

The Role of Social Support and Ego Network Characteristics on Quality of Life: Implications for Persons Involved with Mental Health Courts

David C. Kondrat
W. Patrick Sullivan
Kelli E. Canada
Jeremiah W. Jagers

Abstract: *Mental health courts offer alternatives to incarceration for persons with severe mental illness who are involved in the criminal justice system. These courts have the dual function of ensuring treatment for persons involved in the court as well as ensuring the safety of the public. Persons with severe mental illness who are involved in mental health courts rely on others for support, such as family members. Others may buttress the participant from engaging in criminal activities and provide for needs of the participant. The supportiveness as well as the composition of one's network members may play a role in the success of mental health court participants, such as successfully completing the mental health court program and avoiding incarceration. Little research has explored how social support impacts mental health court participants. We explored how the composition and sense of support of network members were associated with mental health court participants' quality of life. We regressed quality of life on social support and network characteristics of 80 participants in two mental health courts. Findings suggest that perceived support is positively associated with quality of life, and the proportion of family in one's network was negatively related to quality of life. Findings suggest that persons involved in mental health courts need supportive others in their social networks in addition to family. More research is needed to explore the reasons having a higher proportion of family members in one's network is associated with lower quality of life. Practitioners need to pay attention to and leverage mental health court participants' social networks to help improve their quality of life.*

Keywords: *Ego network, social support, severe mental illness, mental health courts*

Persons with severe mental illness (SMI) are disproportionality represented among inmates of jails and prisons. Penal institutions have become the largest providers of mental health care in the United States (Baillargeon et al., 2010), though the quality of this care is questionable. The 12-month prevalence rate of persons with severe mental illness in state or federal prison is about 15% (Pinta, 2001). To address the large number of persons with SMI entering the criminal justice system, practitioners and researchers have developed several interventions to decrease the likelihood that a person with SMI will have repeated contact with the criminal justice system (Heilbrun et al., 2012). Mental health courts (MHC), one of these interventions, are increasingly becoming a point of entry into the mental health system of care for persons with SMI (Redlich et al., 2006). MHCs operate under the principle of therapeutic jurisprudence (Petrila, 2003). Once a person with SMI enters a MHC, the court works with the person with SMI and a team of providers to ensure

David C. Kondrat, MSW, PhD., Associate Professor, School of School of Social Work, Indiana University, Indianapolis, IN. W. Patrick Sullivan, Professor, School of School of Social Work, Indiana University, Indianapolis, IN. Kelli E. Canada, Associate Professor, School of Social Work, University of Missouri, Columbia, MO. Jeremiah W. Jagers, Assistant Professor, College of Social Work, University of Utah, Salt Lake City, UT.

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that needed treatment is received by the participant, while ensuring public safety is maintained. The goals of MHCs are therefore both therapeutic and public safety.

Persons with SMI are at risk of experiencing challenges that expand beyond the symptoms associated with their illnesses. For example, people with SMI may experience changes in their network of friends and supports (ego network) at different stages in their illness. The ego networks of persons with SMI often shrink after diagnosis, though the process of losing friends and supports may begin when persons with SMI start to exhibit symptoms of their illness (Perry & Pescosolido, 2012).

The loss of friends in one's ego network is important because persons with SMI may lose the very individuals they count on for help. Ego networks are the people with whom one regularly interacts. The loss of key supports may increase the risks that people with SMI face, such as engaging in illicit behavior with new and risky persons (Denton et al., 2017). Risky persons are those who engage in activities that may increase the likelihood of the ego engaging in illicit activities, such as individuals who use illicit drugs or engage in criminal activities. In addition, persons with SMI may have close family members as the core of their support network (Perry & Pescosolido, 2012). While not explicitly a goal of MHCs, increasing contact with new friends and supports that are positive and committed may be an important secondary outcome of MHC treatment (Canada, 2013).

While much of the research on MHCs focus on recidivism and program completion (Dirks-Linhorst & Linhorst, 2010; Kondrat et al., 2018; Moore & Hiday, 2006; Ray, 2014; Sarteschi et al., 2011), little research has explored the extent to which these programs achieve mental health recovery-based outcomes, such as quality of life (Honegger, 2015). The purpose of the current study was to explore those social support and ego network properties that relate to quality of life among persons participating in MHCs.

Mental Health Courts

MHCs are treatment-oriented, special jurisdiction courts that are "...based on the assumption that treatment and other types of problem-solving responses are more appropriate than punishment for certain types of individuals" (Petrla, 2003, p. 6). Individuals enter mental health courts after they have been arrested for city ordinance violations, misdemeanors, and/or felony charges. MHCs are premised on therapeutic jurisprudence and divert individuals from jail/prison into community-based mental health treatment, where participants receive needed treatment. Participation in MHCs is voluntary (Hasselbrack, 2001). In addition to arranging treatment, the court is also tasked with ensuring public safety (Tyuse & Linhorst, 2005). Successful participation in MHCs may result in having lesser charges or elimination of all charges before the court; and, non-participation may lead to added jail time, the case being sent back to a criminal court, or other sanctions (Redlich et al., 2006). One important assumption underlying MHCs is that participants will receive and continue to receive needed treatment, resolve the mental health issues that lead to the criminal charge, and not engage in future criminal behavior (Petrla, 2003). Social networks are thought to play an important role in bringing about these outcomes (Canada, 2013).

Research tends to support the effectiveness of MHCs from a criminal justice frame of reference (Dirks-Linhorst & Linhorst, 2010; Kondrat et al., 2018; Moore & Hiday, 2006; Ray, 2014; Sarteschi et al., 2011). For example, Sarteschi et al. (2011) conducted a meta-analysis of 19 studies of MHCs. They found that MHCs were effective at reducing recidivism. In a more recent study, Ray (2014) found that re-arrest rates were lower among persons with mental illness who participated in mental health courts as compared to those who did not. Further, he found that time to rearrests was longer among those who participated in MHCs compared to those who did not. However, little research has explored the extent to which MHCs achieve treatment-related outcomes (Honegger, 2015). Honegger (2015) found only one study that explored the extent to which participation in MHCs was associated with quality of life. Honegger found that MHCs improved overall quality of life among participants.

Social Support, Ego Networks, and Mental Illness

Human beings are inherently social; so, reliance on others is a social certainty (Donev, 2005). Social support is a psychosocial construct that refers to social and emotional care provided in the course of primary and secondary socialization (Thoits, 2011). Types of social support include emotional, informational, and instrumental (Thoits, 2011). Social support is often thought of as a mechanism for dealing with life's challenges and stressors (Chronister et al., 2015). Among persons with SMI, positive social support has been associated with reductions in mental health symptoms (Sundermann et al., 2014), increases in mental well-being (Kondrat et al., 2017), and enhanced quality of life (Chronister et al., 2013). Yet, little is known about how social support impacts the quality of life of MHC participants.

The converse of social support is social undermining. Vinokur and van Ryn (1993) write:

...social undermining is theorized to consist of behaviors directed toward the target person that display (a) negative affect (anger or dislike), (b) negative evaluation of the person in terms of his or her attributes, actions, and efforts (criticism), and (c) behaviors that make difficult or hinder the attainment of instrumental goals. (p. 350)

Social undermining has been shown to have a negative impact on mental health (Vinokur & van Ryn, 1993). Joseph et al. (2011) found that the effects of social undermining on depression were moderated by race. The authors found that higher levels of social undermining were associated with symptom reduction among persons who were White; however, social undermining negatively impacted depression among persons who were Black.

Another way to understand the support received from others by persons with SMI is understanding her or his ego network (Perry & Pescosolido, 2012). Ego network research focuses on exploring the connections that a person (ego) has with those around them (alters). Unlike social network research, which explores the relationships of a whole group of individuals with one another, ego network research focuses on the relationship of the ego to her or his alters (Perry et al., 2018). Aspects of ego networks, such as number,

strength of the relationship, type of relationship, and the interconnection of alters, provide meaningful information about a person's network of friends (Donev, 2005).

Ego networks have several properties that can be measured and used to understand the psychosocial world of persons with SMI. One such property is network degree, or the number of alters in an ego network. As noted above, Perry and Pescosolido (2012) found that persons with SMI often have a smaller number of alters than the general population. These authors argue that, over time, less supportive members drop out of the network of persons with SMI. Loneliness, which can result from a loss of connectedness to others, is a pervasive problem among individuals with major mental illnesses. Research suggests that those with mental illness experience loneliness more frequently than the general population, with prevalence rates ranging from one-half to as high as 80% (Koenders et al., 2017; Lim et al., 2018; Prince et al., 2018). Loneliness is associated with a range of negative outcomes including heightened morbidity, mortality and stress, earlier onset of psychosis, and poor recovery outcomes (Koenders et al., 2017), as well as illness and premature death (Prince et al., 2018).

When one has a larger and committed social network, there is a greater likelihood that the necessary and specific help needed will be available. However, a few committed alters may be more important than a large and uncommitted network. Perry and Pescosolido (2012) observed that "the social consequences of people's lives shape the structure, function, content, and membership of personal social networks at any particular point in time" (pp. 135-136). Perhaps more importantly, it is posited that what is required in terms of effective support is impacted by the specific difficulty faced, and even the stage of the problem confronted. As Perry and Pescosolido (2015) argue,

Social networks have the potential to serve as conduits of general emotional support and information. However, according to our findings, it is not these general support processes that drive recovery outcomes. Rather, the key factor appears to be the activation of particular kinds of people for health discussion. This indicates that achieving a state of recovery may be facilitated by cultivating a social safety net that can provide targeted, health-related advice, information, and instrumental aid that buoys the treatment process and permits gains in self-sufficiency and productivity. (p. 126)

Knowing the types of alters an ego has in her or his network may provide useful information that can be used to predict outcomes. The characteristics of alters can impact the behaviors and choices made by persons with mental illness (Perry & Pescosolido, 2010). For example, Perry and Pescosolido (2015) found that partners, mothers, siblings, and children were more likely to comprise those networks of persons who one talked to about important health matters. Relevant to the current study, networks with alters who have been arrested or display deviant behavior predict criminal engagement. Thus, networks with concentrations of alters who have been arrested may affect a person's contact with the criminal justice system and, subsequently, the person's quality of life.

Family and Ego Networks

There was a time when theories on the origin of serious mental illness emphasized the deleterious impact of families on the well-being of individuals. Decades of advocacy and research have largely discredited such theories (e.g., Butzlaff & Hooley, 1998). However, some families are not supportive, while others need basic information and tools to be helpful to their loved ones. A fundamental question is to what degree are families important to the well-being of persons involved in the criminal justice system.

Criminal Justice, Social Support, and Ego Networks

Cullen (1994) suggested that social support and social networks play a large role in criminal behavior. In fact, he argues that one's friends and the support that those friends provide are strongly associated with arrests. Specifically, high levels of constant social support, as opposed to erratic social support or coercion, are associated with low levels of criminal activity (Colvin et al., 2002). Further, Colvin et al. (2002) posit that coercion can push one to commit a crime. Social support can buffer a person from committing a crime and coercion can create the context for criminal behavior.

Social support and coercion are the result of those with whom one interacts. Marsden and Friedkin (1993) argue that individuals with whom one interacts influences one's behavior. Persons use others for social comparison. Individuals engage in what Cooley (1902; 1967 as cited by Kondrat & Teater, 2012) termed the looking-glass self; that is, persons look to others to understand themselves. This influence of others can be traced back to the groups with whom one interacts (i.e., one's reference groups; Shibutani, 1955). Therefore, social support may not be the only mechanism through which others influence behavior. Merely having risky others in one's ego network may influence criminal behavior by providing a basis for viewing oneself.

Research on ego networks demonstrates how the presence of risky others may influence one to engage in deviant and criminal acts. Papachristos et al. (2012) explored the role of having persons in one's network who were risky on views of the legitimacy of the legal system and violent behavior. The authors found that having a high density of risky persons who have been arrested as members in one's network was associated with a decreased belief in the legitimacy of the legal system. Further Papachristos et al. (2012) found that having fewer than 50% of one's network who have been arrested was associated with a decreased risk of engaging in violent behavior, and having at least one gang member in one's network was associated with an increased risk of engaging in violent behavior. Haynie et al. (2014) found a link between an alter's criminal behavior and the criminal behavior of the ego, such that committing the same crime in a previous criminal act predicts future criminal behavior. Haynie (2001) found that the size and composition of one's network was associated with more behavior that is delinquent. Having multiple others who commit crimes in one's network may lead one to view themselves as a "criminal" and was associated with greater likelihood of engaging in criminal behavior.

Social Support, Ego Networks and Justice Involved Persons With SMI

Although the type and severity of SMI is commonly recorded in arrests and recidivism studies, it is not the most significant factor when determining risk for recidivism in this population (Skeem et al., 2014). Instead, risky personality, cognition, and risky peers explain the risk of recidivism in this group (Andrews et al., 2006). Davis and Brekke (2013) found that persons with SMI who have frequent contact with their ego network increased the likelihood of their arrests by nearly five times. Conversely, having a large social network decreases the odds of arrest. While too much contact with friends may increase the risk of recidivism, having a large network serves as a protective factor. In a sample of MHC participants, Canada (2013) found that the density of one's ego network was positively related to treatment adherence, suggesting, as Coleman (1988) posited, that interconnected networks serve to keep the social order. The key may be to have a socially dense network that is free of risky others.

Quality of Life, Social Support, and Mental Illness

The connection between social support and quality of life is well-documented (Hansson & Bjorkman, 2006; Lam & Rosenheck, 2000; Munikanan et al., 2017). Lam and Rosenheck (2000) discovered that quality of life was associated with social support among a sample of homeless persons with SMI. Munikanan et al. (2017) showed that support from family, friends, and significant others were all positively associated with quality of life. Ruesch and colleagues (2004) reported a positive link between social support and quality of life that was irrespective of one's employment status.

The impact of social support on quality of life among persons with mental illness changes over time. Hansson and Bjorkman (2006) demonstrated that social support remained a significant predictor of quality of life at baseline, 18 months, and at 6 years for persons with SMI. The impact of social support increased over time. At baseline, social support accounted for 16% of the variance in quality of life. By 6 years, social support accounted for 51%. Clearly, social support is an important indicator of quality of life.

Less studied is how ego network characteristics relate to quality of life. The studies that have explored network characteristics on quality of life have consistently found that network properties are positively related to quality of life. Perry and Pescosolido (2015) showed that network size positively correlated with quality of life. Sibitz et al. (2011) reported that the number of connections was indirectly related to quality of life through stigma and empowerment. More research is needed to explore the impact of social network variables on quality of life.

The aim of this study was to fill this gap in the literature. Our research question was: To what extent do social support and network characteristics relate to quality of life among persons involved in MHCs? Specifically, we investigated how network size and density, and proportion of family and risky persons in MHC participants' networks relate to quality of life.

Method

This study used secondary, de-identified data to answer the research questions. Data were originally collected for a mixed-methods project on two Midwestern MHCs with the aim to explore the mechanisms that promote positive outcomes for MHC participants and the impact MHCs have on participant experiences. Data collected from the primary dataset, the data used in the secondary analysis, were derived from in-depth structured interviews with 80 participants from two MHCs in the Midwestern region of the United States. The two MHCs included the 10 essential elements outlined by Thompson and colleagues (2008). Data were collected between September 2010 and October 2011. Recruitment for the original study is outlined below in order to describe the data source.

Recruitment

All eligible participants in the two MHCs were invited to take part in this study. Eligible participants were in their second to 18th month in the MHC, 18 years or older, and able to understand English. The window of two to 18 months was selected due to the aims of the original study. Information about the study was distributed through the MHC staff. If participants were interested, the staff would assist the individual in calling the researcher, or the staff would provide the researcher with participants' contact information for follow-up. If the participant met the eligibility criteria, the researcher met individually with participants in a convenient location and conducted a 60-minute, in-depth, structured interview. Participants were compensated \$20 in cash or gift certificates. Ninety-three participants between the two courts were eligible for study participation. The 13 eligible participants who did not participate did not return follow-up phone calls, did not provide a working phone number, were in custody throughout the entire recruitment period, or had severe paranoid delusions that interfered with the consent process. The final response rate was 86%.

Measures

Outcome variable. Quality of life was measured using 11 items from the subjective portion of Lehman's (1988) Quality of Life Interview (LQOLI). Specifically, we measured QOL using five life domains from the LQOLI, including general life satisfaction (1 item), living arrangements (3 items), daily activity (4 items), family (2 items), and social relationships (3 items). Responses for each item used the seven-point terrible/delighted scale. Internal consistency reliability was .68.

Independent variables. Data for our primary independent variables were derived from information about up to five persons (alters) that participants identified as people with whom they spend time. *Degree*, or network size, was the number of individuals (alters) that the individual nominated as being part of their ego network. Network *density* is a measure of interaction between alters and the extent to which alters were connected to one another. We also calculated the *proportion of alters who were family* (parents, children, siblings, and partners) and the *proportion who were risky* (uses alcohol, drugs and or has been arrested). To calculate proportion of family, we divided the number of family by the

total number of alters. To calculate the proportion who were risky, we divided the number of risky network members by the number of alters.

Two other independent variables were social support and undermining. Data on social support were collected about each alter, using 8 items from Vinokur and van Ryn's (1993) social support scale. According to the authors, the scale has shown evidence of construct validity. Social support is the positive aspect of interpersonal relationships. Responses ranged from 1 (*not at all*) to 5 (*a great deal*). We used the average score across alters. Internal consistency for this scale was .92. All items that related to social support were used.

We used five additional items from Vinokur and van Ryn (1993) to measure perceived undermining, which is the negative aspect of interpersonal interactions. The authors found preliminary evidence of construct validity. Responses ranged from 1 (*not at all*) to 5 (*a great deal*). We used the average score across alters. Internal consistency for this scale was .89. All items that related to social undermining were used.

Control Variables. In addition to the network variables, we controlled for a number of variables. We included psychiatric diagnosis as a series of variables. Participants were able to endorse multiple diagnoses, including schizophrenia, bipolar disorder, and substance abuse disorders. The absence of each diagnosis served as the reference category for these variables. Further, we included gender, with male being the reference category, and age. Finally, we included race, with White being the reference category.

Analysis

We used both bivariate and multivariate statistics to explore the relationship between network variables and quality of life. Specifically, we explored if and how network size and density and proportion of family and risky persons in consumers' network correlated with quality of life. We used Pearson product moment correlations to explore the relationship between the network variables and quality of life. We then ran two regression equations. The first equation included demographic information; in the second equation, we entered the network variables. We ran the two regression equations so that we could determine the amount of variance in quality of life incremented by the network variables. Stata 15 (StataCorp, 2017) was used to analyze the data.

Results

Descriptive Statistics

Eighty persons participated in this study. Just over half were male (55%). The average age of participants was about 40 ($SD = 1.35$). Most participants endorsed having bipolar disorder (71%). About 41% identified being diagnosed with Schizophrenia. The majority (84%) had a substance abuse diagnosis. The average perceived social support score was 32.84 ($SD = 6.44$), which was above the median score of 20. On average, participants rated their alters as supportive. The average perceived undermining score was 7.06 ($SD=2.86$), which is below the median undermining score of 12.5. On average, persons did not rate alters as high in undermining. The average density of ego networks was 3.05 ($SD = .12$).

The average proportion of family was .70 ($SD = .04$), and the average proportion of risky alters was .35 ($.05$). The average total quality of life score was 52.46 ($SD = 11.28$). See Table 1 for demographic and network information from the sample.

Table 1. *Sample Characteristics*

	n (%)
Race – minority	53 (66.3%)
Gender – female	36 (45.0%)
Diagnosis	
Schizophrenia	32 (40.5%)
Bipolar	56 (70.9%)
Substance abuse	67 (83.8%)
Degree* [avg. 2.7, SD (1.25)]	
Zero	1 (1.3%)
One	13 (16.3%)
Two	22 (27.5%)
Three	23 (28.8%)
Four	14 (17.5%)
Five	7 (8.8%)
	Mean (SD)
Age (years)	39.6 (1.35)
Alter's characteristics	
Proportion who were family	0.70 (0.04)
Proportion who were risky	0.35 (0.05)
Perceived social support	32.8 (6.44)
Perceived undermining	7.1 (2.86)
Network density**	0.41 (0.19)
Total Quality of Life	52.5 (11.28)

*Degree or network size = Number of alters
 **Network density = measure of interaction between alters and extent to which alters were interconnected.

Bivariate Analysis

We first ran Pearson product moment correlations on the network variables and QOL. Three variables were significantly related to QOL. Proportion of family was negatively related to QOL, $r = -.23$, $p < .05$. Higher proportions of family were associated with perceptions of more negative QOL. The degree, or number of alters, was also negatively related to QOL, $r = -.21$, $p < .05$. Social support was positively related to QOL, $r = .34$, $p < .01$. Perceiving greater amounts of social support was associated with perceptions of better QOL. In addition, the proportion of family was inversely related to the proportion of risky alters, $r = -.23$, $p < .05$. Having more family members in one's network was associated with fewer risky alters. Finally, social support was inversely related to undermining, $r = -.48$, $p < .01$. Perceiving greater amounts of support was associated with perceptions of less undermining. See Table 2 for a correlation matrix of these findings.

Table 2. *Correlation Coefficients Between Network Variables and Quality of Life*

Variables	1	2	3	4	5	6	7
1. Quality of life	1						
2. Proportion risky	-.07	1					
3. Proportion family	-.23*	-.44*	1				
4. Degree	-.21*	.19	-.11	1			
5. Density	-.08	.07	.03	.20	1		
6. Social support	.34*	-.01	-.05	-.01	.20	1	
7. Undermining	-.14	-.02	.15	-.11	-.10	-.48*	1

* $p < .05$

Multivariate Analysis

We ran two regression equations to determine the impact of network variables on QOL. The first equation containing only demographic variables was not significant, $F_{(6,72)} = 1.77$, $p = .11$, accounting for about 13% of the variance in quality of life. Inspection of the regression coefficients for this first equation yielded one significant finding: females reported perceptions of lower quality of life than males, $b = -5.42$. $t(1) = -2.1$, $p < .05$. Females in MHCs report having lower quality of life compared to males. Specifically, females had quality of life scores 5.42 points lower on average than males. See Table 3 for the results of all regression analyses.

Table 3. *Hierarchical Regression Predicting Perceived Quality of Life by Network Characteristics*

Variable	Model 1		Model 2	
	B (SE)	β	B (SE)	β
Race – minority	-1.40 (2.85)	-.06	-2.53 (3.16)	-.10
Gender – female	-5.42 (2.54)*	-.24	-1.51 (3.10)	-.11
Age	-0.03 (.11)	-.03	-0.09 (.12)	-.10
Diagnosis				
Schizophrenia	1.06 (2.90)	.07	0.16 (3.57)	-.05
Bipolar	-3.54 (3.06)	-.14	-4.32 (3.34)	-.18
Substance Abuse	-4.52 (3.47)	-.15	-1.62 (4.33)	-.10
Perceived social support			0.69 (0.33)*	.32
Perceived undermining			0.02 (0.56)	.01
Density			0.40 (0.46)	-.11
Degree			-2.27 (1.50)	-.16
Proportion family			-9.02 (4.38)*	-.27
Proportion risky			-4.17 (3.71)	-.15
Constant	62.51 (5.99)		51.82 (6.27)	
<i>F</i>	1.77		2.38*	
<i>R</i> ²	.13		.32	

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

For the second equation with the network variables, the model was significant, $F_{(10,50)} = 2.38$, $p < .05$. The amount of variance accounted for by this model was 32%; thus, the model with the network variables explained an additional 19% of variance in quality of life above the model with only the demographic information. Two ego network variables were

significantly associated with quality of life. Social support was positively associated with quality of life, $b = .69$, $t(1) = 2.04$, $p < .05$. Perceptions of stronger social support were associated with perceptions of greater quality of life. For every one-unit change in social support, perceptions of quality of life increased by .69 points. Finally, proportion of family in the network was negatively associated with quality of life, $b = -9.03$, $t(1) = -2.06$, $p < .05$. Participants with networks that had a higher proportion of family reported lower quality of life. Specifically, for every one unit increase in the proportion of family in one's network, the ego's perception of quality of life was reduced by 9.03 points. When comparing the two network variables, social support had the greatest association to quality of life as evidenced by the standardized regression coefficient.

Discussion

Social support and proportion of family play important, though different, roles in perceptions of QOL of participants of MHCs. A curious finding in this study indicates that a higher proportion of family in one's social support network was associated with a perceived lower quality of life. No firm statements about this association are offered, due to the limitations of the available data. Nonetheless, some observations are in order. First, while much of the research on social support networks focuses on the positive nature of such support on emotional and physical well-being, some network members may be nettlesome, quarrelsome, and intrusive. Offers of emotional and tangible support may be accompanied by requests for reciprocity that cannot be fulfilled. As Rook (1984) elucidates, while there is much interest in the role of support networks as a buffer for stressful life events, non-supportive relationships may exacerbate stress, even in the presence of positive social relationships. In essence, social networks can be a source of strain as well as support (Walen & Lachman, 2000).

Further, research suggests that social support is about meaning-making, especially as meaning-making relates to experienced traumatic events (Brinn & Auerbach, 2015). Past research suggests that experiencing stigma diminishes one's perception of social support (Kondrat et al., 2017). Basically, meaning-making is not simply only an intrapersonal process but one that extends well into the social environment. Thus factors such as stigma, acceptance or non-acceptance, affirmation or the lack of affirmation impacts meaning-making (Brinn & Auerbach, 2015). Either a traumatic event is assimilated in a person's assumptive world, new meanings are made, or there is increased distress because one cannot assimilate it and new meaning systems are not forthcoming or are replaced with perspectives of the world as a dangerous or scary place. Future research needs to account for the presence of traumatic events on the role of social support and other network measures on quality of life.

Families

An important finding in this study is that having a high number of family in one's network leads to poorer views of one's quality of life. The onset of an illness often leads to significant disruptions in the lives of persons with mental illness, including for those in the person's ego network (Perry & Pescosolido, 2012). It would be easy to assume that the results indicate that family members are unsupportive, and having a higher proportion of

family members means having more unsupportive alters in one's network. However, results from the bivariate analysis indicate that there is no correlation between proportion of family members and social undermining. What the findings are likely indicative of is the loss of friend. Replacing friends is a higher proportion of family who take up the mantle of helping MHC participants. Had we explored the proportion of friends in the network, instead of family, we may have found that the number of friends is positively correlated with QOL. So, it is likely not the high proportion of family that is problematic, but the low proportion of friends. However, it may be that families surround persons with SMI whom are the most sick and, thus, need the most support.

Risky Alters

An interesting finding is that the mere presence of persons in one's network who engaged in risky behavior did not relate to perceptions of quality of life. There is scant research on the role of risky others on persons' quality of life. This does not mean that risky individuals affect persons in MHC not captured by this research. Carrington (2011) describes differential association theory, which has also been called social learning theory of deviance and peer influence. Consonant with the above-mentioned theory, Pratt and colleagues (2010) describe that we learn information about our social world from those around us. Being embedded in a network with risky individuals may result in the individual engaging in risky behaviors. Rather than having a direct impact on a person's current quality of life, engaging with high risk individuals may result in future arrests.

Social Support

Our findings regarding social support are consistent with the literature on social support and SMI (Kondrat et al., 2017; Sunderman et al., 2014). As with previous research, greater amounts of social support lead to perceptions of a better quality of life (Chronister et al., 2013). While social support was related to QOL, undermining by alters was not. More research is needed to understand the mechanisms through which social support operates to create appraisals of a greater quality of life.

Limitations

This study has a number of limitations. First, we collected data on only up to five alters. This limits the number of potential alters participants could identify, which can lead to an inaccurate count of the size of the networks. While the average number of alters participants identified was small, over 9% identified five network members. Any or none of these nine percent could have identified more than five persons. Further, limiting the number of alters can lead to inaccurate calculations of the density scores (Perry et. al., 2018). In addition, we used a nonrandom sampling procedure, which means that the results are not generalizable beyond this study. Finally, we did not account for the severity of mental illness so that we have no way of knowing how negatively impacted participants were by their illness.

Despite these limitations, this study provides some valuable insight into network properties that are associated with quality of life. The findings contribute to the nascent

body of knowledge about ego networks and persons involved in MHCs (Canada, 2013). Further, these findings add to the body of literature on ego networks with persons with SMI (Perry & Pescosolido, 2010; Perry et al., 2016) and persons who are involved in the criminal justice system (Andrews & Bonta, 2015; Davis & Brekke, 2014). Finally, these findings have practical import for improving the quality of life of persons involved in MHCs.

Implications for Social Work Practice

This study has implications for practice with persons with SMI. The findings suggest that having a high proportion of family in one's core network could be detrimental to one's quality of life. The findings suggest that having family as one's primary source of support was associated with lower quality of life. This may be because families contribute to the problems of persons with SMI or because families rally around their relatives with severe mental illness. Social Workers are encouraged to help participants develop social supports outside of their families, such as friends or peers who have experienced success with an MHC. Further, social workers are encouraged to continue working with families and persons with SMI involved in MHCSs to develop appropriate coping strategies. For example, the National Alliance on Mental Illness offers a 12-week psychoeducation course, Family-to-Family, to help families learn strategies for helping their loved one with mental illness (Dixon et al., 2001). Past research suggested that family members who participated were less worried or displeased and may interact differently with their loved one in such a way as to increase the loved one's quality of life. MHCs and social workers who work in MHCs are encouraged to help link families of participants to programs like Family-to-Family.

These findings have import for social work education. Educators need to continue teaching students about the importance of clients developing strong and supportive social networks. As is evidenced from the findings of this study, the number of supports (degree) was not significant. This suggests that clients need to have at least one strong and supportive relationship. Rather than teaching students to have clients develop large networks of friends, social work students should work with clients on finding at least one person he or she can rely on for support, a person that may already be in their social network.

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Author note: Address correspondence to David C. Kondrat, School of Social Work, Indiana University, School of Social Work, 902 W. New York Street, ES 4118, Indianapolis, IN, 46202. Email: dckondra@iupui.edu