely" and "occasionally."

DISCUSSION

The present study compared different aspects of community integration and the subjective quality of life of persons with psychiatric disabilities in specialized housing programs and community residents who are neighbours living on the same

TABLE 3
Comparison of Persons with Psychiatric Disabilities
and Community Residents on Social Integration Items

Item	Persons with Psychiatric Disabilities (<i>n</i> = 51)	Community Residents (<i>n</i> = 51)	<i>t</i>
	\bar{X}	\bar{X}	
Said hello or waved	3.14	4.12	-4.08*
Received ride	1.57	1.54	0.15
Went on social outing	1.51	1.72	-1.14
Discussed neighbourhood	1.59	2.49	-4.33*
Took care of neighbour's house	1.18	2.22	-5.87*
Told of event	1.57	1.75	-1.07
Invited into home	1.72	2.20	-2.22
Assisted with household task	1.57	2.29	-3.12*
Talked about personal issues	1.69	2.24	-2.85
Borrowed things	1.33	1.92	-4.03*
Discussed home maintenance	1.35	2.30	-4.91*
Told about professional services	1.39	1.76	-2.40
Had conversation on street	2.39	2.90	-2.42

Note. 1 = never, 2 = rarely, 3 = occasionally, 4 = fairly often, 5 = frequently

**p* < .005

block. Examined aspects of community integration included physical integration (i.e., participation in community activities external to the home), psychological integration (i.e., sense of community in relation to neighbours and the neighbourhood), and social integration (i.e., social contact with neighbours).

Overall, the findings in our study provide a mixed picture about the community integration of persons with psychiatric disabilities living in specialized housing programs. Relative to community residents, these programs appear to have had some success in locating individuals with psychiatric disabilities into the community. However, this physical integration has not translated into any kind of meaningful social contact with community residents who are neighbours. In fact, the social isolation of persons with psychiatric disabilities from neighbours is quite striking, suggesting that they have socially marginalized roles in neighbourhoods. Despite this social isolation, our results show that persons with psychiatric disabilities experience psychological integration within neighbourhoods that is comparable to that of other neighbourhood residents. At the same time, persons with psychiatric disabilities are less satisfied with their lives than community residents.

A comparison of persons with psychiatric disabilities living in board and care homes and those living in supportive housing programs found no differences in community integration or general life satisfaction associated with the different types of residences. These findings differ from previous studies comparing persons with psychiatric disabilities living in different types of housing programs. Specifically, research has found persons with psychiatric disabilities living in group homes and supervised apartments reporting higher levels of community integration (Nelson, Hall, Squire, & Walsh-Bowers, 1992) and greater life satisfaction in the areas of health, safety, and living situation (Lehman, Slaughter, & Myers, 1991) than persons with psychiatric disabilities living in board and care homes. The relatively large number of residents living in the four supportive housing programs sampled in our study (i.e., 9, 20, 49, 68) may make these programs more similar to board and care homes than to group homes. The low power for comparing the two groups, associated with the small number of persons with psychiatric disabilities living in supportive housing programs ($n=12$), may also contribute to finding no differences.

Based on the present study, it appears that the simple placement of persons with psychiatric disabilities in community-based residential settings facilitates to some extent their participation in community activities. Previous research suggests that the level of physical integration is quite low for a substantial proportion of persons with psychiatric disabilities in sheltered-care (Segal & Aviram, 1978). Yet, our findings show that the physical integration of tenants in housing programs is at least comparable to that of community residents who are neighbours.

The physical integration of persons with psychiatric disabilities was found to be positively related to their social integration. This relationship makes sense, with greater physical presence in neighbourhoods increasing the opportunities for having social contact with neighbours. However, given the similar levels of physical integration for the two groups, factors other than physical integration appear to be contributing to differences in social integration between persons with psychiatric disabilities and community residents who are neighbours.

At this point, it is not entirely clear what these factors might be. However, housing programs in this area have been criticized for being insular and even institutional in nature, failing to focus on helping residents integrate meaningfully in the outside community with non-disabled residents (Ridgway & Zippel, 1990). Many housing programs in the face of potential opposition to their location have adopted a "low profile" approach in neighbourhoods in order to limit the awareness of community residents of the presence of these programs (Hogan, 1986). This type of strategy, while helping to avoid opposition from neighbours during the start-up phase of a housing program, may ultimately be contributing to the social isolation of persons with psychiatric disabilities by discouraging or at least not encouraging them to have contact with community residents.

Previous studies have indicated that a significant proportion of community residents are supportive of having community mental health programs in their midst (Tefft, Segall, & Currie, 1987) and open to having social contact with persons with psychiatric disabilities who are neighbours (Aubry, Tefft, & Currie, 1995b). It would seem that housing programs have to date failed to capitalize on the receptivity of community residents to persons with psychiatric disabilities.

At the same time, the stigma of having a psychiatric disability may be serving to exclude residents of housing programs from the regular social exchanges that are occurring between community residents. This exclusion may be quite subtle in nature involving indifference on the part of community residents toward persons with psychiatric disabilities rather than outright rejection. A consequence of specialized housing is that it identifies its residents as having a psychiatric disability to neighbours living in proximity. Socioeconomic differences between the two groups in the areas of education and employment might also play a part in the social distance between them since they may not share common interests or similar lifestyles.

Difficulties in social functioning experienced by many individuals with psychiatric disabilities are also likely to contribute to lower levels of social integration for persons with psychiatric disabilities. Research has shown that persons with psychiatric disabilities such as schizophrenia frequently have social skill deficits that limit their ability to interact socially (Yank, Bentley, & Hargrove, 1993). Rehabilitation targeted at these deficits appears necessary for helping this population increase their social integration in the community. The behavioural presentation of persons with psychiatric disabilities has been shown to play a large part in determining the attitudes and intentions of community residents toward them (Aubry et al., 1995b). Moreover, social skills training has been found to improve self-perception, reduce the risk of relapse, and increase length of time between hospitalizations (Benton & Schroeder, 1990). Community support programs for this population would do well to devote some of their focus on addressing social skill deficits while encouraging persons with psychiatric disabilities to have contact with non-disabled persons in the community.

Although community residents reported greater social integration, an examination of their actual levels indicates their social contact with neighbours remains relatively infrequent, averaging for different activities between "rarely" and "occasionally." These findings are consistent with previous studies that showed a preponderance of housing programs for persons with psychiatric disabilities

being located in less desirable neighbourhoods with more transient populations (Goldstein, Brown, & Goodrich, 1989; Newman, 1994).

There is evidence that the level of social contact between residents of a neighbourhood influences positively their likelihood of having social contact with persons with psychiatric disabilities who are neighbours (Aubry et al., 1995a). It has also been suggested that the optimal neighbourhoods for achieving community integration for persons with psychiatric disabilities are those with a moderate level of social cohesion (Trute & Segal, 1976). The location of housing programs in neighbourhoods that have more contact between residents would increase the opportunities for persons with psychiatric disabilities to have contact with community residents.

The importance of social integration is evident in its relationship with psychological integration. Greater social integration with neighbours was associated with greater psychological integration in the neighbourhood for both groups. Given this relationship and the relatively low social integration of residents of housing programs, the lack of differences between the two groups on psychological integration appears surprising. However, a reasonable interpretation of this finding is that the source of each group's sense of community within a neighbourhood is quite different.

The majority of persons with psychiatric disabilities in the present study lived with other adults in large board and care homes. Their congregate living situation may be leading them to define their sense of community to a large extent on attachments to others living with them rather than on relationships with neighbours. They experience psychological integration by virtue of their life within their residence while remaining isolated from community residents who are neighbours. In contrast, community residents who live in family units or alone base their attachment to a neighbourhood on relationships with neighbours.

Further evidence of the importance of social integration for persons with psychiatric disabilities is its significant relationship with their subjective quality of life. Greater social integration was related to better quality of life. Given this relationship, deficits in social integration for persons with psychiatric disabilities may be playing some part in the lower levels of life satisfaction expressed by persons with psychiatric disabilities in comparison to community residents.

Despite their living in the same neighbourhood, differences in living conditions between the two groups might also be contributing to these differences in reported quality of life. Previous research has shown a relationship between the objective quality of living conditions and expressed life satisfaction in such areas as personal health, access to and use of health care services, personal safety, employment, and social relations for persons with psychiatric disabilities (Lehman et al., 1982). Moreover, individuals living in large board and care homes, as do the majority of persons with psychiatric disabilities in our study, are less satisfied with their living situation than individuals in smaller residential settings such as group homes and supervised apartments (Lehman et al., 1991).

Finally, the significant positive relationship between subjective quality of life for the two groups is surprising. A possible explanation of this relationship is the presence of neighbourhood characteristics that have an impact on the life

satisfaction of both groups of individuals. Such neighbourhood characteristics as rate of crime, traffic and noise levels, and physical condition of properties in the neighbourhood can be expected to affect the quality of life of both groups of residents examined in the study.

In summary, findings in the study showing the comparability of physical and psychological integration for the two groups can be viewed as evidence of the achievement of at least partial community integration for persons with psychiatric disabilities. It can be argued, however, that differences between the persons with psychiatric disabilities and community residents are present in the most important area of community integration, namely social integration. Social contact with neighbours produces both social support and normalization opportunities. Despite being physically present in the community and perceiving oneself as part of it, the lack of any meaningful social contact with non-disabled persons living near them suggests that community mental health services have been deficient.

Recent initiatives in some parts of North America to replace congregate housing programs with supported independent living hold some promise in helping persons with psychiatric disabilities achieve true integration with other community residents (Carling, 1990; Ridgway & Zippel, 1990). A limiting aspect of specialized housing programs is that they can serve to stigmatize their residents by grouping and identifying them as psychiatrically disabled to other community residents. In contrast, supported independent living disperses individuals with psychiatric disabilities throughout the community and places them in living situations that are the same as other community residents (Ridgway & Zippel, 1990). This living context is expected to help facilitate social contact between persons with psychiatric disabilities and community residents. Normal living environments are more likely to place demands on persons with psychiatric disabilities to engage in normal behaviour and activity, including social integration with non-disabled persons.

RÉSUMÉ

L'insertion sociale ainsi que la qualité de vie de 51 personnes souffrant de troubles psychiatriques qui participaient à un programme de logement communautaire furent comparées à celles d'un échantillon de citoyens d'Ottawa-Carleton. La stratification de l'échantillon fut effectuée selon le genre et le quartier (c'est-à-dire habitant à l'intérieur d'un même pâté de maisons). Les personnes souffrant de troubles psychiatriques rapportèrent établir moins de contacts avec les voisins et être moins satisfaits de la vie en général. Les deux groupes de citoyens étaient toutefois présents dans la communauté et avaient un même sentiment de vie communautaire. La discussion porte sur des retombées de cette étude pour la planification et l'amélioration des services de santé mentale.

REFERENCES

- Ahlbrandt, R.S. (1984). *Neighbourhoods, people and community*. New York: Plenum Press.
- Aubry, T., Tefft, B., & Currie, R. (1995a). Predicting intentions of community residents toward neighbours with psychiatric disabilities. *Psychosocial Rehabilitation Journal*, 18, 51-66.

- Aubry, T., Tefft, B., & Currie, R. (1995b). Public attitudes and intentions regarding tenants of community mental health residences who are neighbours. *Community Mental Health Journal*, 31, 39-52.
- Aviram, U. (1990). Community care of the seriously mentally ill: Continuing problems and current issues. *Community Mental Health Journal*, 26, 69-88.
- Bachrach, K.M., & Zautra, A.J. (1985). Coping with a community stressor: The threat of a hazardous waste facility. *Journal of Health and Social Behavior*, 26, 127-141.
- Baker, F., & Intagliata, J. (1982). Quality of life in the evaluation of community support systems. *Evaluation and Program Planning*, 5, 69-79.
- Benton, M.K., & Schroeder, H.E. (1990). Social skills training with schizophrenics: A meta-analytic evaluation. *Journal of Consulting and Clinical Psychology*, 58, 741-747.
- Blanch, A.K., Carling, P.J., & Ridgway, P. (1988). Normal housing with specialized supports: A psychiatric rehabilitation approach to living in the community. *Rehabilitation Psychology*, 33, 47-55.
- Canadian Mental Health Association, Ottawa-Carleton Branch. (1990). *Supportive housing registry: Directory of community housing options for the psychiatrically disabled in Ottawa-Carleton*. (Available from the Canadian Mental Health Association, Ottawa-Carleton Branch, 1355 Bank Street, Suite 402, Ottawa K1H 8K7.)
- Carling, P. (1990). Major mental illness, housing, and supports: The promise of community integration. *American Psychologist*, 45, 969-975.
- Carling, P. (1992). Homes or group homes: Future approaches to housing, support, and integration for people with psychiatric disabilities. *Adult Residential Care Journal*, 6, 87-96.
- Davidson, W.B., & Cotter, P.R. (1989). Sense of community and political participation. *Journal of Community Psychology*, 17, 119-125.
- Diener, E., Emmons, R.A., Larsen, R.J., & Griffin, S. (1985). The Satisfaction with Life Scale. *Journal of Personality Assessment*, 49, 71-75.
- Dillman, D.A. (1978). *Mail and telephone surveys: The Total Design Method*. New York: Wiley Interscience.
- Fellin, P. (1993). Reformulation of the context of community based care. *Journal of Sociology and Social Welfare*, 20, 57-67.
- Fisher, G.A., Tessler, R.C., Manderscheid, R.W., & Sommers, I.B. (1992). Sheltering the severely mentally disabled in the community: A sequential decision model. *Research in Community and Mental Health*, 7, 155-176.
- Florin, P.R., & Wandersman, A. (1984). Cognitive social learning and participation in community development. *American Journal of Community Psychology*, 12, 689-708.
- Frisch, M., Cornell, J., Villanueva, M., & Retzlaff, P.J. (1992). Clinical validation of the Quality of Life Inventory: A measure of life satisfaction for use in treatment planning and outcome assessment. *Psychological Assessment*, 4, 92-101.
- Goldstein, M.B., Brown, C.H., & Goodrich, E.J. (1989). Public preferences and site location of residential treatment facilities. *Journal of Community Psychology*, 19, 186-193.
- Hogan, R. (1986). Community opposition to group homes. *Social Science Quarterly*, 67, 442-449.
- Kennedy, C. (1989). Community integration and well-being: Toward the goals of community care. *Journal of Social Issues*, 45, 65-77.
- Kruzich, J.M. (1985). Community integration of the mentally ill in residential facilities. *American Journal of Community Psychology*, 13, 553-564.
- Lehman, A.F., Possidente, S., & Hawker, F. (1986). The quality of life of chronic patients in a state hospital and in community residences. *Hospital and Community Psychiatry*, 37, 901-907.
- Lehman, A.F., Slaughter, J.G., & Myers, C.P. (1991). Quality of life in alternative residential settings. *Psychiatric Quarterly*, 62, 35-49.
- Lehman, A.F., Ward, N.C., & Linn, L.S. (1982). Chronic mental patients: The quality of life issue. *American Journal of Psychiatry*, 139, 1271-1276.
- McMillan, D.W., & Chavis, D. M. (1986). Sense of community: A definition and theory. *Journal of Community Psychology*, 14, 6-23.

- Mechanic, D., & Rochefort, D.A. (1990). Deinstitutionalization: An appraisal of reform. *Annual Review of Sociology*, 16, 301-327.
- Might's Greater Ottawa City Directory. (1993). Toronto, ON: Polk.
- Might's Greater Ottawa City Directory. (1994). Toronto, ON: Polk.
- Morrissey, J.P. (1989). The changing role of the public mental hospital. In D.A. Rochefort (Ed.), *Handbook on mental health policy in the United States* (pp. 311-338). Westport, CT: Greenwood.
- Mowbray, C.T., Greenfield, A., & Freddolino, P.P. (1992). An analysis of treatment services provided in group homes for adults labelled mentally ill. *The Journal of Nervous and Mental Disease*, 180, 551-559.
- Nelson, G., Hall, G.B., Squire, D., & Walsh-Bowers, R.T. (1992). Social network transactions of psychiatric patients. *Social Science and Medicine*, 34, 433-445.
- Nelson, G., & Smith Fowler, H. (1987). Housing for the chronically mentally disabled: Part II—Process and outcome. *Canadian Journal of Community Mental Health*, 6(2), 79-91.
- Newman, S.J. (1994). The housing and neighborhood conditions of persons with severe mental illness. *Hospital and Community Psychiatry*, 45, 338-343.
- Perkins, D.D., Florin, P., Rich, R.C., Wandersman, A., & Chavis, D.M. (1990). Participation in the social and physical environment of residential blocks: Crime and community context. *American Journal of Community Psychology*, 18, 83-115.
- Pinkney, A.A., Gerber, G.J., Lafave, H.G. (1990). Quality of life after psychiatric rehabilitation: The client's perspective. *Acta Psychiatrica Scandinavica*, 83, 86-91.
- Ridgway, P., & Zippel, A.M. (1990). The paradigm in residential services: From the linear continuum to supported housing approaches. *Psychosocial Rehabilitation Journal*, 13, 11-31.
- Rochefort, D. (1992). More lessons of a different kind: Canadian mental health policy in comparative perspective. *Hospital and Community Psychiatry*, 43, 1083-1090.
- Segal, S., & Aviram, V. (1978). *The mentally ill in community-based sheltered care: A study of community care and social integration*. New York: John Wiley & Sons.
- Sherman, S.R., Frenkel, E.R., & Newman, E.S. (1986). Community participation of mentally ill adults in foster family care. *Journal of Community Psychology*, 14, 120-133.
- Tabachnick, B.G., & Fidell, L.S. (1989). *Using multivariate statistics*. New York: Harper & Row.
- Tefft, B., Trute, B.S., & Segall, A. (1987). Neighbourhood response to community mental health facilities for the chronically mentally disabled. *Canadian Journal of Community Mental Health*, 6(2), 37-49.
- Trainor, J.N., Morell-Bellai, T.L., Ballantyne, R., & Boydell, K.M. (1993). Housing for people with mental illness: A comparison of models and an examination of the growth of alternative housing in Canada. *Canadian Journal of Psychiatry*, 38, 494-501.
- Trute, B., & Segal, S.P. (1976). Census tract predictors and the social integration of sheltered care residents. *Social Psychiatry*, 13, 79-84.
- Unger, D.G., & Wandersman, A. (1982). Neighboring in an urban environment. *American Journal of Community Psychology*, 10, 493-509.
- Unger, D.G., & Wandersman, A. (1985). The importance of neighbors: The social, cognitive, and affective components of neighboring. *American Journal of Community Psychology*, 13, 139-163.
- Wandersman, A., & Giamartino, G.A. (1980). Community and individual difference characteristics as influences of an initial participation. *American Journal of Community Psychology*, 8, 217-228.
- Yank, G.R., Bentley, K.J., & Hargrove, D.S. (1993). The vulnerability-stress model of schizophrenia: Advances in psychosocial treatment. *American Journal of Orthopsychiatry*, 63, 55-69.