

ARTICLE

HOW SETTINGS CHANGE PEOPLE: APPLYING BEHAVIOR SETTING THEORY TO CONSUMER-RUN ORGANIZATIONS

Louis D. Brown, Matthew D. Shepherd, Scott A. Wituk, and Greg Meissen
Self-Help Network: Center for Community Support and Research, Wichita State University

Self-help initiatives stand as a classic context for organizational studies in community psychology. Behavior setting theory stands as a classic conception of organizations and the environment. This study explores both, applying behavior setting theory to consumer-run organizations (CROs). Analysis of multiple data sets from all CROs in Kansas provide insight into how organizational size influences member participation, how members benefit from participation, and how behavior setting theory may need to be revised. Results suggest that members do benefit from participation. However, individual involvement in organizational planning and decision making does not appear to be the primary factor leading to member benefit. The predictions of behavior setting theory are found to be true, but results suggest that these predictions provide an incomplete picture of CROs. The incorporation of roles as a unit of analysis within behavior settings is suggested to improve the explanatory power of this theory. © 2007 Wiley Periodicals, Inc.

Community psychologists have long been interested in understanding self-help initiatives such as consumer-run organizations (CROs). As cost-effective resources that are currently expanding their influence in the community, CROs stand to have a major impact on the treatment of mental illness. These organizations embody much of what community

This research would not have been possible without the financial support of the Kansas Social and Rehabilitation Services, Division of Health Care Policy, Mental Health. The authors would also like to thank Dana Soetaert for her feedback on earlier drafts of this work.

Correspondence to: Louis D. Brown, Self-Help Network, Center for Community Support and Research, Wichita State University, 1845 Fairmount Box 34, Wichita, KS 67260-0034. E-mail: ldbrown@wichita.edu

JOURNAL OF COMMUNITY PSYCHOLOGY, Vol. 35, No. 3, 399–416 (2007)

Published online in Wiley InterScience (www.interscience.wiley.com).

© 2007 Wiley Periodicals, Inc. DOI: 10.1002/jcop.20155

 **WILEY**
InterScience®
DISCOVER SOMETHING GREAT

psychologists promote, including the self-directed organization of people to facilitate personal transformation and create social change (Rudkin, 2003). They provide people with mental illness opportunities to contribute to organizational operations and develop mutually supportive relationships in an accepting environment (Salem, Seidman, & Rappaport, 1988).

Behavior setting theory and the under-/overpopulated hypotheses provide conceptual mechanisms for describing how environmental characteristics can influence behavior and psychological well-being. Originally developed by Roger Barker and his associates (e.g., Barker, 1968; Barker & Schoggen, 1973), behavior setting theory has been widely cited for its potential applications to community psychology (Perkins, Burns, Perry, & Nielsen, 1988). Although the theory has broad applicability and a strong empirical base, it has not attracted many researchers in recent years (Wicker, 2002).

Applied to CROs, the theory provides insight into both how organizational size impacts member participation and how CRO participation leads to member benefit. As such, the first goal of this study is to further understanding of how organizational size influences member participation in CROs. The second goal of this study is to improve understanding of how CRO participation leads to member benefit. Findings also provide insight into what behavior setting theory can and cannot currently account for. The third goal of this study is to explore the limitations and criticisms of behavior setting theory and then expand upon the theory to address these limitations.

ORGANIZATIONAL CHARACTERISTICS OF CROS

Consumer/survivor initiatives have taken many different forms including businesses, case management programs, drop-in centers, and advocacy organizations (McLean, 2000; Mowbray, Chamberlin, Jennings, & Reed, 1988). Consumer-run organizations are a specific kind of consumer/survivor initiative that provides warm, encouraging, and accepting environments where members can socialize and develop supportive relationships. Common organizational activities include operating a drop-in center, hosting support groups, organizing recreational activities, advocating for people with mental illness, providing skills training for members, increasing public awareness, educating mental health providers, and fundraising (Brown, 2004; Trainor, Shepherd, Boydell, Leff, & Crawford, 1997). In the process of providing opportunities for mutual support, CROs promote the empowerment of people with mental illness through member control of the activities that are pursued, shared governance, and an informal, nonhierarchical administration.

The roots of CROs lie in the "ex-patients' movement," where there is a fierce rejection of the mental health system by "ex-inmates" who experienced psychiatric treatment and hospitalization. Some of the guiding principles of the movement include voluntary participation and the exclusion of "nonpatients" in organizational decision making (Chamberlin, 1990; Holter, Mowbray, Bellamy, MacFarlane, & Dukarski, 2004). CROs are additionally based in a self-help/mutual-aid philosophy, which values: (a) the promotion of inner strengths, (b) a reliance on helping each other, (c) a rejection of hierarchy, (d) sense of community, (e) empowerment and participation, and (f) self-acceptance and openness (Riessman & Carroll, 1995).

Yet, consumer-run organizations differ from local self-help groups in that they are typically incorporated nonprofits that can receive grants and often have paid staff governed by a board of directors, all of whom have a mental illness. The term *consumer-run organization* or *CRO* will be used throughout this article to refer specifically to nonprofit,

self-help-oriented organizations that are controlled by people with mental illness. Consumer-run organizations have also been referred to as self-help agencies (Segal & Silverman, 2002), consumer-run drop-in centers (Mowbray, Robinson, & Holter, 2002), and consumer/survivor initiatives (Nelson, Lord, & Ochocka, 2001).

Although little has been done to evaluate the effectiveness of CROs, preliminary findings using cross-sectional surveys and member self-perceptions are promising. Trainor et al. (1997) documented a 91% decline in the use of inpatient services after participation in a CRO began. In addition, the Trainor study found that, on average, people with psychiatric disabilities considered their CRO the single most helpful component of the mental health system. Yanos, Primavera, and Knight (2001) found that participants involved in CROs had better social functioning and used more coping strategies than those involved only in traditional mental health services. CRO participants have also reported generally high satisfaction with their CROs and perceived that participation improves quality of life (Chamberlin, Rogers, & Ellison, 1996; Mowbray & Tan, 1993).

How CRO Participation Leads to Positive Individual Outcomes

CROs currently operate as alternative institutions to the traditional mental health system because they offer a different kind of service with a different kind of organizational structure. In fact, the services CROs provide are alternative in that they are not services, but collaborative efforts among people with mental illness. CROs reject the mental health service paradigm assumption that the only way to help people is to make them clients and provide services (Trainor et al., 1997). Instead of the typical service provider/service recipient roles assigned in the traditional mental health system, members of CROs all work as peers who provide mutual support to one another. By playing the role of helper and leader in a CRO rather than the role of dependent client, CROs are thought to improve self-confidence and facilitate personal empowerment (Trainor et al., 1997).

Serving as a foundation for this organizational model is the helper-therapy principle, which states that the act of providing help is frequently more therapeutic than the act of receiving help (Riessman, 1965). Skovholt (1974) theorized that the power of this principle is derived from four benefits to the helper: (a) an increased sense of interpersonal competence; (b) the development of a sense of equality in giving and taking with others; (c) the helper gains new personally relevant knowledge while helping; and (d) the helper receives social approval from the person he or she helps and others.

There are two primary routes to playing the role of help provider within a CRO. One route is to get involved in organizational operations and decision making. A second route is to form friendships with members through participation in social activities. People can get involved in CROs through either or both of these routes. How these differing forms of organizational participation are related to positive individual outcomes is not well understood, hence it is a goal of this study.

If CROs are to promote organizational involvement via the first route, they must emphasize a participatory process where everyone is involved in organizational operations and decision making. This participatory process is at the heart of the empowerment construct (Peterson & Zimmerman, 2004). By wielding some influence over the functioning of an organization, members can gain a sense of control and ownership with the organization. This organizationally mediated empowerment can transfer into a sense of personal empowerment (Schulz, Israel, Zimmerman, & Checkoway, 1995; Zimmerman & Rappaport, 1988). The importance of getting involved in organizational planning and

decision making at CROs is further supported by Segal and Silverman (2002), who found that it was the best predictor of personal empowerment and social functioning.

Although several members do get involved in organizational planning and decision making, several more do not. Many members simply participate in activities hosted by the CRO and socialize with other members. By making friends at the CRO, members improve their social support networks and social skills. They are able to play the role of help provider in these mutually supportive relationships. If CROs are to promote positive outcomes via this second route, then they will want to provide an accepting and supportive environment with a diversity of interesting and engaging organizational activities.

Behavior Setting Theory and CROs

Originally developed by Roger Barker and his associates (e.g., Barker, 1968; Barker & Schoggen, 1973), behavior setting theory has been applied to problems of community psychology (e.g., Zimmerman et al., 1991), critiqued by community psychologists (e.g., Perkins et al., 1988), expanded upon by community psychologists (e.g., Luke, Rappaport, & Seidman, 1991), and covered in introductory community psychology textbooks (e.g., Dalton, Elias, & Wandersman, 2001).

Introduction to the concept. Behavioral settings are small-scale social systems with standing patterns of behavior restricted by temporal and spatial boundaries. The orderly and established standing patterns of behavior guide the interactions among the setting's various components. For example, a grocery store has a standing pattern of behavior where the behavior setting components of employees, customers, and goods for sale interact in an established and orderly fashion to exchange food for money. Both grocery stores and CROs are bound temporally by their hours of operation and spatially by their location.

Each behavior setting has several roles that need to be filled for the setting to operate properly. A CRO needs several members to fill organizational roles, such as grant writer, budget manager, activity organizer, activity participant, and board member. Two strategies are commonly used to optimize behavior setting performance. "Vetoing circuits" serve to exclude less adequate people from certain roles within the behavior setting. "Deviation-countering circuits" serve to correct behavior and train inhabitants to perform roles as desired. Businesses and CROs try to hire the most competent staff (vetoing circuit) and train them (deviation-countering circuit) to perform their roles well.

Although the human actors in behavior settings are considered critical, they are frequently interchangeable because similar interactions occur regardless of who occupies each role in a setting. Assuming an understanding of how to perform behavior setting roles, a grocery store will operate in a similar manner regardless of who plays the role of customer or cashier. Likewise, CROs generate an unstructured buzz of social activity regardless of who shows up as long as mutually supportive relationships have developed.

Although behavior setting theory remains a classic in the field of community psychology, several criticisms and limitations have been raised. For one, the process of cataloging all of the different behavior settings in a community is an onerous task (Perkins et al., 1988; Sommer & Wicker, 1991). Because of this limitation, many behavioral setting researchers have begun to focus on functionally similar settings, such as gas stations or CROs (Sommer & Wicker, 1991). A second strategy is to use a person-centered approach, where the different behavior settings individuals participate in are catalogued (e.g., Barker & Wright, 1951). Many other criticisms have been raised (see Perkins et al., 1988), and several of these criticisms are explored in the discussion, in conjunction with an

examination of how the incorporation of roles as a unit of analysis can help resolve these criticisms.

Applications of behavior setting theory. Although behavior setting theory has not attracted the attention of many researchers over the past decade, its strong empirical base and potential for broad application remain (Wicker, 2002). Some of the more recent applications include a study by Norris-Baker (1999), which used a behavior setting approach to understanding the decline of small towns and their behavior settings in the Midwest. Blanchard (2004) examined virtual communities and computer-mediated communication using behavior setting concepts, which provided insight into how virtual communities function and interact with individual members of these communities. Wicker and August (1995) applied the under- and overpopulated hypothesis to better understand how workload impacted attachment to the workplace, job satisfaction, work self-esteem, and stress symptoms. Latkin et al. (1994) applied behavior setting theory to the study of injection drug use and the spread of HIV.

Under- and overpopulation. One critical factor in differentiating how individuals experience behavior settings is whether the behavior setting is under- or overpopulated. The under- and overpopulated hypotheses are a fundamental component of behavior setting theory. The underpopulated hypothesis states that when an underpopulated behavioral setting has more roles than members, every member is essential (Barker, 1968; Schoggen, 1989). In this environment, opportunities to develop new skills are plentiful, and unused resources are tapped. Rather than exclude people through “vetoing circuits,” underpopulated settings use “deviation-countering circuits” to help people learn the correct behavior. If the setting is too underpopulated, however, members will become overextended and burn out.

The overpopulated hypothesis states that in an optimally or overpopulated setting, there are more members available than there are roles to fill. Because there are plenty of members, settings select only the most capable to fill organizational roles, excluding other less capable members. When behavior settings become too overpopulated, “vetoing circuits” are frequently used to exclude people from the behavior setting.

One major criticism of the underpopulated hypothesis is the lack of clarity as to whether participants are being pulled into underpopulated settings because the settings need them or whether participants are pushed into underpopulated settings because there are a lack of satisfactory behavioral opportunities elsewhere (Perkins et al., 1988). Both factors are likely to be operating, and behavior setting theory currently has no way of accounting for the strength of either.

Behavior setting theory applied to CROs. The under- and overpopulated hypotheses provide insight into how an increase in the number of organizational members changes a CRO. The application of these hypotheses to CROs presents a quandary in understanding what the optimal size of organizations should be. Both the advantages gained from being large and those gained from being small appear critical to organizational success.

Previous research has indicated that having a strong leadership base is critical to operating effective CROs (Kaufmann, Ward-Colasante, & Farmer, 1993). In developing a large and strong leadership base, an overpopulated behavior setting is advantageous because it allows vetoing circuits to operate, excluding the weaker candidates from leadership positions. As a result, overpopulated CROs will have a surplus of capable leaders operating a productive organization.

This appears to be the ideal scenario until one considers those members who are being excluded from leadership roles. Although involving everyone in organizational planning and decision making is held as an ideal, having everyone involved in all organizational

decisions becomes cumbersome quickly. As a result, there are a limited number of leadership roles where people are significantly contributing to organizational planning and decision making. If there are a limited number of leadership roles but it is these leadership roles that lead to positive individual outcomes, as suggested by Segal and Silverman (2002), then underpopulated settings would appear to be ideal for facilitating positive outcomes from participation. In an underpopulated setting, all members are encouraged to take on leadership roles, and taking on these leadership roles helps members reach more positive outcomes from their participation experience.

Competing and complementary theories. Although behavior setting theory does appear to explain how size interacts with organizational functioning, several organizational theorists have also explored these relationships. Theorists and researchers in the business organization literature have discussed the relationship between size and several facets of organizational functioning, including Dewar and Hage (1978) and Blau (1970). Although this research base has merit, it has limited applicability to CROs and other small nonprofits because what is defined as a small, for-profit company equates with a large organization in the voluntary nonprofit sector.

Similar work has been done in the voluntary nonprofit sector that is relevant to CROs. Smith (2000) theorizes that as organizational size increases, centralization of decision making will also increase. This is a straightforward and accurate description of the same process behavior setting theory predicts. However, behavior setting theory explains why this relationship between organizational size and power centralization exists. The limited number of organizational roles is the mechanism by which organizational size leads to power centralization. There is a limited amount of work to be done, and a limited number of people can be directly involved in making organizational decisions if the organization is to remain agile. The more decision makers you have, the harder it is to reach consensus.

Empowerment theory also complements behavior setting theory in this context. Although empowerment theory may do a better job of explaining how organizational participation leads to individual benefit, it has nothing to say about how organizational size may influence organizational participation. This is the critical advantage of behavior setting theory over empowerment theory for the purposes of this study.

Hypotheses

This study explores the applicability of behavior setting theory to CROs, specifically testing two hypotheses related to the theory. The first hypothesis states that as the membership size of a CRO increases, the proportion of members involved in organizational planning and decision making within the organization decreases. This is thought to be true because of the limited number of leadership roles within CROs. Although increasing membership size is hypothesized to provide diminishing returns, behavior setting theory still acknowledges that the number of roles available does increase as the size of the behavior setting increases. This leads to our second hypothesis that membership size will have a positive relationship with the number of members contributing to organizational planning and management.

In addition to behavior setting theory, the theoretical issue of how organizational involvement influences individual participation benefits is explored. Our third hypothesis states that as the proportion of members involved in leadership roles increases, the average level of member benefit within a CRO will increase. This hypothesis is based on

the work of Segal and Silverman (2002), who found that getting involved in the organizational operations and decision making was the strongest predictor of member benefit within CROs.

METHOD

To test the above hypotheses, this study analyzes the organizational characteristics of 20 consumer-run organizations. Organizational data were collected from three sources: quarterly reports, an organizational characteristics survey, and a questionnaire about individual outcomes derived from participation. Following is a description of the CROs in Kansas and further information on each of the three data sets.

Study Population and Settings

Consumer-run organizations operated by people with mental illness in Kansas are diverse in terms of community size, operating budget, length of existence, and membership size. There are 20 such organizations spread throughout Kansas, and this study analyzes all of them. Some organizations exist in communities of less than 4,000 while others are in metropolitan areas greater than 1 million. The diversity in number of members is just as broad, ranging from 9 to 171, with an average of 56 members. The average age of the organizations is 7 years, with one in operation for 26 years and two with 1 year of operation.

Operating budgets range from \$5,600 to \$132,000, with an average of \$31,000. Although CROs frequently have multiple funding partners, including the local mental health center, businesses, and foundations, the primary funding agency for the 20 CROs in this study is the Kansas Social and Rehabilitation Services, Division of Health Care Policy, Mental Health. The primary functions of CROs in Kansas are to maintain a drop-in center with activities that foster mutual support and to provide leadership opportunities for members. Additional organizational pursuits include increasing public awareness about mental illness, fundraising, educational and training activities, and hosting support groups. There are several different ways members can get involved, such as volunteering for CRO activities, becoming a board member or hired staff, organizing activities, and helping maintain the facility. Membership of CROs consists of individuals who have psychiatric disabilities and are current or past recipients of mental health services, mostly through state-funded public mental health centers and hospitals.

CRO Quarterly Reports

Like other nonprofits who receive public funding from the state, CROs are required to submit quarterly reports. This study analyzes the report submitted by each CRO in the second quarter of fiscal year 2004, which started October 1 and ended December 31, 2003. Data subject to analysis in these quarterly reports was the unduplicated count of members who attended the CRO during the quarter. This number represents the variable membership size.

Organizational Characteristics Survey

Information supplementing the quarterly report data was collected through an organizational activity survey administered to CRO leaders, such as the executive director or the president of the board of directors. Surveys were completed either in person during site visits by the researchers or through telephone interviews. For the purposes of this study, data came from two questions in this survey. The first question asked respondents to report the approximate number of CRO members who are involved in reporting and management (this includes completing quarterly reports, grants, tax reporting, budget management, and hiring decisions). The second question asked respondents to approximate the number of members who are involved in planning and organizing all of the different CRO activities. Although approximations were provided, respondents were familiar enough with the organization to provide relatively specific estimates, such as 4–6 or 7–9 people.

These two questions are used to measure the number of people involved in organizational planning and decision making, which is considered to be an approximation of the number of leadership roles in an organization. The members in these roles have a major influence on organizational operations, frequently working as members of the board of directors or paid staff. The members in these leadership roles are essentially the decision makers of the organization, and the participatory decision-making process is dominated by them.

Individual Outcomes from Participation Survey

During December 2003 and January 2004, two of the authors scheduled and visited each of the 20 CROs in Kansas. While scheduling site visits with CRO leaders, attempts were made to schedule a time when most members were in attendance. Furthermore, attempts were made by CRO leaders to encourage attendance on the day of these data collection sessions. Participation in the survey was completely voluntary and only two people (1%) of those 254 people eligible did not participate. Two surveys (1%) were omitted from the final data set due to obvious respondent error (i.e., marking all answers on the far right side of each page), leaving a total of 250 surveys from the 20 CROs subject to data analysis.

Considering the convenience sampling methodology implemented, it is likely that this sample over-represents those members most active in CROs (the regular attendees) as compared to the overall official membership lists of each CRO. This sampling bias was intended, as it facilitated a representative sample of *active* CRO members.

Although data were collected on many facets of CRO participation, the data most relevant to this study measured positive outcomes resulting from CRO participation. Positive outcomes were measured using a 15-item scale ($\alpha = 0.93$) that asked for participants' self-perceptions on how they have changed since becoming involved in the CRO. The scale is based on the Consumer Satisfaction Survey developed by the Mental Health Statistics Improvement Program (MHSIP, 2000). A list of all questions in this scale is presented in Table 1. Respondents answered questions on a five-point scale ranging from strongly disagree to strongly agree. To compute an overall scale score, the results from individual items were summed for each respondent. These individual-level data were used to represent the organizational level by calculating the mean of all

Table 1. Member Benefit from Participation Scale (N = 250)

<i>Since I have become involved here...</i>	<i>% Who Agree or Strongly Agree</i>
I feel better about myself.	81
I have become more confident.	81
I am better able to control my life.	77
I have become more competent.	75
I have become more independent.	74
I have become more effective in getting what I need.	74
I deal more effectively with daily problems.	74
I do better in social situations.	73
I am better able to deal with a crisis.	71
I have become more ambitious.	70
I do better with my leisure time (i.e., I get more out of leisure time).	70
I can deal better with people and situations that used to be a problem for me.	68
I am getting along better with my family.	65
My symptoms are not bothering me as much.	61
I do better in school or work. (if applicable)	55

scale scores from a particular CRO. All analyses took place at the organizational level, with an *N* of 20.

RESULTS

Survey results on the individual outcomes from participation are generally positive. CRO participants report that they are benefiting from CRO participation. Table 1 provides a summary of the results from this scale. Table 2 provides a summary of all measures used in correlation analysis, along with the mean and standard deviation of each measure. Table 3 provides a correlation matrix of the four primary measures used in analysis: (a) membership size, (b) organizational planning and management size, (c) percentage of members in planning/management, and (d) average member's participation outcome.

In its simplest form, correlation analysis indicates congruence with the under- and overpopulated behavior setting hypotheses. Just as the underpopulated/overpopulated hypothesis would predict, smaller organizations have a larger percentage of their members involved in organizational planning and management than do larger organizations. As the number of members in a CRO increases, the percentage of members contributing to organizational management decreases ($r = -0.60$, $p < 0.01$, $r^2 = 0.36$). In line with this finding is the negative correlation between membership size and the percentage of members contributing to the planning and organization of activities ($r = -0.50$, $p < 0.05$, $r^2 = 0.25$). Although duplication of members cannot be accounted for, when these two measures are summed and correlated with membership size, the negative relationship becomes even stronger ($r = -0.65$, $p < 0.01$, $r^2 = 0.42$). These separate correlations all reflect the limited number of leadership roles available within a CRO.

Although increasing membership size provides diminishing returns in the percentage of members contributing to organizational management, the total number of members

Table 2. Mean and Standard Deviation of All Variables Under Study (N = 20)

Variable Name	Mean	Standard Deviation
Membership size	58.4	50.7
Members in reporting and management	7.2	4.4
Members in activity planning	8.3	5.9
Members in planning/management	15.5	8.5
Percent members in management	19	13
Percent members in activity planning	20	13
Percent members in planning/management	38	21
Average member's participation outcome	67.6	4.9

Table 3. Correlations Between Primary Variables Under Study (N = 20)

Variable Name	(1)	(2)	(3)	(4)
1. Membership size	–	0.74**	–0.65**	0.49*
2. Organizational planning and management size		–	–0.12	0.59**
3. Percent members in planning/management			–	–0.34
4. Average member's participation outcome				–

* $p < 0.05$; ** $p < 0.01$.

contributing to management does still increase as the size of the organization increases ($r = 0.46$, $p < 0.05$, $r^2 = 0.21$). Similarly, there is a correlation between membership size and the number of members contributing to the planning and organizing of activities ($r = 0.73$, $p < 0.001$, $r^2 = 0.53$). Again, when these two leadership size measures are summed, they retain a strong correlation with membership size ($r = 0.74$, $p < 0.001$, $r^2 = 0.55$). Behavior setting theory does predict these correlations, stating that the number of roles in a behavior setting increases along with the number of people available to operate the setting, only at a slower rate.

Although findings are congruent with the expectations of behavior setting theory, they are incongruent with the predictions of Segal and Silverman (2002). The hypothesis that positive outcomes from participation will decrease as involvement in organizational planning and decision making decreases was not found to be true. In fact, a correlation in the direction opposite of what is predicted was found, although it was not significant ($r = -0.34$, $p = 0.14$). Explanations as to why this correlation exists in contradiction to the predictions of Segal and Silverman (2002) are explored in the discussion.

DISCUSSION

Although the results provide insight into the validity of the three hypotheses, the discussion will explore how these results speak to the three goals of this article. Explored first is the question of how organizational size influences organizational participation. Second is a discussion of how organizational participation leads to member benefit, and third is the issue of how the explanatory power of behavior setting theory can be improved to provide a more useful and accurate description of behavior settings.

How Organizational Size Influences Organizational Participation

Results suggest that as CROs become larger, there is a decline in the percentage of members contributing to organizational planning and management. According to behavior setting theory, this is because it becomes increasingly competitive to get involved in these leadership roles. Larger CROs appear to be facing overpopulated conditions, where vetoing circuits are effectively used to exclude some members from leadership positions. Similar to the selection of varsity athletes in large schools, large CROs have the luxury of being able to select only the most qualified members for paid positions. Large CROs additionally benefit from the most motivated volunteers naturally working their way into leadership positions, such as board member. One example is the surplus of candidates that sometimes compete to be elected to board officer positions in large organizations, while small organizations often struggle to simply find enough people willing to take on the board officer positions.

Overpopulated CROs not only are able to select the most competent leaders, but also benefit from having more leaders overall. Although the size of the organization has a major influence on the percentage of members involved in operating the organization, there remains a strong positive relationship between membership size and the number of people involved in organizational planning and management ($r = 0.74$, $p < 0.001$). This correlation is important because previous research by Brown (2004) has associated leadership size with organizational productivity. Additionally, research by Kaufmann, Ward-Colasante, and Farmer (1993) found that a large leadership base is critical to successful organizational functioning. Based on these studies, it appears that large CROs are more likely to be successful in the long term because these organizations have more leaders.

Larger organizations may also be able to offer higher quality opportunities for social engagement. By having more paid staff and more voluntary leadership, larger organizations can keep CROs open longer hours while providing a richer diversity of activities that facilitate the development of mutually supportive relationships. This may explain the positive relationship between membership size and positive outcomes from participation ($r = 0.47$, $p < 0.05$).

A second potential explanation for this relationship is that the members of smaller CROs may be facing burnout from taking on too many organizational roles. When the leaders of underpopulated CROs leave, the existence of the CRO is threatened and the recruitment of new members becomes critical to the survival of the organization.

How Organizational Participation Influences Positive Outcomes

Although larger organizations have a smaller percentage of members involved in leadership roles, it does not appear to be negatively impacting the organization's ability to facilitate positive outcomes from participation. As the percentage of members in planning and management roles decreases, the average level of member benefit increases ($r = -0.34$, $p = 0.14$). Although this correlation is not significant, it is in the opposite direction of what Segal and Silverman (2002) predict. Clearly, there is some other, more powerful mechanism leading to member benefit.

This raises the question of what people who are not in leadership roles are doing while they are participating in CROs. Instead of leading the organization toward productivity, these individuals are enjoying the multitude of activities offered by CROs. They are

making friends, forming mutually supportive relationships, and contributing to the organization through support roles.

The improved social networks and social support that are derived from CRO participation may be leading members toward positive individual outcomes. Mowbray and Tan (1993) found that social support was the dominant reason members continued participation in CROs. The existence of social support has been linked to a variety of mental and physical health outcomes, including recovery from chronic diseases; greater life satisfaction; enhanced ability to cope with life stressors; decreased mental health symptoms, such as depression and anxiety; and an overall ability to function in instrumental roles (Cohen, Underwood, & Gottlieb, 2000; Cohen & Wills, 1985).

Intertwined with social support is the existence of mutually supportive relationships where people play the role of both help receiver and help provider. As discussed in the introduction, the helper-therapy principle may explain how members benefit from the relationships formed at a CRO. In the role of help provider, people gain a sense of importance and interpersonal competence. Both organizational leaders and the general membership can benefit from mutually supportive relationships where they play the role of help provider.

Although social support and the helper therapy principle appear to be promising explanations of how organizational participation influences outcomes, results from this study do not provide empirical support for this explanation. Results only suggest that playing a leadership role within a CRO is not the primary mechanism by which members benefit from participation. Involvement in leadership roles may still be a secondary mechanism facilitating positive outcomes. The positive relationship between organizational decision making and positive individual outcomes found by Segal and Silverman (2002) is likely to be accurate. Their study had no measure of social support or mutually supportive relationships formed, and hence organizationally mediated empowerment had no other powerful predictors to compete with. For this reason, the importance of a participatory process within CROs should not be ignored, only moderated.

Shortcomings of Behavior Setting Theory

Although results were congruent with the predictions of behavior setting theory in the sense that leadership roles did become overpopulated, the organizations as a whole do not appear to be overpopulated. Instead, there appear to be at least two primary roles organizing activity within a CRO, that of leader and that of member. As leadership roles become overpopulated, membership roles appear to be approaching optimal population. Just as public spaces and other settings that emphasize unstructured socialization reach optimal population when they are crowded (Whyte, 1980), CROs may provide a more attractive social setting when they are crowded on a regular basis.

The under- and overpopulation hypotheses lack explanatory power because they do not take into consideration the idea that some roles within a behavior setting may be overpopulated while others are underpopulated. In any behavior setting, there can be too few or too many individuals trying to occupy a specific role. For example, a newspaper can have too many editors and not enough writers. Although these two positions require similar skill sets, the people in each of these roles are not always interested in switching roles. Newsrooms and many other behavior settings can frequently maintain underpopulation with respect to a specific role, even though the setting as a whole may have a surplus of members. By examining what roles exist within an organization, and

how many people need to be in each role, a more accurate conceptualization of under- and overpopulated behavior settings can be obtained.

Integrating Roles into Behavior Setting Theory

The consideration of what roles need to be filled within a behavior setting does more than resolve shortcomings in the under- and overpopulated hypotheses. Roles serve to organize both the standing behavior patterns within a setting and the expectations of each individual in that setting. Humans use roles as conceptual tools that clarify the boundaries of what they are expected to do and what they can expect of others.

Roles can be made as broad or as fine grained as is useful in understanding a setting. To understand a basketball game, one may want to focus only on the role of coaches and players. A more fine-grained analysis could take into consideration the differing roles of each player (i.e., guard, center) and each coach (i.e., head coach, assistant coach), the fans, and the media. As more roles are taken into consideration, they will provide a richer description of the standing behavior pattern. Likewise, an understanding of all the different roles played by an individual provides insight into who that person is and what skills they possess.

The addition of roles as a unit of measurement in behavior settings accomplishes several goals that other similar extensions have addressed. Wicker, McGrath, and Armstrong (1972) suggested refining the under- and overpopulation hypotheses to take into consideration the difference in population levels between people who have positions of responsibility and those who are merely members, clients, or onlookers. For example, a restaurant can have too many patrons and not enough staff or vice versa. Although Wicker et al. (1991) did not explicitly use the concept of roles, their refinement represents a specialized extension of the more generalized expansion suggested here.

Wicker (1991) also suggests the use of cognitive scripts to understand behavior settings. Scripts are cognitive structures that describe appropriate sequences of events in a particular context (Schank & Abelson, 1977). A script can be thought of as the sum of role expectations an individual has for both themselves and all other actors in a behavior setting. Although cognitive scripts provide an accurate description of how people conceptualize setting programs, they are not useful as a unit of analysis in the way roles are.

Using Roles to Understand How Settings Change People

The concept of roles provides a unit of analysis that is meaningful to understanding both the demands of behavior settings and the identity of the individual. Several role-based theories have been developed, including role theory (Sarbin, 1954), social valorization theory (Flynn & Lemay, 1999), and identity theory (Stryker, 1980; Stryker & Burke, 2000). All these theories go into significantly more detail than can be explained here, but a brief overview of identity theory is provided to illustrate how role theories can enhance behavior setting theory.

Grounded in symbolic interactionism (Mead, 1934), identity theory provides insight into how roles played by individuals have a major impact on what skills they learn and how they identify themselves. Roles provide a sense of identity, purpose, and guidance because people use roles as basic conceptual tools in thinking about self. We become the roles that we play. If an individual is unable to create congruence between role expectations

and role performance, then the individual will experience anxiety. Adopting a new role forces individuals to develop a new skill set in order to adequately perform the role and meet expectations.

In order to verify one's identity, Swann (1987) contends that people go through a process of "selective interaction" in which they choose to interact with others in settings where they can play the roles they are comfortable with and confirm their identities. This process of self-verification and role negotiation may explain many behaviors within a setting. CRO members who see themselves as lacking competence will likely find roles in the organization where they have no responsibility and can simply show up and enjoy the company of others. If they see themselves as activists, then they may find roles in the organization where they can make public presentations to reduce stigma about mental illness. This process of selective interaction may explain why many people try out different behavior settings before making many commitments.

How Roles Address Several Criticisms of Behavior Setting Theory

One major criticism of behavior setting theory is that it does not integrate meaningfully any individual difference factors (Perkins et al., 1988). The integration of identity theory can address this issue to some extent. Because people selectively interact with behavior settings to fill roles that match their identity, certain people are likely to be drawn to certain settings where they can fulfill certain roles.

Behavior setting theory is also criticized for being a unidirectional model, where settings influence people but people do not influence settings (Perkins et al., 1988). The use of roles facilitates understanding of how there is an interaction between the settings and people. People are likely to structure settings around roles they are familiar with. Once these roles are entrenched, settings will be most amenable to people who fill those roles. For example, people who prefer authoritarian roles are likely to set up organizations that have a rigid hierarchy. Once this authoritarian structure is established, the addition of individuals who prefer a more egalitarian, collaborative approach will cause tension, and these people will probably either change their ways or leave the setting.

Criticism has also risen over behavior setting theory's inability to account for the personal satisfactions that are derived from participation in a behavior setting (Perkins et al., 1988). If community psychologists are to change behavior settings so as to making them more rewarding and beneficial to participants, then this connection will need to be made. The integration of roles and identity theory provides a strong theoretical link between the properties of behavior settings and how people may benefit from participation in these settings. The roles available in a setting provide insight into what skills people are likely to develop in that setting. For example, in CROs, people frequently play the role of friend, learning social skills along the way.

Limitations and Future Research

One of the major limitations of this study is its reliance on correlations between variables in drawing conclusions. Although correlations do indicate a relationship between variables, they do not indicate a causal relationship. The possibility that an entirely different set of causal relationships may be operating cannot be ruled out. Additionally, results are based on a small sample size, and some relationships found in the data may be unique to

CROs in Kansas, thereby limiting the generalizability of findings. Finding significance with a small sample size requires relatively strong relationships between variables, however, and these relationships are likely to remain significant with larger sample sizes, even if the strength of the relationships is reduced because CROs outside Kansas operate somewhat differently.

One area clearly in need of future research is how participation in a CRO leads to member benefit. Although it is clear that involvement in organizational operations and decision making is not the primary mechanism leading to member benefit, it may still be a powerful one. The explanatory power of a variety of theoretical mechanisms that link CRO participation to member outcomes needs to be explored. A second area needing further research is the use of roles in understanding behavior settings. Although the theoretical extension holds promise, it currently has no empirical support.

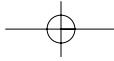
CONCLUSIONS

With respect to the question of how organizational size influences organizational participation, it appears that there is an upper limit to the number of members who can get involved in leadership roles. Although this may be the case, larger CROs do still have a larger number of leaders, and previous research has associated this with organizational productivity and effectiveness. Additionally, these larger CROs still have plenty of roles available for members who want to participate in organizational activities and fill support roles. With respect to the question of how participation leads to member benefit, it does not appear that participation in a leadership role is the primary force contributing to member benefit. Instead, it may be the benefits derived from the formation of mutually supportive relationships that are most important.

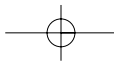
Results also reveal weaknesses in the under- and overpopulated hypotheses' ability to account for the intricacies of behavior settings. Larger CROs appear to be overpopulated with respect to leadership roles but adequately populated with respect to other organizational roles. To account for this finding and extend the explanatory power of behavior setting theory, the introduction of roles as a unit of analysis is suggested. This facilitates the development of rich descriptions of standing behavior patterns, where both people and settings can be described in terms of their roles. Identity theory is one role-oriented theory that connects the roles played by individuals to the individual benefits derived from playing those roles. Community psychologists can use this extension to create and modify behavior settings so that inhabitants will learn new skills and alter their self-conception.

REFERENCES

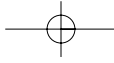
- Barker, R.G. (1968). *Ecological psychology: Concepts and methods for studying the environment of human behavior*. Stanford, CA: Stanford University Press.
- Barker, R.G., & Schoggen, P. (1973). *Qualities of community life: Methods of measuring environment and behavior applied to an American and an English town*. San Francisco: Jossey-Bass.
- Barker, R.G., & Wright, H.F. (1951). *One boy's day*. New York: Harper & Row.
- Blanchard, A. (2004). Virtual behavior settings: An application of behavior setting theories to virtual communities. *Journal of Computer-Mediated Communication*, 9(2). Retrieved March 1, 2005, from <http://www.ascusc.org/jcmc/vol9/issue2/blanchard.html>.



- Blau, P.M. (1970). A formal theory of differentiation in organizations. *American Sociological Review*, 35, 210–218.
- Brown, L.D. (2004). Goal achievement in mutual support organizations operated by persons with psychiatric disability. Unpublished master's thesis, Wichita State University, Wichita, KS.
- Chamberlin, J. (1990). The ex-patients' movement: Where we've been and where we're going. *Journal of Mind and Behavior*, 11, 323–336.
- Chamberlin, J., Rogers, E.S., & Ellison, M.L. (1996). Self-help programs: A description of their characteristics and their members. *Psychiatric Rehabilitation Journal*, 19, 33–42.
- Cohen, S., Underwood, L.G., & Gottlieb, B.H. (2000). *Social support measurement and intervention: A guide for health and social scientists*. New York: Oxford Press.
- Cohen, S., & Wills, T.A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 95, 310–357.
- Dalton, J.H., Elias, M.J., & Wandersman, A.W. (2001). *Community psychology: Linking individuals and communities*. Belmont, CA: Wadsworth/Thomson Learning.
- Dewar, R., & Hage, J. (1978). Size, technology, complexity, and structural differentiation: Toward a theoretical synthesis. *Administrative Science Quarterly*, 23, 111–136.
- Flynn, R.J., & Lemay, R.A. (Eds.). (1999). *A quarter-century of normalization and social role valorization: Evolution and impact*. Ottawa, Ontario: University of Ottawa Press.
- Holter, M.C., Mowbray, C.T., Bellamy, C.D., MacFarlane, P., & Dukarski, J. (2004). Critical ingredients of consumer run services: Results of a national survey. *Community Mental Health Journal*, 40, 47–63.
- Kaufmann, C.L., Ward-Colasante, C., & Farmer, J. (1993). Development and evaluation of drop-in centers operated by mental health consumers. *Hospital and Community Psychiatry*, 44, 675–678.
- Latkin, C., Mandell, W., Vlahov, D., Oziemkowska, M., Knowlton, A., & Celentano, D. (1994). My place, your place, and no place: Behavior settings as a risk factor for HIV-related injection practices of drug users in Baltimore, Maryland. *American Journal of Community Psychology*, 22, 415–430.
- Luke, D.A., Rappaport, J., & Seidman, E. (1991). Setting phenotypes in a mutual help organization: Expanding behavior setting theory. *American Journal of Community Psychology*, 19, 147–167.
- McCall, G.J., & Simmons, J.L. (1978). *Identities and interactions: An examination of human associations in everyday life*. New York: Free Press.
- McLean, A.H. (2000). From ex-patient alternatives to consumer options: Consequences of consumerism for psychiatric consumers and the ex-patient movement. *International Journal of Health Services*, 30, 821–847.
- Mead, G.H. (1934). *Mind, self, and society*. Chicago: University of Chicago Press.
- Mental Health Statistics Improvement Program. (2000). The MHSIP Consumer Satisfaction Survey. Retrieved March 1, 2005, from <http://www.mhsip.org/surveylink.htm>.
- Mowbray, C.T., Chamberlin, P., Jennings, M., & Reed, C. (1988). Consumer-run mental health services: Results from five demonstration projects. *Community Mental Health Journal*, 24, 151–156.
- Mowbray, C.T., Robinson, E.A., & Holter, M.C. (2002). Consumer drop-in centers: Operations, services, and consumer involvement. *Health and Social Work*, 27, 248–261.
- Mowbray, C.T., & Tan, C. (1993). Consumer-operated drop-in centers: Evaluation of operations and impact. *Journal of Mental Health Administration*, 20, 8–19.
- Nelson, G., Lord, J., & Ochocka, J. (2001). *Shifting the paradigm in community mental health: Towards empowerment and community*. Toronto: University of Toronto Press.
- Norris-Baker, C. (1999). Aging on the old frontier and the new: A behavior setting approach to the declining small towns of the Midwest. *Environment & Behavior*, 31, 240–258.



- Perkins, D.V., Burns, T.F., Perry, J.C., & Nielsen, K.P. (1988). Behavior setting theory and community psychology: An analysis and critique. *Journal of Community Psychology*, 16, 355–372.
- Peterson, N.A., & Zimmerman, M.A. (2004). Beyond the individual: Toward a nomological network of organizational empowerment. *American Journal of Community Psychology*, 34, 129–145.
- Riessman, F. (1965). The “helper” therapy principle. *Social Work*, 10, 27–32.
- Riessman, F., & Carroll, D. (1995). *Redefining self-help*. San Francisco: Jossey-Bass.
- Rudkin, J.K. (2003). *Community psychology: Guiding principles and orienting concepts*. Upper Saddle River, NJ: Prentice Hall.
- Salem, D.A., Seidman, E., & Rappaport, J. (1988). Community treatment of the mentally ill: The promise of mutual-help organizations. *Social Work*, 33, 403–408.
- Sarbin, T.R. (1954). Role theory. In G. Lindzey (Ed.), *Handbook of social psychology*. Vol. I. Theory and method (pp. 223–258). Cambridge, MA: Addison-Wesley Publishing Company.
- Schank, R.C., & Abelson, R.P. (1977). *Scripts, plans, goals, and understanding*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Schoggen, P. (1989). *Behavior settings: A revision and extension of Roger G. Barker’s ecological psychology*. Stanford, CA: Stanford University Press.
- Schulz, A.J., Israel, B.A., Zimmerman, M.A., & Checkoway, B.N. (1995). Empowerment as a multi-level construct: Perceived control at the individual, organizational, and community levels. *Health Education Research*, 10, 309–327.
- Segal, S.P., & Silverman, C. (2002). Determinants of client outcomes in self-help agencies. *Psychiatric Services*, 53, 304–309.
- Skovholt, T.M. (1974). The client as helper: A means to promote psychological growth. *Counseling Psychologist*, 4, 58–64.
- Smith, D.H. (2000). *Grassroots associations*. Thousand Oaks, CA: Sage.
- Sommer, R., & Wicker, A.W. (1991). Gas station psychology: The case for specialization in ecological psychology. *Environment & Behavior*, 23, 131–149.
- Stryker, S. (1980). *Symbolic interactionism: A social structural version*. Menlo Park, CA: Benjamin Cummings.
- Stryker, S., & Burke, P.J. (2000). The past, present, and future of identity theory. *Social Psychology Quarterly*, 63, 284–297.
- Swann, W.B. (1987). Identity negotiation: Where two roads meet. *Journal of Personality and Social Psychology*, 53, 1038–1051.
- Trainor, J., Shepherd, M., Boydell, K.M., Leff, A., & Crawford, E. (1997). Beyond the service paradigm: The impact and implications of consumer/survivor initiatives. *Psychiatric Rehabilitation Journal*, 21, 132–140.
- Whyte, W. (1980). *The social life of small urban spaces*. New York: Project for Public Spaces, Inc.
- Wicker, A.W. (1991). Behavior settings reconsidered: Temporal stages, resources, internal dynamics, context. In D. Stokols & I. Altman (Eds.), *Handbook of environmental psychology* (pp. 613–653). Malabar, FL: Krieger.
- Wicker, A.W. (2002). Ecological psychology: Historical contexts, current conception, prospective directions. In R.B. Bechtel & A. Churchman (Eds.), *Handbook of environmental psychology* (pp. 114–126). New York: John Wiley & Sons.
- Wicker, A.W., & August, R.A. (1995). How far should we generalize?: The case of a workload model. *Psychological Science*, 6, 39–44.
- Wicker, A.W., McGrath, J.E., & Armstrong, G.E. (1972). Organization size and behavior setting capacity as determinants of member participation. *Behavioral Science*, 17, 499–513.
- Yanos, P.T., Primavera, L.H., & Knight, E.L. (2001). Consumer-run service participation, recovery of social functioning, and the mediating role of psychological factors. *Psychiatric Services*, 52, 493–500.



416 • *Journal of Community Psychology*, April 2007

Zimmerman, M.A., & Rappaport, J. (1988). Citizen participation, perceived control, and psychological empowerment. *American Journal of Community Psychology*, 16, 725–750.

Zimmerman, M.A., Reischl, T.M., Seidman, E., Rappaport, J., Toro, P.A., & Salem, D.A. (1991). Expansion strategies of a mutual help organization. *American Journal of Community Psychology*, 19, 251–278.

