

A Little Goes a Long Way: The Impact of Distal Social Support on Community Integration and Recovery of Individuals with Psychiatric Disabilities

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Abstract Although an extensive body of literature highlights the important role of social support for individuals with psychiatric disabilities, definitions of support tend to be restricted—focusing on intimate relationships such as friend and family networks and ignoring the role of casual relationships existing naturally in the community. This mixed-methods study of 300 consumers of mental health services in the Southeastern US aims to better understand the impact of community supports, termed *distal supports*, on community integration and recovery from mental illness. Qualitative content analysis, tests of group mean differences, and hierarchical linear regression analyses revealed the following: (1) participants primarily reported receiving *tangible* support (e.g., free medication/discounted goods) from distal supports rather than *emotional* support (e.g., displays of warmth/affection) or *informational* support (e.g., provision of advice); (2) women and older participants reported more distal supports than men or younger participants; and (3) distal supports played a unique role in predicting community integration and recovery even after accounting for the influence of traditional support networks. Results highlight the importance of considering diverse types of social support in naturally occurring settings when designing treatment plans and interventions aimed at encouraging community

participation and adaptive functioning for individuals with psychiatric disabilities.

Keywords Psychiatric disability · Community mental health · Community integration · Social support · Recovery · Mixed-methods

Introduction

Community integration refers quite simply to the notion that individuals with disabilities should have opportunities to live, work, engage with others, and enjoy recreational activities in the same manner as peers without disabilities (Wong and Solomon 2002). In addition to fostering the achievement of normative goals (e.g., employment, education, social support, successful community tenure), there is emerging evidence that community integration facilitates positive mental health, life satisfaction, reduced loneliness, and increased sense of acceptance from community members (Abdallah et al. 2009; Granerud and Severinsson 2006; Prince and Gerber 2005; Townley et al. 2009; Ware et al. 2007). Uncovering ways to encourage community inclusion and participation has emerged as a high priority among mental health advocates, policy makers, and researchers (Davidson 2005; Nelson et al. 2001; Townley and Kloos 2011; Ware et al. 2007; Yanos 2007). Although community integration encompasses numerous factors, including participation in community activities, social relationships with peers of one's own choosing, and perceptions of belonging to the community, we focus here on the role that casual, routine interactions with community members, termed *distal supports* (Wieland et al. 2007), can play in promoting community integration and recovery from mental illness.

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The Importance of Social Support to Community Integration

In the twenty-first century, the ideal of individuals with disabilities being fully engaged in their communities remains an unrealized goal (Kloos 2010; Partington 2005). There are various reasons for this, perhaps the primary one being that individuals with disabilities have fewer opportunities to engage in their communities (White et al. 2010). Unaffordable or inaccessible housing, limited opportunities for employment, and lack of transportation severely limit involvement of individuals with disabilities. In addition to more practical barriers to engaging in community activities, individuals with psychiatric disabilities also face challenges related to establishing supportive social networks. In relation to society at large, the social networks of individuals with psychiatric disabilities are smaller, less diverse, less interconnected, include fewer meaningful personal relationships, and entail a greater reliance on dependent ties (e.g., family members and mental health staff) and relationships formed in mental health contexts rather than in the general community (Eklund and Hansson 2007; Schwartz and Gronemann 2009; Segal et al. 1997). Typically, following the first major episode of mental illness and hospitalization, many individuals with psychiatric disabilities experience a significant decrease in the number, frequency, and quality of social contacts and supports (Brown 1996). Beels (1981) terms this experience a *network crisis*; and it may cause individuals to become withdrawn and isolated from the community at large—impairing both their ability and also their motivation to form social relationships and participate in community life (Beels 1981; Schwartz and Gronemann 2009). Promoting distal social supports as legitimate and useful could avert this network crisis for some.

Community integration has traditionally been conceptualized as physical presence in the community and operationalized as the cumulative frequency of self-initiated participation in community activities and use of community resources (e.g., shopping, working, going to church, and visiting health centers) (Aubry and Myner 1996). Throughout the last decade, researchers have noted that the concept of community integration should encompass more than simply being in the physical presence of the general public and participating in activities (Gulcur et al. 2007; Townley et al. 2009; Wong and Solomon 2002). Rather, integration experiences demand attention to the role of *social* components of community life, particularly those that occur in natural settings outside the mental health system (Kloos and Shah 2009). Research has explicated the impact that different types of relationships may have on community integration experiences, and these will be reviewed briefly below.

Friend and Family Relationships

Having companions is a normal and desirable aspect of peoples' lives (Boydell et al. 2002), and community integration research reflects this notion. For example, Browne (2005) conducted open-ended interviews about housing experiences and mental health and reported that all participants spoke of the importance of living with others and having someone to come home to. Living with others helped reduce participants' feelings of isolation and provided an outlet for discussing distressing symptoms and stressful events. Similarly, Boydell et al. (2002) interviewed 21 individuals with psychiatric disabilities and found that friendship was important for all study participants, particularly as a source of emotional support. Participants spoke of friends acting as a potential surrogate family: "... I want to be more active with other people and contribute some more to the community to make my own family. I want some kind of network of friends and to have a support system" (Boydell et al. 2002, p. 126). Participants also spoke of the benefits of reciprocal friendships; that is, being able to both receive and give support was quite meaningful to them.

Results are mixed concerning the impact of family members on community integration experiences. In a qualitative study of 41 dually diagnosed individuals entering residential programs to exit homelessness, Padgett et al. (2009) found that family members could be both sources of unconditional warmth and nurturing and also sources of rejection and condemnation. Family relationships were reported by participants as being quite volatile, with parents and siblings actively supporting their recovery efforts one moment while having them involuntarily committed to mental health treatment facilities the next. Chen (2010) presents similarly contrasting results, with some parents supporting children in living independently and engaging in community life and other parents thwarting their children's efforts by making them dependent on their assistance.

Relationships Tied to the Mental Health System

Although our focus in this study is on relationships that occur naturally in the community, mental health staff and other consumers provide a "safety net" that may counteract some of the actual or feared negative experiences that individuals face in the community (Felce et al. 2002; Nelson et al. 2001). As one staff member in a qualitative study by Wong et al. (2006, p. 56) suggests, "I think it sort of works as a balance, even when they integrate out there; they need to maintain some sort of connections somewhere, some sort of support group, some sort of group of friends that has gone through what they go through." Additionally,

rehabilitative services tied to mental health centers encourage individuals to integrate into the community through provision of skills that help individuals socialize with others, fulfill activities of daily living (e.g., shopping and cleaning), and obtain and maintain education and employment (e.g., Nelson et al. 2001).

Despite the important role that supports tied to mental health services may play in facilitating community integration, other researchers argue against relying on relationships tied to services. Beal et al. (2005) argue that there is a critical distinction between individuals forming relationships for themselves versus having them created or selected by others. Similarly, Dileo (2007) states that rather than programs and services trying to *be* the social support for consumers, they should be the facilitator of these supports, teaching individuals to form their own support systems in the community.

Some researchers take this argument even further, suggesting that support from mental health staff may actively hinder individuals' efforts to integrate into the community (Abraham and Stein 2009). Mental health professionals may believe that individuals with psychiatric disabilities lack motivation or the ability to participate in meaningful community activities. For example, clinicians may discourage employment due to a belief that it may result in symptom relapse (Abraham and Stein 2009). Boydell et al. (2002) also note the lack of attention that many case managers and other mental health professionals invest toward helping individuals with psychiatric disabilities develop normalized social relationships in the community.

The Importance of Social Support to Recovery from Mental Illness

Along with influencing community integration experiences, social support from friends, family, and mental health staff has also been found to influence recovery from mental illness. Recovery is a dynamic process that encompasses holistic, consumer-based principles of well-being, adaptive functioning, hope, autonomy, purpose, and transcending one's limitations (Deegan 1988). Whitley and Drake (2011) argue that recovery has at least five essential dimensions: (1) *Clinical*, comprised of reduced symptomatology and psychiatric treatment; (2) *Existential*, comprised of spirituality, self-efficacy, and empowerment; (3) *Functional*, comprised of basic functioning in terms of housing, employment, and education; (4) *Physical*, comprised of health and reduced substance abuse; and (5) *Social*, comprised of social connectedness, sense of community, and social activity. This final component has particular relevance to the current study. Numerous researchers have discussed the importance of social support to the recovery process. For example, Corrigan et al. (2004)

found that people with larger social support network size and more network satisfaction reported higher scores on the Recovery Assessment Scale (RAS), a scale assessing perceptions of personal recovery from mental illness. Similarly, Hendryx et al. (2009) found that higher scores on the RAS were related to social support network size and engagement in activities.

Considering the Role of Distal Social Supports in Community Integration and Recovery Experiences

In addition to the closer relationships that individuals may have with friends, family, and service providers, there is evidence in the literature that naturally-occurring supports in the community may also promote community integration efforts and recovery from mental illness. For example, Beal et al. (2005) and Corin and Lauzon (1992) found that participants felt connected to the community through regular, routine encounters with community members in public places. Further, participants identified naturally existing supports as an important part of their recovery process and ability to adapt to living in the community.

Wieland et al. (2007) apply the term 'distal support' to the support provided through casual community relationships developed via regular contact with other individuals who live and work in the same community (e.g., shop owners, sales clerks, bartenders, librarians, and other community members). Very much in line with the classic work of Granovetter (1973) regarding strong and weak social network ties, the authors argue that this support is not necessarily central to the individual's life or a part of their formal support structure; yet, "these weak ties may help to promote a sense of integration and belonging and provide the intangible support of acceptance, familiarity, and sociability in a predictable environment without imposing emotional demands" (Wieland et al. 2007, p. 2). In a study of 58 individuals with psychiatric disabilities living in the community, Wieland et al. (2007) found that a greater number of distal supports were associated with higher life satisfaction ratings and sense of belonging scores. Consideration of distal supports may be particularly important when developing interventions aimed at increasing support networks for individuals who may not have strong friend and family relationships.

Expanding Empirical Inquiry of Diverse Forms of Social Support

As the review above suggests, social support plays an important role in the community integration and recovery experiences of individuals with psychiatric disabilities. However, definitions of social support may be too narrow—focusing on intimate relationships such as friend and family

networks and ignoring the potential role of more casual relationships existing naturally in the community (i.e., distal supports). While qualitative studies have provided some context for understanding the *importance* of distal social supports for individuals with psychiatric disabilities (e.g., Beal et al. 2005; Corin and Lauzon 1992; Royce-Davis 2001), less is known about the specific *types* of support provided by distal supports. For instance, the social support literature generally agrees upon three classic types of support: (1) *tangible support* (the provision of financial assistance, material goods, or services); (2) *emotional support* (the offering of empathy, concern, affection, love, and trust); and (3) *informational support* (the provision of advice, guidance, or useful information) (Langford et al. 1997; Uchino 2004; Willis 1998). However, these categories are based on the assistance provided by more proximal ties (e.g., friends and family members). Thus, it is important to determine whether distal supports operate similarly.

More information is also needed about personal characteristics that may impact receipt of distal support. For example, do distal supports differ by age, race, or gender? Finally, the work by Wieland et al. (2007) described above is, to our knowledge, the only published study that measured the relationship between distal supports and well-being variables quantitatively; and *no* studies have assessed the influence of distal supports on community integration and recovery from mental illness relative to more traditional types of support (e.g., friends, family, mental health staff, etc.). To address these gaps in the literature, we will employ mixed-methods to perform the following:

1. Document and describe distal supports for individuals with psychiatric disabilities. We will focus primarily on the *type* of social support provided, categorizing support according to classic social support dimensions suggested in the literature (i.e., tangible, emotional, and informational support; Langford et al. 1997; Uchino 2004; Willis 1998).
2. Explore associations between distal supports and demographic/diagnostic factors (specifically, age, gender, race, and diagnostic category).
3. Assess distal support as a predictor of community integration and recovery after controlling for the potential role of traditional social support networks. We hypothesize that distal support will play a unique role in predicting both community integration and recovery even after accounting for the influence of traditional social support.

In addition to contributing to the body of research aimed at understanding the importance of distal social supports to community integration experiences and recovery, it is our hope that results of this study will inform mental health services and interventions aimed at increasing the ability of

individuals with psychiatric disabilities to connect socially with diverse community members.

Methods

Participants

Data were collected from a sample of 300 adults using outpatient mental health services and living in independent housing in Columbia, the largest city in South Carolina. Demographic characteristics of the participant sample were highly representative of the client population at the community mental health center from which they were recruited: 66 % were female; 64 % self-identified as Black, 28 % as White, 3 % as Latino, 2 % as Alaskan Native/Native American, 2 % as Asian, and 1 % other. Participants' ages ranged from 21 to 74 years ($M = 46$). The most common diagnostic category was schizophrenia spectrum disorder (e.g., schizophrenia, schizoaffective disorder; 46 %). Other diagnostic categories included major depression (25 %), bipolar disorder (22 %), and other (e.g., PTSD, anxiety disorders; 7 %). Mental health services received by participants varied from medication management only to more frequent, intensive case management services. Participants lived in a variety of neighborhoods in primarily urban settings, with median household income ranging from \$10,391 to \$82,264, with a mean of \$33,564 and a standard deviation of \$14,158. The majority of participants (57 %) lived in homes owned or rented by themselves or by family members, followed by apartments (35 %) and duplexes (8 %). Forty-six percent of participants owned or had regular access to a vehicle, and 24 % reported some form of work in the 6 months prior to their interview, ranging from full-time employment to performing semi-regular odd jobs for friends and family.

Measures

Distal supports were assessed using a modified version of the Distal Support Measure (Wieland et al. 2007). Specifically, participants were asked about interactions with community members at five community locations: grocery stores, pharmacies, restaurants/cafes, other types of stores, and other public places. As per the instructions of Wieland et al. (2007), for a community location to be identified as a distal support, participants had to provide three or more positive answers to the following five questions assessing attitudes toward and involvement with the settings:

1. Do people there recognize/acknowledge you when you come in?
2. Do you feel welcomed there?

3. Do you know the names of people there?
4. Do they know your name?
5. Do they sometimes help you out in times of need? If so, please describe.

Each question had a ‘Yes/No’ response format. After determining whether or not each of the five community locations could indeed be considered a distal support (i.e., at least three of the five questions above were answered affirmatively), the total number of distal support categories for each participant was summed. Thus, participants could have a maximum of five distal supports.

Traditional social support networks were measured using a 10-item scale adapted from the SAMHSA ACCESS protocol (Lam and Roshenheck 1999) which assesses both network size and frequency of contact with members within participant support networks across five categories: family members, friends, co-workers, mental health staff, and religious/spiritual congregation members. Five items assessed the number of individuals participants feel close to in each of the five network categories. A sample item includes, “How many family members do you feel close to?” The remaining five items measured frequency of contact with people in the support network and were answered on a 7-point Likert scale ranging from 0 (Never) to 6 (lives with me). A sample item includes, “How often did you see family members during the past year?” To obtain a composite score, a product was calculated between frequency of contact and network size for each network category (i.e., family members, friends, coworkers, religious/spiritual congregation members, and mental health staff). Next, the product scores across the five network categories were summed to yield a weighted score for *social support network*. The weighted score captured both the frequency of contact, as well as the number of individuals within one’s support network. Higher weighted scores indicated greater levels of social support.

Community Integration was assessed using the community integration measure (CIM). The CIM was developed for use investigating community integration for persons with traumatic brain injury (McColl et al. 2001). Although the scale was not specifically developed for individuals with psychiatric disabilities, the items are phrased generally enough that they should be applicable to any person with a disability facing challenges integrating into community life. The scale includes 10 items about feeling accepted in the community and being able to participate in the community (e.g., “I feel like part of this community, like I belong here” and “I have something to do in this community during the main part of my day that is useful and productive”). Questions utilize a five-point response scale ranging from “always disagree” to “always

agree.” The internal consistency α for the scale in this sample was .85.

Recovery was assessed using the RAS-Short form (RAS-S) (Corrigan et al. 2004). The scale is comprised of 25 items that represent the following five factors: (a) personal confidence and hope, (b) willingness to ask for help, (c) goal and success orientation, (d) reliance on other, and (e) not dominated by symptoms. Questions utilize a five-point response scale ranging from “strongly disagree” to “strongly agree.” The internal consistency α for the scale in this sample was .92.

Design and Procedure

Data for this study were collected as part of a larger research project assessing community integration experiences of individuals with psychiatric disabilities. Participants were offered \$20 to answer a series of self-report questions administered by a trained research assistant at a local community mental health center. Interviews lasted approximately 60–90 min and included questions about community experiences, social functioning, and psychiatric symptoms. All recruitment and interview procedures were approved by the University of South Carolina and SC Department of Mental Health Institutional Review Boards. Informed consent was obtained before research began.

Data Preparation and Analysis

Mixed-methods data preparation and analysis began by first assessing simple descriptive information about distal supports. Frequency distributions were conducted for each potential distal support (i.e., grocery store, pharmacy, restaurant/cafe, other types of stores, and other public places). Percentages of participants reporting each distal support location were observed. Second, a qualitative content analysis was performed on an open-ended question asking participants to specify the type of support provided to them at each distal support location. A directed, or deductive, content analysis (Zhang 2009) was performed because we wished to group the type of support provided into the following three classic social support categories suggested in the literature: (1) *tangible support*; (2) *emotional support*; and (3) *informational support* (Langford et al. 1997; Uchino 2004; Willis 1998).

Responses were entered and coded in NVivo 9.0 software according to (1) distal support location (i.e., grocery store, pharmacy, restaurant/cafe, other types of stores, and other public places); and (2) type of social support provided (i.e., tangible, emotional, and informational). Cross-matrix coding (distal support location crossed with type of social support provided) was then conducted to determine the frequency with which each distal support location was

coded as providing tangible, emotional, or informational support.

Data preparation for quantitative analyses began with an inspection of missing data. Data was missing for very few participants. The following variables were the only ones with any missing data: (1) race was missing for <1 % of participants; (2) data on psychiatric diagnosis was missing for <1 % of the sample. According to χ^2 and t tests, no associations existed among participants who were missing these study variables, indicating that data were likely missing at random (MAR; Allison 2001). Given these findings, no action was taken to minimize the effects of missingness on study analyses.

Next, data preparation involved creating continuous composite scores of individual scale variables. Scales were assessed for psychometric qualities (e.g., skewness, kurtosis). See Table 1 for descriptive information on composite variables. Each of the scales had adequate psychometric qualities except for the Network Support Index. Given that some participants reported numerous social contacts (in some cases over 100 supports for any given category), while other participants reported very few contacts, scores were positively skewed (skewness statistic = 2.41). A decision was made to perform a logarithmic transformation, and the resulting statistic (.49) was acceptable. Bivariate correlations were examined between distal supports and participant demographic/diagnostic characteristics; and between distal supports and variables of interest in the current study (i.e., recovery from mental illness and community integration) (see Table 2). Independent group t tests were conducted to determine relationships and mean differences in distal supports by demographic and diagnostic categories. Finally, hierarchical regression models were conducted to assess distal support as a predictor of community integration and recovery after accounting for the influence of demographic/diagnostic characteristics and more traditional social support networks. Specifically, demographic/diagnostic characteristics were entered in a first block to partial out their influences, followed by a block that included the traditional social support network variable, and then followed by a block that included the distal social support variable. The effect of including each block was assessed by examining the increment change in R^2 and the F test statistic associated with it.

Results

Documenting and Describing Distal Supports

When asked questions about community locations they visit on a regular basis (i.e., grocery stores, pharmacies, restaurants/cafes, other stores, and other public places),

Table 1 Descriptive statistics for composite scales

Variables	Range	Mean	SD	Skewness	Kurtosis
Distal supports	.00–5.00	2.40	1.23	.38	–.24
Social support network	.00–102.60	9.84	14.23	2.41	9.82
Community integration	1.80–5.00	4.14	.72	–.47	.23
Recovery	1.60–5.00	3.89	.55	–.07	.51

Actual values for the social support network variable are shown; for analyses, social support network data were log transformed

participants reported a mean number of 2.40 of these five locations as being distal supports. A total of 21 participants (7 %) reported no distal supports; while 18 participants (6 %) reported each of the locations as being a distal support. Pharmacies were the most commonly reported distal support location, with 175 participants (58 %) identifying them as distal supports. A total of 130 participants (43 %) listed grocery stores as distal supports; 92 (31 %) listed other stores (e.g., convenient stores, book stores, and department stores); 85 (28 %) listed restaurants/cafes; and 62 (21 %) listed other public places (e.g., gyms, leisure activity centers, and support group facilities) as being distal supports.

Our deductive content analysis revealed that the vast majority of participants who reported that distal supports help them out in times of need received *tangible* support as opposed to *emotional* or *informational* support. For example, of the 91 participants who stated that pharmacies help them out in times of need, 80 participants' responses about the specific type of help provided were coded as tangible support, 3 responses were coded as emotional support, and 8 responses were coded as informational support. Examples of tangible support provided at pharmacies included discounting purchases, giving free medication, and calling taxis. Examples of emotional support included listening to and providing empathic feedback about stressful life situations and praying for the participant. Finally, examples of informational support included offering instructions on how to take medication, helping participants understand blood pressure readings, and answering questions unrelated to medication.

This pattern of findings (i.e., tangible support being the most common type of support provided) was consistent across all five distal support locations, as is summarized in Table 3. Examples of specific types of support provided were also similar across locations. That is, tangible support was typically seen in the form of lending money, discounting purchases, and providing rides; emotional support typically involved empathic listening and reassurance; and informational support was most commonly provided in the

Table 2 Correlation matrix of study variables

Variables	1	2	3	4	5	6	7	8
1. Distal supports	–							
2. Social support network	.25**	–						
3. Community integration	.27**	.34**	–					
4. Recovery	.20**	.40**	.39**	–				
5. Race	–.08	.05	.01	.04	–			
6. Gender	.13*	–.02	.04	.04	–.03	–		
7. Age	.14*	–.02	.08	–.03	–.25**	.17**	–	
8. Diagnosis	–.06	.13*	.07	.12*	.22**	–.29**	–.17	–

The race variable was coded 'Black' (1) and 'non-Black' (0), diagnosis was coded 'schizophrenia-spectrum' (1) and 'other diagnoses' (0), gender was coded 'female' (1) and 'male' (0)

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

Table 3 Type of social support provided across five distal support locations

Distal support	Social support category		
	Tangible	Emotional	Informational
Grocery store	44	2	3
Pharmacy	80	3	8
Restaurant/cafe	49	4	1
Other type of store	42	1	4
Other public setting	33	7	4

form of answering location-specific questions or offering advice.

Associations Between Distal Supports and Demographic/Diagnostic Factors

Analyses revealed that female participants reported significantly more distal supports ($M = 2.52$, $SD = 1.42$) than males ($M = 2.15$, $SD = 1.29$), $t(298) = -2.25$, $p < .05$. No differences in reported distal supports were found between Black participants ($M = 2.30$, $SD = 1.43$) and non-Black participants ($M = 2.55$, $SD = 1.31$), $t(298) = -1.53$, $p = .13$. Similarly, no significant differences in reported distal supports were found between participants diagnosed with schizophrenia spectrum diagnoses ($M = 2.31$, $SD = 1.31$) and participants with other diagnoses ($M = 2.46$, $SD = 1.45$), $t(298) = -.97$, $p = .33$. Finally, participant age was found to be significantly positively related to reported distal supports ($r = .14$, $p < .05$).

Distal Support as a Predictor of Community Integration and Recovery

The hierarchical regression model with demographic/diagnostic variables, traditional social support network, and distal

supports predicting community integration accounted for 17.1 % of the variance in community integration scores, $F(6, 293) = 9.88$, $p < .001$ (see Table 4). The block of demographic/diagnostic variables accounted for 2 % of the variance in community integration, $F(4, 295) = 1.60$, $p = .17$. Addition of the block containing the traditional social support network variable explained an additional 11.8 % of the variance, $F(1, 294) = 39.59$, $p < .001$. Finally, and of particular interest to the current study, addition of the block containing the distal support variable explained 3.1 % of additional variance in community integration after accounting for the influence of all other variables, $F(1, 293) = 10.85$, $p < .01$. In the final model including all variables, the social support network beta weight was .29, $p < .001$; and the distal support beta was .19, $p < .01$.

The hierarchical regression model with demographic/diagnostic variables, traditional social support network, and distal supports predicting recovery accounted for 18.5 % of the variance in recovery, $F(6, 293) = 10.88$, $p < .001$ (see Table 5). The block of demographic/diagnostic variables accounted for 1.8 % of the variance in recovery, $F(4, 295) = 1.30$, $p = .27$. Addition of the block containing the traditional social support network variable explained an additional 15.6 % of the variance, $F(1, 294) = 54.36$, $p < .001$. Finally, addition of the distal support variable explained 1.2 % of additional variance in recovery after accounting for all other variables, $F(1, 293) = 4.15$, $p < .05$. In the model including all variables, the social support network beta weight was .37, $p < .001$; the distal support beta was .12, $p < .05$.

Discussion

Distal support appears to be a source of social support largely overlooked in empirical studies that holds promise

Table 4 Summary of hierarchical regression analysis for variables predicting community integration ($N = 300$)

Variables	Model 1			Model 2			Model 3		
	<i>B</i> [95 % CI]	<i>SE B</i>	β	<i>B</i> [95 % CI]	<i>SE B</i>	β	<i>B</i> [95 % CI]	<i>SE B</i>	β
Age	.01 [−.006, .01]	.004	.10	.01 [−.006, .01]	.004	.09	.004 [−.003, .01]	.004	.07
Sex	.09 [−.10, .26]	.09	.06	.10 [−.09, .25]	.09	.06	.06 [−.12, .21]	.09	.04
Race	.02 [−.16, .19]	.09	.01	.01 [−.17, .17]	.09	.003	.02 [−.15, .18]	.08	.02
Diagnosis	.18 [−.03, .32]	.09	.06*	.13 [−.06, .27]	.08	.09	.14 [−.04, .29]	.08	.09
Social support network				.50 [.33, .64]	.08	.35***	.42 [.26, .57]	.08	.29***
Distal supports							.10 [.04, .16]	.03	.19**
R^2	.02			.14			.17		
F for R^2 change	1.60			39.59***			10.85**		

The social support network variable is log transformed

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

Table 5 Summary of hierarchical regression analysis for variables predicting recovery ($N = 300$)

Variables	Model 1			Model 2			Model 3		
	<i>B</i> [95 % CI]	<i>SE B</i>	β	<i>B</i> [95 % CI]	<i>SE B</i>	β	<i>B</i> [95 % CI]	<i>SE B</i>	β
Age	−.001 [−.01, .01]	.003	−.01	−.001 [−.01, .004]	.003	−.02	−.002 [−.01, .004]	.003	−.03
Sex	.09 [−.05, .23]	.07	.08	.09 [−.04, .21]	.06	.08	.07 [−.05, .20]	.06	.07
Race	.01 [−.13, .14]	.07	.01	−.01 [−.13, .12]	.06	.004	.002 [−.12, .13]	.06	.01
Diagnosis	.14 [.01, .27]	.07	.13*	.10 [−.02, .23]	.06	.09	.10 [−.02, .23]	.06	.09
Social support network				.43 [.31, .54]	.06	.40***	.39 [.28, .51]	.06	.37***
Distal supports							.05 [.01, .09]	.02	.12*
R^2	.02			.17			.19		
F for R^2 change	1.30			54.36***			4.15**		

The social support network variable is log transformed

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

for promoting community integration and recovery for individuals with psychiatric disabilities. This is the first paper to assess distal social support as a predictor of community integration and recovery after controlling for the influence of more traditional types of social support. There is a rich body of literature highlighting the importance of social support for individuals with psychiatric disabilities, but far less is known about more non-traditional relationships with members of the community in public places such as grocery stores, community centers, pharmacies, and restaurants. Our study helps to fill in this gap.

Documenting and Describing Distal Supports

The first goal of this study was to document and describe distal supports for individuals with psychiatric disabilities. The vast majority of participants reported having distal supports in the community, with pharmacies being the most commonly reported support location. This finding is in line with those reported by Wieland et al. (2007), highlighting

the important role that relationships with pharmacists can have for individuals with psychiatric disabilities. Other commonly reported distal supports were grocery stores, other stores (e.g., convenient stores, department stores, etc.), and restaurants/cafes. Overwhelmingly, participants discussed the type of support received at distal support locations as being primarily *tangible* support. That is, individuals reported receiving support in the form of a money loan, a ride home, free food/beverage, and so forth. Participants discussed receipt of *emotional* and *informational* support less frequently, but a few individuals did mention that community members at distal support locations occasionally listen to their problems, pray with them, or give them advice about how to handle stressful situations.

These particular findings are contradictory to those reported in the social support literature. Specifically, results of multiple studies suggest that emotional support is the most common type of social support asked for and provided, followed by informational support, and then followed by tangible support (Burke 2010; Kaniasty and

Norris 2000). The discrepancy in types of support identified in our study may be due in part to the nature of *distal* supports. That is, distal supports are more casual, less intimately involved, and typically less frequently engaged with than other members of the support network (e.g., family, friends, and colleagues). Asking for and providing tangible support (e.g., carrying groceries to a car, providing free medication, calling a taxi) does not require the same level of closeness or emotional bond that is often a prerequisite of more emotional types of support (e.g., physical comfort, such as hugs; active listening and empathizing). Social support studies typically involve analyses of closer relationships where provision and receipt of emotional and informational support would be expected. Our findings establish a basis of understanding for casual community relationships and suggest that tangible support is the most common type of support asked for and received.

The discrepancy in types of support reported may also be due to the ways in which questions were asked. Specifically, as part of our determination of whether or not a community location should be considered a distal support, we asked participants if individuals at the location have helped them out in a time of need. If they answered this question in the affirmative, we then asked them to specify the type of support. The social support literature suggests that tangible support is the easiest type of support to recognize and define (House 1981), while emotional support can be difficult to distinguish because most forms of support have some underlying emotional quality (Gottlieb 1978; Tardy 1985). Further, unlike tangible support, both emotional and informational support can be difficult to translate into specific helpful *actions* (Dakof and Taylor 1990). Our question seems to pull for specific, concrete examples of support. Given that tangible support is easier to identify and define, it is not surprising that so many more participants described tangible forms of support rather than emotional or informational support. In the future, questions should be reworded to broaden the scope of support types elicited and described by participants. However, it is also important to acknowledge the unique role that distal supports may play in shoring up individuals' access to and utilization of tangible social support.

Associations Between Distal Supports and Demographic/Diagnostic Factors

The second study goal was to explore associations between distal supports and demographic/diagnostic factors. First, we found that women reported more distal supports than men. This finding is in line with classic social psychology literature that suggests that women have larger social support networks than men and receive support from multiple sources (e.g., Antonucci and Akiyama 1987;

Greenglass 1982; Verbrugge and Wingard 1987). It is interesting that this pattern of findings was consistent in our sample of adults with psychiatric disabilities, and it points to a potentially fruitful area of intervention aimed at (1) encouraging men to tap into more numerous and diverse support networks, and (2) supporting women to maintain diverse support networks, including casual community supports.

Second, we found a significant positive relationship between age and number of distal supports reported, suggesting that as individuals age they expand their social networks to include more casual community supports. Although there is a dearth of literature concerning social support for middle-age individuals, quite a bit has been written about social support for older individuals. Specifically, the literature suggests that while people generally maintain social connections with others throughout life, rates of social interaction begin to decline during the latter part of adulthood (Cartensen 1986; Fredrickson and Cartensen 1998; Knoll and Schwarzer 2002).

Researchers disagree about the causal mechanism behind reductions in social contact that typically occur as people age, but two theories currently dominate our thinking in this area. *Disengagement* theorists argue that old age brings about a mutual withdrawal between aging people and society. Withdrawal from social life is seen as a symbolic preparation for death. *Activity* theorists contend that older people remain committed psychologically to the importance of social support; however, physical and social obstacles prevent them from being able to maintain high rates of social interaction (Cartensen 1992). In light of these theories, our finding that increased age is associated with a greater number of casual relationships in the community is encouraging. First, it suggests that there may actually be a mutual *commitment* between society and aging people to ensure that they feel supported and welcomed when engaging in routine activities in the community. Second, it suggests that the low level of physical or social commitment involved in activating and maintaining distal supports in the community helps to ensure that aging individuals have access to at least casual levels of social support even if more intimate support networks are truncated. Findings also point to the importance of encouraging younger individuals to engage with casual community support networks. Researchers and interventionists would be wise to consider the important role that distal supports may play in bolstering social support networks and well-being across the lifespan.

Third, we found no differences in number of distal supports by race (i.e., Black and non-Black). This null finding is consistent with those reported in the Wieland et al. (2007) distal support article and in studies of traditional social support (Griffin et al. 2006). Similarly,

number of distal supports did not differ by diagnostic category (i.e., schizophrenia spectrum and non-schizophrenia spectrum). Again, this finding is similar to those reported by Wieland et al. (2007), lending support to the notion that engaging with casual community supports is both desirable and achievable to individuals experiencing diverse psychiatric symptoms. Researchers and interventionists should not disregard the impact of race and psychiatric diagnosis on distal supports; but there is preliminary evidence from our study and the Wieland et al. (2007) study to suggest that these factors may be less predictive of distal supports than other social categories (e.g., age and gender).

Distal Support as a Predictor of Community Integration and Recovery

Finally, the third goal of our study was to assess the role of distal support in predicting community integration and recovery after controlling for demographic/diagnostic variables and traditional social support networks. Since there is a wide body of literature suggesting the importance of traditional social support networks (e.g., friends, family, mental health staff, etc.), it was important to assess the unique relationship between distal supports and well-being variables. Encouragingly, and as expected, we found that distal supports predicted both recovery and community integration after accounting for the influence of traditional social support networks. Traditional social support had larger standardized beta weights and accounted for the most variance in both community integration and recovery; however, distal support still explained a significant amount of unique variance. Thus, while having traditional social support is perhaps more influential in the community integration and recovery process, the establishment of casual ties with community members plays a unique role in supporting individuals to engage in community life and lead satisfying, productive, and healthy lives.

Limitations

There are limitations associated with the design, sample, and methods that must be discussed. First, since a cross-sectional design was employed, the study only accounts for data taken from one point in time. Thus, causation cannot be inferred from the results. Future studies should employ a longitudinal design to assess whether distal supports remain stable over time or fluctuate as individuals visit new community locations, move to new residences, or experience changes in primary support networks. Additionally, the direction of effects could not be identified in the current

study. It could be that enhanced community integration and recovery predict more distal supports, as opposed to the reverse relationship. Longitudinal studies would help to better explain the causal direction of effects.

A potential issue with generalizability of the findings is that they represent only the experiences of individuals with psychiatric disabilities living in a small city in the Southeastern United States. Given the contextual nature of distal supports, findings may look considerably different in metropolitan cities or in more rural areas. Future research in other geographic locations will help increase our understanding of specific environmental differences in distal supports.

This study relied on individuals' perceptions of social support. The problem with basing findings on people's perceptions is that they are subjective—unique to the experiences of the participant and of questionable authority to be generalized to others. This methodological dilemma is compounded when participants experience psychiatric symptoms. The fluctuation of symptom severity could affect participant responses; and at a given time, self-reports may not be representative of the normal level of overall functioning (Newman 1995). To help address the unique experience of psychiatric symptomatology, psychiatric diagnosis was controlled for in the hierarchical regression analyses.

It should be noted that the manner of operationalizing and measuring distal supports and traditional support networks was considerably different. Distal supports were assessed using an adapted version of the Distal Support Measure (Wieland et al. 2007), which asks participants targeted questions about five potential distal support locations; while the social support network variable included information about the number and frequency of various types of proximal supports (e.g., friends and family members). This measurement difference may actually be a strength, as it likely reduced some shared error variance that would have otherwise existed yet been undetectable. However, it also complicates comparing the two variables. Future studies should utilize more similar measures to ease comparison and to assess whether measurement differences contributed to the social support network variable emerging as a stronger predictor of community integration and recovery in our study.

Related to this point, a final limitation is that participants were only asked to report information about five potential distal supports. Future studies should ask participants to first list all of the places they regularly engage with community members; and then ask targeted follow-up questions about each location to determine whether or not it is a distal support. This would allow for more flexibility in identifying diverse locations where individuals engage with community members on a routine basis.

Future Research and Practical Implications

As mentioned briefly above, future research should assess the role of environmental factors on distal supports. For instance, it is likely that urban versus rural residence, availability of public transportation, perceived safety, quality of public spaces, and other environmental variables would impact establishment and utilization of distal supports. Studies should also assess the relationship between distal supports and other outcomes, including educational/vocational outcomes, housing stability, physical health, and civic participation. Such information would further illuminate the importance of distal supports and point to mechanisms to bolster active community participation.

From a mental health services perspective, results suggest the importance of mental health consumers and clinicians working together to identify and utilize distal supports as aids to community integration and recovery. It is typical for more intimate relationships in consumers' support networks to be a focal area of intervention in mental health services; however, findings from the current study suggest that more casual community relationships should also be considered. Case management and support from peers can assist consumers in fostering distal relationships in their neighborhoods and help them identify stores and services where they can access support and achieve a sense of belonging. Encouraging examples of similar interventions are emerging in the literature. For example, Clayon et al. (2013) tested an intervention based on a theoretical framework of citizenship reducing psychiatric symptoms and increasing quality of life for persons with psychiatric disabilities and found that increasing participants' knowledge of community resources/programs encouraged them to engage in more community activities and build an independent life in the community after peer supports were removed.

Distal supports may be a particularly important source of support to cultivate for persons who do not have significant relationships with family, friends, or others. Over time, casual community supports may even evolve into closer, more intimate relationships—filling voids or buffering losses in individuals' primary support networks. Given evidence from this study that men and younger participants reported fewer distal supports, interventions should target members of these groups to determine ways to encourage their engagement with community members. However, it is also important to respect individual choice and preference for social support and community participation.

Our study helps to build upon previous distal support research and suggests the importance of attending to casual relationships existing naturally in the community. Nevertheless, ongoing research in diverse settings is needed to

fully understand the nature, development, and utility of distal supports for individuals with psychiatric disabilities.

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