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Processes Underlying Treatment Success and Failure in Assertive Community Treatment

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Abstract

Background—Processes underlying success and failure in Assertive Community Treatment (ACT), a widely-investigated treatment model for persons with severe mental illness, are poorly understood.

Aims—The purpose of the current study was to examine processes in ACT by 1) understanding how consumers and staff describe the processes underlying treatment success and failure and 2) comparing processes identified by staff and consumers.

Method—Investigators conducted semi-structured interviews with 25 staff and 23 consumers from four ACT teams.

Results—Both staff and consumers identified aspects of the ACT team itself as the most critical in the process of consumer success. For failure, consumers identified consumer characteristics as most critical and staff identified lack of social relationships. Processes underlying failure were not viewed as merely the opposite of processes underlying success. In addition, there was notable disagreement between staff and consumers on important processes.

Conclusions—Findings overlap with critical ingredients identified in previous studies, including aspects of the ACT team, social involvement, and employment. In contrast to prior studies, there was little emphasis on hospitalizations and greater emphasis on not abusing substances, obtaining wants and desires, and consumer characteristics.

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Keywords

Treatment Success; Assertive Community Treatment; Qualitative Research

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Assertive Community Treatment is one of the most widely investigated treatment models for persons with severe mental illness. Although ACT consumers have improved outcomes, including reduced dropout rates and hospital utilization, and increased housing stability and client and family satisfaction (e.g., Marshall & Lockwood, 1998; Stein & Test, 1980; Ziguras & Stuart, 2000), there is no clear understanding of the specific therapeutic mechanisms of change. One strategy for identifying treatment mechanisms is to understand the processes that underlie treatment success and failure. Because stakeholders may differ, it is also important to examine both staff and consumer perspectives.

Research has identified a variety of helpful elements of ACT, e.g., the relationship, availability of staff, assistance with everyday problems, and home visits (Chinman et al., 1999; McGrew & Wilson, 1996; Prince et al., 2000). Research also has examined aspects of ACT that may be unhelpful, e.g., interactions that are experienced as intrusive, confining, and encouraging dependency (Prince et al., 2000) or practices that seem to produce conflicts over money and medications or that are viewed as authoritative (Krupa et al., 2005). In one small study, ACT clients reported receiving coercive services, although specificity of the coercion to ACT was unclear (Watts & Priebe, 2002); however, in two larger studies, when consumers were asked what they liked least about ACT, the most common response was to report that they disliked nothing (McGrew et al., 2002) or “no response” (Redko et al., 2004).

Although prior studies have explored consumer perspectives on helpful and unhelpful aspects of ACT, none have compared staff and consumer perspectives directly or have examined possible factors underlying stakeholder defined *success and failure in ACT*. The study of failure has been recommended as critical for advancing knowledge in psychotherapy research (Emmelkamp & Foa, 1983). Accordingly, the primary purpose of the current study was to explore how ACT staff and consumers view treatment success and failure processes. We recently examined definitions of success and failure, by ACT staff and consumers (Stull, McGrew, & Salyers, 2010). The current paper goes further, by characterizing the specific therapeutic *processes* that were viewed as supporting or hindering the achievement of success and failure in ACT in the same study sample.

Method

Sites

Four Indiana ACT teams participated as part of a larger study of recovery in ACT (Salyers, Stull, Rollins, & Hopper, 2011). Selected teams met a minimum threshold of ACT fidelity (>4.0 on the Dartmouth ACT Scale; Teague et al., 1998). Two teams were urban, serving 43 and 46 consumers, and two teams were rural, serving 74 and 80 consumers.

Sample

We targeted six staff and six consumers from each program. For the staff sample, we targeted the psychiatrist, team leader, nurse, case manager, substance abuse specialist, and vocational specialist, which are the primary roles on Indiana ACT teams. For the consumer sample, we targeted three of the most successful consumers on the team and three of the least successful, as identified through consensus staff nominations (see Stull et al., 2010 for more detail).

Procedures

Data were collected from August–December, 2007. Researchers attended the team's morning meeting to invite staff participation and obtain informed consent. ACT staff contacted nominated consumers. Researchers met willing consumers to explain the study and obtain informed consent. Interviews were audiotaped and transcribed. Participants were compensated \$50 for completing interviews. The university Institutional Review Board approved the study procedures.

Qualitative Measures and Analysis

To assess how staff viewed success and failure, staff reflected on the six exemplar consumers. Staff rated the overall success of each consumer (1 = completely unsuccessful; 5 = completely successful), explained why they assigned the rating (to get at definitions of success or failure), and discussed processes that contributed to a consumer's success (e.g., “What factors do you believe contributed to [consumer] being more [or less] successful?”). Similarly, consumers rated their own success in ACT using the same five-point scale. To assess processes, they were asked, “What would it take to move you to a five from a [rating]?” and “What would it take to move you to a one from a [rating]?” For both groups, additional probes were used for clarification. Interviews lasted approximately 90 minutes, including unrelated questions from the larger study.

Qualitative analyses followed a content analysis approach (Miles & Huberman, 1994). Three researchers read the same sets of consumer and staff interviews and discussed potential codes (e.g., medications, ACT team). After consensus was reached, researchers developed a set of codes (i.e. codebook) to guide our analysis. The codes were tested on previously unexamined transcripts until a final set of codes was defined and “saturation” (a set of codes that could accommodate the content of all incoming data) was reached. We then applied these codes to all of the transcripts (focused coding). Themes were then classified and counted. Thematic labeling and organization was aided by qualitative software (ATLAS.ti 5.5.9). Themes are listed in Table 1 in rank order, based on how frequently they were mentioned. Consistent with prior work (Stull et al., 2010), we discuss differences in the rank order of themes (of at least four places), but not in the frequency with which themes were mentioned (see Table 2), because staff talked much more than consumers (staff average word count = 76.2 ± 22.2 ; consumer average word count = 24.0 ± 11.0). We examined similarity between staff and consumer responses using Spearman correlations.

Results

Sample

Twenty-five staff participated. Most were Caucasian (23, 92%), female (19, 76%), and the average age was 43.6 ± 11.4 years. Eleven more successful and 12 less successful consumers participated ($n = 23$). Most were Caucasian (20, 87%), female (12, 52%), and the average age was 42.7 ± 12.0 years.

Processes of Success

Table 1 shows staff and consumer rank-ordered responses concerning the processes of success. Staff and consumer rankings were correlated, $r_s = 0.87$, $p < 0.01$, indicating substantial agreement in how they viewed success processes. There were several areas of strong agreement. First, the top ranked process of success for consumers and staff was helpful aspects of the ACT team. Informants described specific instrumental support (e.g., “they take me to see my family”), having consistent and quality contacts (e.g., “having set appointments with people twice a week, to know that she has that outlet to discuss things”), use of preferred treatment approaches (e.g., “Illness Management and Recovery and Integrated Dual Disorders Treatment groups and the doctor, she really feels like that has helped her maintain and get better”), helpfulness of specific staff, and intensity of services. Staff and consumers also agreed that consumer-specific factors (e.g., seeking help, making good choices, displaying determination, and other factors, such as intelligence, high self-esteem, motivation) and employment/education/psychoeducation (e.g., learning more about their illness, getting a degree, working or volunteering) were important success processes. Overall, consumers and staff agreed that first, the ACT team, and second, the consumer, were both critical to success.

There also were notable differences between staff and consumers on success processes. Staff and consumers differed most on the importance of being socially involved with others (consumers ranked 2nd; staff ranked 7th). For example, one consumer identified “being around the right person, the right role models” as contributing to success, while others identified specific people (e.g., mom) as important. Consumers were also more likely to mention having their wants and desires met (e.g., getting a car) as contributing to success (tied for 10.5; staff tied for 14.5). In contrast, staff were more likely to mention consumers taking small steps or breaking down goals as important (ranked 12.5; consumers ranked 16th; “I think the ACT team allowed her to believe she could do it and gave her little baby steps and she did it.”).

Processes of Failure

Staff and consumer responses concerning failure processes were significantly correlated, $r_s = 0.64$, $p = 0.02$ (see Table 1). Both groups, particularly consumers, had less to say about failure (each process mentioned on average by 2.6 consumers and 8.9 staff) compared to success (each process mentioned on average by 7.4 consumers and 12.2 staff). Notably, failure processes were not simply the opposite of success processes. Consumers and staff agreed in identifying substance abuse as a critical factor underlying failure. For example, when describing what would make them completely unsuccessful one consumer stated, “If I

started doing drugs again” and another said, “If I would go back to drinking.” Similarly, when thinking about failure for a consumer, a staff member stated “She also has such an addiction problem that she craves it to such an extent that she leaves a safe facility in order to find drugs and then that leads to prostituting, which leads to getting hurt.” Rarely, though, was lack of substance abuse mentioned as part of the process of success.

Similar to success, consumers and staff agreed that the ACT team was a critical factor underlying failure (e.g., not giving enough support, not contacting the consumer enough, being “too intrusive”). Both groups also mentioned consumer-specific factors as important in understanding failure, including engaging in risky behaviors (e.g., “she’s putting herself into risky situations”), anger problems (e.g., “Being around bad people or somebody starts with an anger problem and I get angry and then it’s like...my whole mood’ll change”), and other personal characteristics (e.g., “her age”, “she has very serious schizophrenia”).

Some notable differences between consumers and staff also emerged. First, staff more frequently identified poor social support (staff ranked 1st; consumers tied for 8th), including isolation, lacking family support, and being the victim of domestic violence. For example, a staff member described the process of failure for one consumer as “...lack of support. There is no one out there for this girl...She has a mom and a sister, but they do not view it as their responsibility to help keep track of her.” Second, staff more often mentioned consumers non-participation in ACT treatment as a failure process (e.g., “She has been very sporadically involved in treatment”; tied for 6.5; consumers tied for 10th). Staff also mentioned consumers’ legal involvement (“the police got involved”, “involvement in the criminal justice system”; staff ranked 11th), while no consumers mentioned this theme.

There also were some failure processes that consumers identified more often than staff. First, consumers described having a poor quality therapeutic relationship with the ACT team more often (tied for 3rd; staff ranked 8th), which included not trusting staff and having a superficial relationship. Additionally, consumers were more likely to mention medication non-adherence (having the wrong medications or not taking them; tied for 5.5; staff ranked 9th) as underlying failure. The remaining differences in consumer and staff views of failure processes are based on the responses of a single consumer (being hospitalized, having unmet needs) and should be interpreted cautiously.

Discussion

The current study is unique in describing consumer and staff perspectives of the processes underlying success and failure in ACT. It was striking that both groups viewed success processes quite differently from failure processes. One key difference was that staff and consumers were more likely to attribute success to aspects of the ACT team (e.g., consistent contact, providing support) and failure to consumer characteristics (e.g., risky behaviors, lack of insight, anger). This echoes the notion of “therapist as hero” when there is improvement and “blaming the victim” when there is not, a finding also documented in psychotherapy research (Tallman & Bohart, 1999).

There were notable differences between the processes underlying success and failure. For example, consumers and staff viewed obtaining employment and education as an important success process, but viewed the lack of employment or education as relatively unimportant in explaining failure. Similarly, substance abuse was viewed as an important process underlying failure whereas the absence of substance abuse was infrequently mentioned as underlying success. These findings suggest that failure processes are not simply the opposite of processes associated with success.

However, there also was disagreement among staff and consumers. One key difference was that consumers were more likely to mention not taking medications when describing the process of failure. In contrast, staff mentioned taking medications more often when describing the process of success. That is, consumers saw the failure to take medications as central to explaining poor outcomes, in essence “blaming the consumer,” whereas staff saw medication effectiveness as central to explaining good outcomes, which “praises” the treatment. The finding also corroborates previous literature in which case managers rated medication management as a beneficial mechanism of action in ACT (McGrew et al., 2003). Although differences between staff and consumer perspectives may be expected given their power differential in the ACT relationship, it is not entirely clear why their perspectives diverged with respect to these specific processes.

Finally, several findings echo themes from the general psychotherapy literature and prior research on ACT. For example, consistent with theories of psychotherapeutic change, aspects of both the treatment and person emerged as critical factors in explaining the process of therapeutic action (Lambert, 2004). Consistent with prior ACT research highlighting the critical importance of relationships (Leiphart & Barnes, 2005; McGrew & Wilson, 1996; Prince et al., 2000; Redko et al., 2004), the impact of consumers' social relationships, both good and bad (e.g., reuniting with family, lack of family support), was mentioned frequently as an important process of success and failure. These findings suggest the need to examine further how ACT teams effectively facilitate or support these social relationships.

Overall, the identified success processes were consistent with important components of ACT identified previously by staff and consumers (McGrew et al., 2003; McGrew & Wilson, 1996), such as medication management, assisting with employment and education, assisting with basic needs (e.g., medical care, housing, transportation), supporting consumer independence, therapeutic relationships, and availability of staff. However, some notable differences emerged. Hospitalization appeared to play a weak role in the current study, despite being identified as a critical aspect of ACT effectiveness, and being mentioned by consumers in prior research (McGrew & Wilson, 1996). In addition, there was a greater emphasis on not abusing substances and obtaining wants and desires. This shift is consistent with changes in ACT over time into a program less strictly focused on reduction of hospital use to one embracing a broader set of clinical (substance use) and personal recovery outcomes (e.g., McGrew & Bond, 1995).

The study has both strengths and weaknesses. One strength was the inclusion of staff and consumers from several ACT teams. A weakness was the use of the same coding scheme for all interviews and for processes and definitions (Stull et al., 2010). Although different

themes may have emerged if each group or aspect of success/failure had been analyzed separately, we wanted to directly compare the presence/absence of each category across groups. Further, the interpretation of the data is limited by the use of a content analysis approach. While our methodology is one useful way to identify and compare emergent themes (Sandelowski, 2001), other methods, such as the grounded theory approach (Charmaz, 2006), may provide a richer understanding of mechanisms of change in ACT.

In addition, although efforts were made to differentiate between definitions (i.e. outcomes) and processes of success and failure, participants had difficulty making this distinction. This is consistent with prior work indicating that consumers view an intervention as both an outcome and a process towards outcomes such as recovery (Dunn et al., 2008) and parallels definitions of recovery as both an outcome and a process (Onken et al., 2007). Finally, participants represented a limited number of programs within one state.

Our findings have several important implications. First, researchers, providers, and consumers should be alert to the potential, and work to mitigate tendencies, to attribute failure to the consumer and success to the provider. Second, processes underlying failure should not be viewed as merely the opposite of those underlying success. Finally, the study highlights areas for further research. For example, processes underlying success (e.g., team support, social involvement, employment, and education) could be studied to identify ways to enhance those factors. Similarly, processes underlying failure (e.g., consumer behaviors, substance abuse, and poor social involvement) indicate fruitful areas to intervene to avoid unsuccessful outcomes in ACT services.

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Table 1

Rankings of processes of success and failure by perspective

	Success Processes		Failure Processes	
	Consumers (n = 23)	Staff (n = 25)	Consumers (n = 23)	Staff (n = 25)
ACT Team (e.g., providing support, consistent contact, advocacy, not individualizing treatment)	1	1	3	4
(Poor) Social Involvement with Others (e.g., socially connected, family reconciliation, isolation)	2	7	8	1
Consumer-Specific Factors (e.g., determination, high self-esteem, risky behaviors, lack of insight)	3.5	2.5	1	3
(Absence of) Employment/Education/Pschoeducation	3.5	2.5	10	12.5
Basic Needs (Not Met) (e.g., meeting or not meeting needs regarding housing, food, physical health)	5	5	5.5	5
(Not) Participating in Treatment	6	9	10	6.5
(Poor) Relationship with ACT Team (e.g., working with each other, getting along, lack of trust, team not caring)	7.5	6	3	8
(Not) Taking Medications	7.5	4	5.5	9
(Lack of) Independence	9	8	10	12.5
(Lack of) Substance Abuse	10.5	10	3	2
Wants/Desires (Not Met) (e.g., get a car, a dog)	10.5	14.5	10	N/A
(Lack of) Legal Involvement	13	14.5	N/A	11
(Poor) Mental Health	13	12.5	8	6.5
Other (e.g., successful prior to getting sick, being on court commitment, first time receiving treatment)	13	11	8	10
(No) Hospitalizations	15	16	10	14
Taking Small Steps/Breaking Down the Goal	16	12.5	N/A	N/A

Table 2

Frequencies of processes of success and failure by perspective

	Success Processes				Failure Processes			
	Consumers (n = 23)		Staff (n = 25)		Consumers (n = 23)		Staff (n = 25)	
	$M^d = 7.4$		$M^d = 12.2$		$M^d = 2.6$		$M^d = 8.9$	
	b n	% c	b n	% c	b n	% c	b n	% c
ACT Team	18	78	25	100	4	17	13	52
(Poor) Social Involvement with Others	16	70	15	60	2	9	22	88
Consumer-Specific Factors	12	52	21	84	6	26	17	68
(Absence of) Employment/Education/Psychoeducation	12	52	21	84	1	4	3	12
Basic Needs (Not Met)	10	44	17	68	3	13	9	36
(Not) Participating in Treatment	9	39	11	44	1	4	8	32
(Poor) Relationship with ACT Team	8	35	16	64	4	17	7	28
(Not) Taking Medications	8	35	18	72	3	13	6	24
(Lack of) Independence	6	26	14	56	1	4	3	12
(Lack of) Substance Abuse	4	17	9	36	4	17	18	72
Wants/Desires (Not Met)	4	17	4	16	1	4	N/A	N/A
(Lack of) Legal Involvement	3	13	4	16	N/A	N/A	4	16
(Poor) Mental Health	3	13	6	24	2	9	8	32
Other	3	13	7	28	2	9	5	20
(No) Hospitalizations	2	9	1	4	1	4	1	4
Taking Small Steps/Breaking Down the Goal	1	4	6	24	N/A	N/A	N/A	N/A

^a Mean (M) number of consumers or staff who mentioned success and failure processes.

^b Number of consumers or staff who mentioned the success or failure process.

^c Percentage of consumers or staff who mentioned the success or failure process.