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The Outcome Star: A tool for recovery orientated services; and, Exploring the use of the Outcome Star in a Recovery Orientated Mental Health Service

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The Outcome Star: A tool for recovery orientated services.

Exploring the use of the Outcome Star in a Recovery Orientated Mental Health Service

Emma-Louise Keen

A Report Submitted in Partial Fulfilment of the Requirements for the Award of

Bachelor of Science (Occupational Therapy) (Honours)

Faculty Computing, Health and Science,

Edith Cowan University

Submitted December 2010

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The Outcome Star: A tool for recovery orientated services

A literature Review

Emma-Louise Keen

The Outcome Star: A tool for recovery orientated services

Abstract

Objective

The primary objective of this review was to examine the Outcome Star and its utility as a tool for use in recovery oriented mental health services. The secondary objective was to examine similar instruments and their use within mental health services.

Methods

Electronic databases PsycInfo, CINAHL, Medline and Proquest were searched. Manual searches of reference lists of retrieved articles and specific journals were undertaken to identify research relevant to describing the structure and properties of the Outcome Star, and its use in mental health settings.

Results

A review of the literature revealed that there is a paucity of research examining both the psychometric properties and utility of the Outcome Star. As such a narrative review was possible. All research was limited to evidence level II and III. Preliminary findings were that the Outcome Star is effective in monitoring and facilitating change. In general researchers had obtained limited consumer feedback and input in relation to the use of the Outcome Star. As mental health services shift to provide recovery orientated practice, there is a need for outcome measures and assessment tools which support a recovery focus.

Conclusion

The Outcome Star possesses many of the aspects of recovery model: empowering clients to make change, seek supportive environments, promote inclusion, meaning and importance in relationships. With a stronger evidence base, it is possible that the Outcome Star will become adopted by many recovery orientated mental health services.

Keywords: Outcome Star, Recovery, mental illness, mental health services

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Literature review

Introduction

Mental health problems and mental illness are among the greatest cause of disability, reduced quality of life and reduced productivity in the developed world (Edmond, 2008; Jong-Wok, 2009). It is estimated that mental disorders cost national economies several billion dollars every year, both in direct and indirect costs (Jong-Wok, 2009). In 2007-2008 it was reported that approximately 11% of the Australian population had a diagnosis of a long term mental illness (Australian Bureau of Statistics, 2009b). Within Australia it is estimated that 1.9 million people access mental health services every year (Australian Bureau of Statistics, 2007). Clearly, mental health represents a significant public health issue to Australia.

In recent years providers of mental health services have become more focussed on the needs of consumers and need for evidence-based practice (Lloyd, King, & Bassett, 2005). Internationally, the recovery model has emerged as one approach to service delivery, which embraces consumer involvement (Meehan, King, Beavis, & Robinson, 2008). It has been described as a best-practice approach in the delivery of mental health services (Anthony, 2000). The Australian 2003-2008 National Mental Health Plan recognised this and advocated that services should aim to adopt a recovery orientation (Edmond, 2008).

A recovery focus to service provision is associated with fewer costs for both individuals and the community (Edmond, 2008). The recovery focus has been demonstrated to result in improved mental health outcomes for consumers such as fewer symptoms, improved coping strategies, and improved vocational and social outcomes (Mueser et al., 2002). Enabling individuals to better cope with their mental illness, results in reduced medical and pharmaceutical costs as well as a reduction health care service utilisation (Jong-Wok, 2009; Profitt, 2008). The recovery orientation supports individuals to develop an increased capacity to manage their illness, resulting in a reduction in symptoms and fewer relapses (Meehan, et al., 2008; Mueser, et al., 2002).

As clients develop these skills they rely less on mental health services and have fewer hospitalisations (Bedell, Hunter, & Corrigan, 1997).

A recovery orientation must be supported by appropriate policies and procedures (Anthony, 2000). As services adapt recovery orientated policies and procedures, there is a need for assessment tools and outcome measures which are also in keeping with recovery principles (Andresen, Caputi, & Oades, 2010; Schofield, 2006). These tools will provide a basis for evaluation and implementation of recovery services, programs and interventions (Anthony, 2000).

This paper aims to provide a review of literature concerning one such assessment tool, the Outcome Star. This paper will provide an overview of the recovery model as well as critically examine preliminary research findings of the Outcome Star. Additionally this review aims to describe the utility of the Outcome Star, and other commonly used outcome measures and assessments used within the field of mental health.

Theoretical framework

People who live with a mental illness have the same needs and wants as the rest of the population (Anthony, 1993). They wish to be valuable members of society, have stable accommodation, meaningful work, relationships, financial security, health and quality of life (Bond & Campbell, 2008; Rogers, Farkas, & Anthony, 2005). During the 1980s consumers of mental health services documented their experiences and described their ability to obtain these needs and wants in spite of mental health issues (Deegan, 1988; Leete, 1989; Peebles et al., 2007). These accounts formed the basis for a reorientation in models of service delivery in mental health which recognised the potential for people living with a mental illness to achieve better outcomes or recover (Anthony, Rogers, & Farkas, 2003; Farhall et al., 2007).

Recovery is founded on the premise that people living with a mental illness can and do recover (Anthony, 1993; Merryman & Riegel, 2007). A fundamental principle of the recovery model is the premise that recovery is “a way of living a satisfying, hopeful, and contributing life even within limitations caused by illness” (Anthony, 2000, p. 159). In many cases recovery not only involves recovery from the illness itself but from other factors such as stigma, the adverse effects of treatment settings, and the negative effects of unemployment and crushed dreams (Anthony, 1993; Bradshaw, Armour, & Roseborough, 2007; Tooth, Kalyanasundaram, & Glover, 1997). Recovery is a complex and individual process. It does not necessarily mean that the symptoms are removed or functioning is completely restored, but implies one can take charge of their life and evolve towards a new self (Anthony, 2000; Krupa & Clark, 2004; Piat, Sabetti, & Couture, 2009).

Recovery can and often does occur without professional intervention. It is not something that can be “done” to consumers, but rather is driven by the individual themselves and is a highly personal and unique journey (Mezzina, Borg, et al., 2006; Mezzina, Davidson, et al., 2006). An individual’s recovery journey is influenced by their surrounding physical, cultural, social and institutional environments (Davidson et al., 2005; Mezzina, Borg, et al., 2006; Mezzina, Davidson, et al., 2006). Recovery does not aim to cure, but rather enable a individual to live a fulfilling socially inclusive life (Ramon, Healy, & Renouf, 2007; Roberts & Wolfson, 2004).

A recovery orientation to service delivery involves organisations promoting and fostering recovery. For mental health services to adopt a recovery orientation they need to implement the elementary principles, and adopt policies, procedures and systems reflecting recovery (Anthony, 2000; Torrey & Wyzik, 2000). Recovery principles encourage services to communicate hope, assist consumers to develop the skills and knowledge to take personal responsibility, and to support consumers to engage in life beyond their illness (Krupa & Clark, 2004; Torrey & Wyzik, 2000). Although the

individual themselves is responsible for the recovery process mental health services can provide opportunities for it to occur (Meehan, et al., 2008).

Methodology

To review research examining the Outcome Star and to examine its utility as a tool for use in recovery oriented services the electronic databases PsycInfo, CINAHL, Medline and Proquest were searched. The main search terms were: Outcome Star, recovery or recovery orientation, mental illness, mental health services and assessments. Keywords were truncated and adjusted to suit the database and to optimise results. Manual searches of reference lists of retrieved articles and specific journals were undertaken to identify research relevant to describing the structure and properties of the Outcome Star, and its use in mental health settings. Articles were restricted to the English language. Due to the paucity of research on this subject all levels of evidence were included in this review (DePoy & Gitlin, 1998).

Background to the Outcome Star

In the United Kingdom the Outcome Star is the leading outcome measurement tool in the homelessness sector (Harper, 2004). In January 2010 a non-government organisation in Perth, Western Australia, St Bartholomew's House begun implementing the Outcome Star across all of its programs. These programs included homeless, aged care and mental health services (St. Bartholomews House: Reconnecting lives, 2010). St Bartholomew's House provides crisis, short-term and long-term community supported accommodation to nearly 100 individuals living with mental illness. They aim to provide mental health services in line with a recovery orientation to maintain or improve an individual's quality of life to enable them to successfully live within the community (St Bartholomew's House, 2010).

The Outcome Star was developed in 2003 by Triangle Consulting in conjunction with the London Housing Foundation and St Mungo's (Harper, 2004). It was originally developed as a tool to be used by housing services to monitor, track and support change in clients and to enable reporting of meaningful service outcomes to funding bodies

(Harper, 2004). The Outcome Star is designed to be used with a worker and a consumer to assess the domains of motivation and taking responsibility, physical health, mental health, self care, managing money, social networks, drug misuse, meaningful use of time, managing tenancy and offending (MacKeith, Burns, & Graham, 2008).

The Outcome Star has been described as having a dual purpose: a 'key worker tool' and data management. As a 'key worker tool' its main aim is to support, track and monitor an individual on their journey of change (MacKeith, et al., 2008). The star is completed with an individual and support plans and goals are developed. The Outcome Star allows the client to decide how they would like it to be administered; either alone, or with the support of a key worker. Clients are asked to identify where they are on a ladder of change in each of the 10 domains. These corresponding scores are then documented on the client's star chart. Upon completion of scoring, support and action plans are developed to aid in making changes. To monitor these changes reassessment of the Outcome Star is required (MacKeith, et al., 2008).

As a data management tool the Outcome Star enables service evaluation and improvement (MacKeith, et al., 2008). Change scores can be compared within and across organisations. Discrepancies in scoring can be identified and causal factors can be identified and investigated (MacKeith, et al., 2008). This can allow organisations to identify services in which progress and improvements are being seen and those where little progress is being made. Scores can also be provided to relevant funding or governing bodies in the form of outcomes. Traditionally service outputs have been measure in the form of number of beds used and days occupied (Larivière, Gélinas, Mazer, Tallant, & Paquette, 2006). The outcome star allows organisations to provide information as to progress made by clients for each of the domains of the Outcome Star.

The Outcome Star is supported by a customised online data management system , 'The Outcome Star System' (The Outcomes Star System, 2010). This system allows star

charts to be entered online, enabling individual progress to be recorded and monitored. This system also allows organisations to benchmark with other similar agencies. The Outcome Star is freely available from the Outcome Star website. This has ensured that the Outcome Star is available to organisations worldwide, regardless of geographical location or financial resources. The website also provides guides regarding staff training and implementing the star with clients. Currently the Outcome Star is only available in the English language (MacKeith, et al., 2008).

Preliminary research findings of the Outcome Star

Currently, there is a paucity of research examining the psychometric properties of the Outcome Star. To date three studies have examined the application of the Outcome Star, however, this has been exclusively with organisations providing services to homeless individuals in the United Kingdom. All research was limited to an evidence level of II or III (DePoy & Gitlin, 1998). Results may have been vulnerable to bias in two of the studies as they were conducted in partnership with Triangle Consulting, the developers of the tool.

In 2004 Harper using a mixed methods study examined the utility of the Outcome Star as a key worker tool at St Mungo's in London. St Mungo's provides supported, hostel accommodation to homeless people living in the United Kingdom (Thornton, 2009). Using quantitative data from 122 clients Harper aimed to describe individual change comparing clients' initial and follow-up Outcome Star scores. Participating clients included both long-term and short-term residents of St Mungo's. Follow-up scores demonstrated that nearly three quarters of clients improved, with 62% ($n = 75$) making clear progress, and 11% remaining stable. Overall, clients demonstrated greatest improvement in relation to accommodation and substance misuse, with those aged 21-45 and males reporting the greatest improvements in overall scores. In addition, participation in activities, outings and life skills was associated with more progress. Positive changes were noted to peak during the first 6-12 months of contact with St

Mungo's. Clients with alcohol and mental health issues were the least likely to improve (Harper, 2004).

The qualitative section of this study involved interviews with 18 hostel managers and workers (Harper, 2004). Findings suggested that the Outcome Star was useful in encouraging open and honest communication. It was also reported that the Outcome Star enabled clients to see themselves from an alternative perspective (Harper, 2004). Overall, this study was valuable in providing preliminary feedback on the utility of the Outcome Star from the perspective of workers and managers.

In 2008 Triangle Consulting conducted interviews with 25 managers of homeless organisations in the United Kingdom, who had successfully implemented the Outcome Star. This study aimed to investigate the impact of the Outcome Star on service delivery and explore the managers experience in implementing the Outcome Star (Burns, MacKeith, & Graham, 2008). Findings from this study indicated that the Outcome Star had a profound effect on services delivery; it empowered clients to be more involved in their rehabilitation, encouraged communication, aided in developing goals, and helped to identify and understand consumer needs. This research highlighted the importance of staff training and client involvement for successful implementation of the Outcome star. Formal training was also found to significantly impact on inter-rater reliability, consistency and accuracy of scoring (Burns, et al., 2008).

In 2009 the University of Wales Institute, Cardiff conducted a pilot study aimed at validating the Outcome Star as a data collection tool. A mixed methods design was utilised to investigate test-retest and inter-rater reliability (Boswell & Skillicorn, 2009). Thirty three front line staff completed two online case study scenarios and then participated in a focus group to discuss variances in scores. Result from this study indicated that scores varied between 3 to 5 points for each domain. It was found that organisations who had been using the Outcome Star for less than 3 months and who had

not received training showed the greatest variation in scores in comparison to services who had provided formal training and had been using the Outcome Star for longer than two years (Boswell & Skillicorn, 2009). Qualitative findings identified several issues in relation to administration of the Outcome Star including that it was difficult to use with hesitant clients, that it was not suitable to be used with everyone, and that it was at times contradictory, particularly in relation the domains of offending and drug and alcohol misuse.

Future research

Based on the paucity of research regarding the Outcome Star, research is needed in a variety of key areas. Further research is required to further understand the psychometric properties and usefulness of the Outcome Star in mental health settings. To date no research has focused solely on the Outcome Star's use within mental health services. Research is needed in a variety of settings with participants with a range of mental health diagnoses. There is a need for independent research to be conducted allowing for a non-biased evaluation of the Outcome Star. The majority of previous research has been in form of interviews, surveys and focus groups with an evidence level of no higher than III (DePoy & Gitlin, 1998). Further more rigorous research such as studies employing experimental and quasi-experimental design will allow for further examination of utility of the Outcome Star.

Previous research has sought feedback on the utility of the star at the organisational and managerial level, however further research is need which seeks feedback from consumers directly. Qualitative research examining the experience of clients in using the Outcome Star would enable valuable insights into the appropriateness of the Outcome Star and its use. This would also allow triangulation of clients and managers opinions.

Harper identified that clients least likely to improve were those with alcohol or mental health issues (Harper, 2004). Future research is required to investigate these findings and to develop possible causal hypotheses. This would enable organisations providing mental health services to develop a deeper understanding of their clients and expectations. This understanding could then inform the development of interventions targeted to meet the needs of these individuals.

The Outcome Star within the field of mental health services

Although the Outcome Star has been widely used within homeless services in the United Kingdom; to date no research examined the use of the Outcome Star solely within mental health services. Burns, MacKeith and Graham (2008) conducted research across 25 organisations using the Outcome Star. Of these 25 organisations they reported that seven were providing mental health services in some form. Further research is needed to ensure the Outcome Star is suitable to be used with a mental health population.

The Outcome Star was originally designed to be used with the housing and related services. As demand has grown, several specialised versions of the original Outcome Star have been developed. The Recovery Star (MacKeith & Burns, 2008) uses the original Outcome Star as a framework but includes domains such as managing mental health, trust and hope. Many clients seeking the help of mental health services have complex needs. In addition to a mental illness many experience complicating factors such as homelessness and addiction (Geczy & Cote, 2002). The original Outcome Star provides a good starting point for organisations that provide basic supportive mental health services, such as accommodation and vocational services. Services which have a rehabilitative focus may benefit more from using the more in-depth Recovery Star (MacKeith & Burns, 2008).

Comparison with other recovery and mental health tools

To justify the need for the use of the Outcome Star, it is necessary to compare it to similar tools being used within the field of mental health. Below is a review of some tools and assessments currently being used within community mental health, recovery and psychosocial rehabilitation services. This is not an exhaustive list but rather a comparative review.

The Manchester Care Assessment Schedule or MANCAS (Australian version 1.0), is a screening tool used within mental health and social care services to assess a clients capacities and needs in relation to their condition and treatment (Firth, Jenkinson, Rouen, & Sultan, 2007). It is required to be administered by a trained mental health professional and is administered using a conversational approach. It contains 20 domains such as self care, psychological health and safety to self/others which are required to be allocated a rating. Although administration involves the client, the score is determined by the mental health professional. An additional requirement of the MANCAS is 16 questions relating to demographics. Like the Outcome Star the MANCAS does allow for action plans to be developed as well as provide a comparison for scores between individuals and across services. However, evaluation has highlighted that the MANCAS can be lengthy and complicated, and that it can become a burden for both the client and staff member (Firth, et al., 2007). In comparison the Outcome Star may be more suited to community mental health services as it can be administer by relatively inexperienced staff and can be completed within a shorter time frame.

The Psychosocial Rehabilitation Toolkit (PSR Toolkit) uses psychosocial principles with a recovery focus to monitor a client's progress towards recovery (Kirsh, Krupa, Horgan, Kelly, & Carr, 2005). Its main aim is to measure changes in the lives of people with psychiatric disabilities (Arns, Rogers, Cook, & Mowbray, 2001). Similar to the Outcome Star, it can be easily used by organisations delivering a variety of programs. It also contains domains similar to the Outcome Star such as legal, residential and financial. Unlike the Outcome Star the majority of the toolkit is completed by the

worker, where as the Outcome star is completed by the consumers with the worker to facilitate. The PSR toolkit is designed simply to monitor progress; the Outcome Star also monitors progress, but can also be used as a tool to develop support plans, goals and interventions.

Another common assessment used by mental health services is the Canadian Occupational Performance Measure or COPM (Law, Baptiste, McColl, & Opzoomer, 1990). The COPM was developed with mental health as one of intended areas of application (Kirsh & Cockburn, 2009). It allows the client to select issues related to their situation, which are within the domains of self-care, productivity and leisure. The client then scores their performance and satisfaction in relation to each of these domains (Kirsh & Cockburn, 2009; McColl, Paterson, Davies, & Law, 2000). This assessment has a unique way of describing performance and satisfaction, and identifying client centred goals. These in turn inform intervention planning, and enable progress to be monitored. Because of the individualised nature of measurement outcomes COPM scores cannot be compared across individuals and or services. Scoring and use of the COPM can also be impacted by the clients' level of insight. It is recommended that the COPM is administered by an occupational therapist and therefore its use is limited to those services that employ an occupational therapist.

The Outcome Star and Recovery

Measures often used in mental health settings focus on a medical model of mental illness and do not support the vision of recovery (Baxter & Diehl, 1998). Based on accounts of consumer's experiences and literature Andreson (2006) drew the conclusion that there is a need for a model and a method of measuring a client on their recovery journey. It is possible the Outcome Star provides this method and enables a client to develop a deeper understanding of their recovery journey. As there are many links between the Outcome Star and the recovery model it is possible that it could be a method of facilitating and monitoring clients in their recovery.

Recovery is an ongoing process and journey during which a person is expected to have ups, downs, setbacks and periods of little change (Davidson & Roe, 2007; Rogers, et al., 2005; Tooth, et al., 1997). Symptoms and episodes can reoccur but this does not prevent recovery. However, as an individual recovers often the symptoms and frequency of episodes reduce (Gagne, White, & Anthony, 2007). The Outcome Star allows for assessment of this non-linear progression, as a client can be assessed to be moving in either direction. Further, capturing changes over time may enable a client to develop a deeper understanding as to why these changes have occurred and aid in identifying any patterns. Throughout this process it is important the client understands the nature of recovery and that this non-linear progression is normal (Tooth, et al., 1997).

Several theorists have described process models or stages of recovery. Although models differ they all have a similar end point; when a client has moved beyond their disability and is living a full and meaningful life (Andresen, et al., 2006; Merryman & Riegel, 2007). As demonstrated in Table 1 similarities are evident between the stages of recovery and the ladder of change as described in the Outcome Star (MacKeith, et al., 2008; Prochaska & DiClemente, 1982) The ladder of change identifies that there is often a pattern to change and that people move from feeling “stuck”, “to accepting of help”, to “believing”, to “learning” and finally to “self reliance” where as the stages of recovery involve a client moving from a moratorium stage, to awareness, preparation, rebuilding and finally the growth stage (Andresen, et al., 2006).

Model	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
The ladder of change	Stuck	Accepting of help	Believing	Learning	Self-reliance
Stages of recovery instrument	Moratorium	Awareness	Preparation	Rebuilding	Growth

Table 1: Comparison table of the ladder of change and stages of recovery instrument.

Conclusion

The Outcome Star is best described as a client centred, holistic tool designed to support and track change. It empowers clients to take action and make changes in their lives, improve role functioning, participation and inclusion. Additionally, the Outcome Star can also be used to as a tool for service evaluation and improvement. This allows organisations to have a dual purpose for implementing and using the Outcome Star.

Research to date suggests there are many positive aspects about the Outcome Star. It is versatile and can be used for a variety of purposes, it is easily administered and is cost effective. The Outcome Star can be widely used by any staff regardless of qualifications, skills and experience. As the Outcome Star is in its infancy, future research is required using a variety methodologies and focusing on a variety of aspects. As mental health services shift to provide recovery orientated practice, there is a need for outcome measure and assessments which are keeping with recovery principles. The Outcome Star possesses many of the aspects of recovery model: empowering clients to make change, seek supportive environments, promote inclusion, meaning and importance in relationships. With a stronger evidence base, it is possible that the Outcome Star will become adopted by many recovery orientated mental health services.

References

- Andresen, R., Caputi, P., & Oades, L. (2006). Stages of recovery instrument: development of a measure of recovery from serious mental illness. *Australian & New Zealand Journal of Psychiatry*, 40(11/12), 972-980.
- Andresen, R., Caputi, P., & Oades, L. G. (2010). Do clinical outcome measures assess consumer-defined recovery? *Psychiatry Research*, 177(3), 309-317.
- Anthony, W. A. (1993). Recovery from mental illness: The guiding vision of the mental health service system in the 1990s. *Psychosocial Rehabilitation Journal*, 16(4), 11-23.
- Anthony, W. A. (2000). A recovery-oriented service system: Setting some system level standards. *Psychiatric Rehabilitation Journal*, 24(2), 159-168.
- Anthony, W. A., Rogers, S. E., & Farkas, M. (2003). Research on evidence-based practices: Future directions in an era of recovery. *Community Mental Health Journal*, 39(2), 101-114.
- Arns, P., Rogers, E. S., Cook, J., & Mowbray, C. (2001). The IAPRS toolkit: Development, utility and relation to other performance measurement systems. *Psychiatric Rehabilitation Journal*, 25(1), 43-52.
- Australian Bureau of Statistics. (2007). National survey of mental health and wellbeing Retrieved March 21, 2010, from <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Latestproducts/4326.0Media%20Release12007?opendocument&tabname=Summary&prodno=4326.0&issue=2007&num=&view=>
- Australian Bureau of Statistics. (2009). National health survey: summary of results, 2007-2008 Retrieved March 17, 2010, from <http://www.abs.gov.au>
- Baxter, E. A., & Diehl, S. (1998). Emotional stages: Consumers and family members recovering from the trauma of mental illness. *Psychiatric Rehabilitation Journal*, 21, 349-355.
- Bedell, J. R., Hunter, R. H., & Corrigan, P. W. (1997). Current approaches to assessment and treatment of persons with serious mental illness. *Professional Psychology: Research and Practice*, 28(3), 217-228. doi: 10.1037/0735-7028.28.3.217

- Bond, G. R., & Campbell, K. (2008). Evidence-based practices for individuals with severe mental illness. *Journal of Rehabilitation, 74*(2), 33-44.
- Boswell, C., & Skillicorn, D. (2009). Validating the outcome star as a data collection tool. Cardiff: Univeristy of Wales institute.
- Bradshaw, W., Armour, M. P., & Roseborough, D. (2007). Finding a place in the world: the experience of recovery from severe mental illness. *Qualitative Social Work, 6*(1), 27-47.
- Burns, S., MacKeith, J., & Graham, K. (2008). Using the outcomes star: Impact and good practice. London: Triangle consulting.
- Davidson, L., Borg, M., Marin, I., Topor, A., Mezzina, R., & Sells, D. (2005). Processes of recovery in serious mental illness: Findings from a multinational study. *American Journal of Psychiatric Rehabilitation, 8*, 177-201.
- Davidson, L., & Roe, D. (2007). Recovery from versus recovery in serious mental illness: one strategy for lessening confusion plaguing recovery. *Journal of Mental Health, 16*(4), 459-470.
- Deegan, P. E. (1988). Recovery: The lived experience of rehabilitation. *Psychosocial Rehabilitation Journal, 11*(4), 11-19.
- DePoy, E., & Gitlin, L. N. (1998). *Introduction to research: Understanding and applying multiple strategies* (2nd ed.). Philadelphia: Mosby Inc.
- Edmond, W. (2008). National mental health plan 2003-2008. Canberra: Department of Health and Ageing.
- Farhall, J., Fossey, E., Keeble-Devlin, B., Meadows, G., Roberts, S., & Singh, B. (2007). Conceptual models used in mental health practice. In G. Meadows, B. Singh & M. Grigg (Eds.), *Mental health in Australia: collaborative community practice* (2nd ed., pp. 13-20). South Melbourne: Oxford.
- Firth, M., Jenkinson, S., Rouen, T., & Sultan, A. (2007). *MANCAS: Manchester care assessment schedule. Australian version 1.0*. England.
- Gagne, C., White, W., & Anthony, W. A. (2007). Recovery: A common vision for the fields of mental health and addictions. *Psychiatric Rehabilitation Journal, 31*(1), 32-37.
- Geczy, B., Jr., & Cote, M. (2002). Developing an inpatient practicum program for patients with serious and persistent mental illness. *Professional Psychology: Research and Practice, 33*(1), 80-87. doi: 10.1037/0735-7028.33.1.80

- Harper, L. (2004). First research results from the Outcome Star. London: St Mungos.
- Jong-Wok, I. (2009). Investing in mental health. Geneva: World Health Organisation.
- Kirsh, B., & Cockburn, L. (2009). The Canadian Occupational Performance Measure: A tool for recovery-based practice. *Psychiatric Rehabilitation Journal*, 32(3), 171-176.
- Kirsh, B., Krupa, T., Horgan, S., Kelly, D., & Carr, S. (2005). Making it better: Building evaluation capacity in community mental health. *Psychiatric Rehabilitation Journal*, 28(3), 234-241.
- Krupa, T., & Clark, C. (2004). Occupational therapy in the field of mental health: Promoting occupational perspectives on health and well-being. *The Canadian Journal of Occupational Therapy*, 71(2), 69-71.
- Larivière, N., Gélinas, I., Mazer, B., Tallant, B., & Paquette, I. (2006). Adjustment to community residential settings over time among older adults with serious mental illnesses. *Psychiatric Rehabilitation Journal*, 29(3), 189-196. doi: 10.2975/29.2006.189.196
- Law, M., Baptiste, S., McColl, M. A., & Opzoomer. (1990). The Canadian Occupational Performance Measure: An outcome measure for occupational therapy. *Canadian Journal of Occupational Therapy*, 57(2).
- Leete, E. (1989). How I percieve and manage my illness. *Schizophrenia Bulletin*, 15(2), 197-200.
- Lloyd, C., King, R., & Bassett, H. (2005). Occupational therapy and clinical research in mental health rehabilitation. *British Journal of Occupational Therapy*, 68(4), 172-176.
- MacKeith, J., & Burns, S. (2008). Mental health Recovery Star. London: Triangle Consulting.
- MacKeith, J., Burns, S., & Graham, K. (2008). The Outcome Star. London: London Housing Foundation and Triangle Consulting.
- McColl, M. A., Paterson, M., Davies, D., & Law, M. (2000). Validity and community utility of the Canadian Occupational Performance Measure. *Canadian Journal of Occupational Therapy*, 67(1), 22-30.
- Meehan, T. J., King, R. J., Beavis, P. H., & Robinson, J. D. (2008). Recovery-based practice: do we know what we mean or mean what we know? *Australian and New Zealand Journal of Psychiatry*, 42, 177-182.

- Merryman, M. B., & Riegel, S. K. (2007). The recovery process and people with serious mental illness living in the community: an occupational therapy perspective. *Occupational Therapy in Mental Health, 23*(2), 51-73.
- Mezzina, R., Borg, M., Marin, I., Sells, D., Topor, A., & Davidson, L. (2006). From participation to citizenship: how to regain a role, a status, and a life in the process of recovery. *American Journal of Psychiatric Rehabilitation, 9*(1), 39-61.
- Mezzina, R., Davidson, L., Borg, M., Marin, I., Topor, A., & Sells, D. (2006). The social nature of recovery: discussion and implications for practice. *American Journal of Psychiatric Rehabilitation, 9*(1), 63-80.
- Mueser, K. T., Corrigan, P. W., Hilton, D. W., Tanzman, B., Schaub, A., Gingerich, S., et al. (2002). Illness management and recovery: a review of the research. *Psychiatric Services, 53*(10), 1272-1284.
- Peebles, S. A., Mabe, A., Davidson, L., Frinks, L., Buckley, P. F., & Fenley, M. G. (2007). Recovery and systems transformation for schizophrenia. *Psychiatric Clinics of North America, 30*, 567-583.
- Piat, M., Sabetti, J., & Couture, A. (2009). What does recovery mean for me? Perspectives of Canadian mental health consumers. *Psychiatric Rehabilitation Journal, 32*(3), 199-207.
- Prochaska, J. O., & DiClemente, C. C. (1982). Transtheoretical therapy: Towards a more integrative model of change. *Psychotherapy Theory, Research, Practice, Training, 19*, 276-288.
- Profitt, K. P. (2008). Realigning for recovery. *Behavioral Healthcare, 28*(1), 20.
- Ramon, S., Healy, B., & Renouf, N. (2007). Recovery from mental illness as an emergent concept and practice in Australia and the UK. *International Journal of Social Psychiatry, 53*(2), 108-122.
- Roberts, G., & Wolfson, P. (2004). The rediscovery of recovery: open to all. *Advances in Psychiatric Treatment 10*, 37-49.
- Rogers, E. S., Farkas, M., & Anthony, W. A. (2005). Recovery from Severe Mental Illnesses and Evidence-Based Practice Research. In C. E. Stout & R. A. Hayes (Eds.), *The evidence-based practice: Methods, models, and tools for mental health professionals*. (pp. 199-219). Hoboken, NJ US: John Wiley & Sons Inc.
- Schofield, P. (2006). Measuring outcome in psychiatric rehabilitation. *British Journal of Occupational Therapy, 69*(10), 481-483.

St Bartholomew's House. (2010). Operational manual: Community supported residential units. Perth.

St. Bartholomews House: Reconnecting lives. (2010) Retrieved March 19, 2010, from <http://www.stbarts.org.au/>

The Outcomes Star System. (2010) Retrieved March 19, 2010, from <http://www.outcomesstarsystem.org.uk/>

Thornton, J. (2009). Down and out: St Mungos call for evidence report. London: St Mungo's.

Tooth, B. A., Kalyanasundaram, V., & Glover, H. (1997). Recovery from schizophrenia: A consumer perspective. Queensland: Centre for Mental Health Nursing Research.

Torrey, W. C., & Wyzik, P. (2000). The recovery vision as a service improvement guide for community mental health center providers. *Community Mental Health Journal*, 36(2), 209-216.

Appendix

PSYCHIATRIC REHABILITATION JOURNAL

Guidelines for Authors

Aims and Policies

Psychiatric Rehabilitation Journal is a peer-reviewed interdisciplinary journal published quarterly by the Center for Psychiatric Rehabilitation, [Sargent College of Health and Rehabilitation Sciences](#), Boston University in collaboration with the [US Psychiatric Rehabilitation Association \(USPRA\)](#).

The purpose of the *PRJ* is to encourage the dissemination and use of new knowledge in the practice of psychiatric rehabilitation. To that end, we strive to ensure that articles and brief reports published in the journal include implications for practice to promote the translation of research findings into practical applications for the field. The *PRJ* also promotes the USPRA goal of improving the quality of services designed to support positive community adjustment and integration. The *PRJ* gives priority to submissions that are clearly applicable to the development, administration and delivery of services. Articles include descriptive or exploratory studies; qualitative studies; pre-post evaluations of services; measurement development or testing; survey research; and quasi-experimental or randomized studies. Literature reviews and policy studies are also accepted for review.

The journal is intended for, and encourages the submission of manuscripts from all persons involved in psychiatric rehabilitation, including consumers, family members, and mental health and rehabilitation professionals. Brief reports and book reviews are also published. Authors are encouraged to review and use the [USPRA Language Guidelines](#) in article submissions.

Manuscripts are initially reviewed by the editors and then sent to members of the editorial board. Manuscripts are acknowledged upon receipt. Generally, it takes 2 to 3 months between acknowledgement of receipt and notification of disposition of a manuscript. Each author receives an individual copy of the *PRJ* upon publication.

Manuscript Requirements

Manuscripts not conforming to the following guidelines will be returned to the author without review.

Length/Word Counts. The *PRJ* reviews material for publication on condition that it has not been previously published, including electronic publication, and is not being reviewed for publication elsewhere. All manuscripts submitted as articles should not exceed 5,000 words; brief reports should not exceed 1500 words; and letters to the editor should be under 300 words. Word count includes references and tables.

Abstracts. Research manuscripts should include a structured abstract after the title page with the following information, under the headings indicated:

- *Objective:* the primary purpose of the article;
- *Methods:* data sources, subjects, design, measurement, data analysis;
- *Results:* key findings; and
- *Conclusions and Implications for Practice:* implications, future directions.

Article abstracts should not exceed 250 words. For brief reports, the limit is 150 words.

All theoretical manuscripts should include a structured abstract after the title page with the following information, under the headings indicated:

- *Topic:* in one sentence;
- *Purpose:* thesis or organizing construct and the scope of the article;
- *Sources used:* personal observation, published literature, etc.; and
- *Conclusions and Implications for Practice:* implications, future directions.

Key Words. Four (4) key words must be provided for both the print and online versions of the journal.

Biographical Information. Limited biographical information should include the degrees, titles, and affiliations for each author in two to three lines of text.

APA Style. All manuscripts and references must conform to the style set forth in the Publication Manual (6th ed.) of the American Psychological Association (<http://www.apastyle.org/>) also known as APA style. APA style is an editorial style that consists of rules or guidelines that the PRJ observes to ensure clear and consistent presentation of written material. APA style dictates uniform use of such elements as:

- selection of headings,
- construction of tables,
- citation of references,
- presentation of statistics, and
- punctuation and abbreviations.

Final Preparation. All manuscripts should be prepared for blind (masked) review (i.e., with title page free of author[s] name[s], and text free of obvious author-identifying references). Please supply with “track changes” and comments deleted. The entire manuscript, including quotations, footnotes, references, and tables, must be double-spaced. Use 12 point Times New Roman font with consistent headings and subheadings and omit underlining. Place all footnotes in the references at the end of the document. Tables and figures (graphs, illustrations, and line drawings) should be prepared without color and ready for production (See APA manual regarding the use, preparation, and reproduction of tables and figures). The Psychiatric Rehabilitation Journal reserves the right to change copy to conform to APA style.

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Exploring the use of the Outcome Star in a Recovery Orientated Mental Health Service

Emma-Louise Keen

Exploring the use of the Outcome Star in a Recovery Orientated Mental Health Service

Abstract

Objective

The objective of the present study was to investigate if the Outcome Star is an effective tool to record recovery related changes associated with individuals who live with a mental illness. A secondary objective was to gain insight into consumer's experiences and attitudes in relation to the Outcome Star.

Methods

This research study was conducted using a mixed methods design, and data was collected using a sequential exploratory design. Initially a pre-test post-test design was used with 4 participants with mental illness to examine change in Outcome Star scores following completion of the Modified Recovery Workbook Program. Qualitative data was obtained by means of a semi-structured interview following completion of the intervention. Quantitative data was analysed using the Wilcoxon Signed-Ranks Test and qualitative data was analysed using a thematic framework and constant comparative approach.

Results

Participants reported no statistically significant difference between initial and follow-up scores. Despite the absence of a statistical difference the sum of the positive ranks were higher than the sum of the negative ranks. Across each of the ten domains of the Outcome Star mixed results were documented, some domains had no change, while others had mixed results and one saw positive change across all participants. Data analysis of interviews revealed that participants found the overall experience of using the Outcome Star to be a positive one. They found it simple and easy to understand, liked its completeness and identified many ways in which it can be used to assist them. No areas for improvement or amendment were identified by respondents.

Conclusions

This research provided valuable insights into the consumers' experience and attitudes in relation to the Outcome Star. Although there was no statistical difference in Outcome Star scores following the Modified Recovery Workbook Program, three of the four participants saw improvements in their overall scores. Results from this study were limited by the small sample size. Future research using larger sample sizes and across a variety of services would provide a stronger evidence base for the Outcome Star.

Keywords: Outcome Star, Recovery, Mental Health Services, Assessment

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Submitted: December 2010

Introduction

In Australia approximately one in five people aged between 18-65 reported a diagnosis of a mental disorder and one in two will experience a mental illness at some time in their life (Australian Bureau of Statistics, 2009a). It is estimated that mental illness costs 20 billion dollars every year in health care costs, loss of productivity and reduced participation in the work force (Australian Bureau of Statistics, 2009a; Jong-Wok, 2009). The 2008 national mental health policy ensures continual improvement of the mental health services provided to those who live with a mental illness in Australia. The policy ensures the mental health system promotes early intervention, access to effective and appropriate treatment and recovery (Edmond, 2008).

Those who live with a mental illness have the potential to live meaningful productive lives or recover regardless of the impact of their illness (Anthony, 1993). The concept of recovery emerged during the 1990's from consumers' experiences and research (Deegan, 1988; Leete, 1989). In order for mental health services to facilitate consumers on their recovery they need to implement the fundamental principles of recovery. These principles encourage services to communicate hope, and assist consumers to develop skills and knowledge to take responsibility, and to support consumers to continue with life beyond their illness (Krupa & Clark, 2004; Torrey & Wyzik, 2000).

Literature outlines that there is a need for community mental health services to create opportunities for recovery (Krupa & Clark, 2004; Torrey & Wyzik, 2000). A recovery focus to service provision will not only improve mental health outcomes for consumers, but will also reduce medical and pharmaceutical costs as well as a reduction health care service utilisation (Bedell, et al., 1997; Jong-Wok, 2009; Profitt, 2008). As services shift towards a recovery orientation, there is a need for outcome measures that not only support clients but are consistent with the recovery perspective (Kirsh & Cockburn, 2009). In January of 2010, a non-government organisation in Perth Western Australia, began implementing the Outcome Star across all of its services, with the hope that the Outcome Star could be one such outcome measure.

The Outcome Star was developed in 2003 by Triangle Consulting in conjunction with the London Housing Corporation and St. Mungo's (Burns, et al., 2008). The aim was to design a tool that could be used by housing services to monitor track and support change in their clients' while providing a meaningful measure of service outcomes to governing bodies (MacKeith, et al., 2008). Today in the United Kingdom the Outcome Star is the leading outcome measurement tool in the homeless sector (Harper, 2004).

As the Outcome Star is a relatively new tool limited research has explored its use. The research so far has yielded positive results (Boswell & Skillicorn, 2009; Burns, et al., 2008; Harper, 2004). Preliminary findings suggest the outcome star is a valid tool to monitor and facilitate change with consumers. Workers at homeless organisations in the United Kingdom suggested the Outcome Star encouraged open communication and empowered clients to be more active in their rehabilitation (Harper, 2004). Formal training was found to be important in improving inter-rater reliability (Boswell & Skillicorn, 2009; Burns, et al., 2008). To date no research has aimed to seek feedback from a client's perspective and no research has been conducted with a sample solely of people living with a mental illness.

Purpose of the Present Study

The primary objective of the present study was to investigate if the Outcome Star is an effective tool to record recovery related changes associated in individuals living with a mental illness. A secondary objective was to gain insight into consumers' experiences and attitudes in relation to the Outcome Star.

Methods

Design

This research used a mixed methods design, a method characterised by the inclusion of both qualitative and quantitative techniques, methods, approaches and concepts (Johnson & Onwuegbuzie, 2004). This approach was chosen to enable the researcher to develop an understanding of both the utility of the Outcome Star and to explore client

perspectives. This approach allowed the researcher to draw on the strengths of each design and to develop a deeper understanding of the quantitative results from the supporting qualitative findings (Connelly, 2009; Onwuegbuzie, Slate, Leech, & Collins, 2009). The data was collected sequentially; quantitative followed by qualitative. The integration of the results occurred in the final phase of this research. This approach is referred to as sequential explanatory design (Corcoran, 2006; Creswell, 2009).

The quantitative study employed a one group pre-test post-test design. The intervention, the Modified Recovery Workbook Program (MRWP), was completed in full, but the time frame in which it was completed was modified (Spaniol, Koehler, & Hutchinson, 2009). The program was conducted in a group setting and consisted of six sessions which ran for approximately one hour, twice per week. The six sessions of the program focused on six key topics; recovery, increasing knowledge and control, managing life's stresses, enhancing personal meaning, building personal support and setting personal goals. In 2009 a randomised control trial was conducted to examine the effectiveness of the MRWP. This study indicated that it was effective in facilitating recovery, significantly increasing personal confidence, hope and empowerment (Barbic, Krupa, & Armstrong, 2009).

The qualitative study consisted of a semi-structured interview. This method was chosen to develop a better understanding of the Outcome Star from the participant's perspective (King & Horrocks, 2010). The flexible approach of a semi-structured interview allowed the researcher to further explore and ask new questions dependent on the interviewee's response, therefore developing a richness of information (King & Horrocks, 2010).

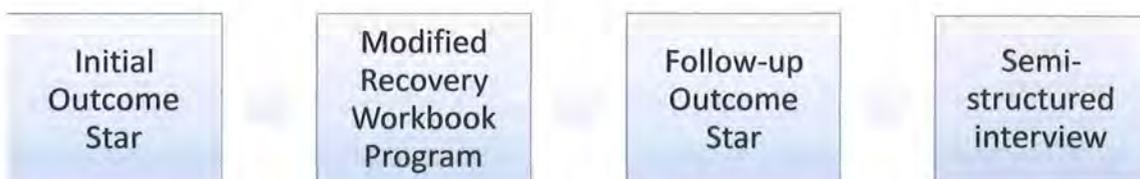


Figure 1: Method for data Collection

Participants

Participants for this study were recruited from a Community Supported Residential Unit (CSRU) operated by St Bartholomew's House in Western Australia. The CSRU aims to provide medium to long term accommodation for people living with a mental illness who require two to four hours of support each day in order to live independently in the community (St. Bartholomews House: Reconnecting lives, 2010). The CSRU program has a commitment to the recovery model of service delivery (St Bartholomew's House, 2010). Residents were recruited by means of convenience and purposive sampling (DePoy & Gitlin, 1998; Fox, Hunn, & Mathers, 2007). Residents were required to have resided at the CSRU for a minimum of four weeks and were excluded if they have a co-occurring diagnosis of an intellectual disability or were determined to have an unstable psychological status. An unstable psychological status was concluded if a resident had a recent hospital admission or was showing signs of becoming unwell.

Throughout the research process the researcher was employed at this CSRU as a Support Worker. This facilitated the development of rapport with the participants prior to commencement of the research. This had the ability to limit participation, but rather it seemed to encourage open and honest participation. Participants were informed prior to commencement of the research and that declining to participate in the study would in no way affect the services they received from St. Bartholomew's house.

Ethics and consent

This study was conducted in accordance with the ethical guidelines as outlined in the National Statement on Ethical Conduct in Human Research (National Health and Medical Research Council, 2007). Ethical approval for this study was granted by the Human Research Ethics Committee at Edith Cowan University, Western Australia. All participants were provided with an information letter and informed consent was gained prior to data collection. All documents were stored in a secure filing cabinet within the researcher's home or password protected on the researcher's laptop. Pseudonyms are used in the presentation of all findings and to protect anonymity all identifying data has been omitted.

Data Collection

Quantitative

Quantitative data was collected over a period of five weeks using the Outcome Star at two time points: baseline (pre-test) and immediately after the completion of the MRWP (post-test). Completion of the Outcome Star took between 30 minutes and one hour. The Outcome Star was developed to monitor and track change with clients, it involves the client allocating a score from one to ten for each of the Outcome Stars ten domains (MacKeith, et al., 2008). The ten domains of the Outcome Star include motivation and taking responsibility, physical health, mental health, self care, managing money, social networks, drug misuse, meaningful use of time, managing tenancy and offending. For each domain a score of one represents a client feeling “stuck” and unwilling to accept help or change, and a score of 10 represents a client feeling self reliant in that particular domain (MacKeith, et al., 2008). Research examining the psychometric properties of the Outcome Star is limited, however it has been demonstrated to have acceptable validity and reliability (Boswell & Skillicorn, 2009; Burns, et al., 2008).

Qualitative

Upon completion of the post-test Outcome Star, semi-structured interviews were conducted with each participant. Interviews took place within a participant’s private unit at St Bartholomew’s House. An interview guide was developed to guide the interview and participants were asked at times to expand or provide examples in accordance with their responses. Interviews were digitally recorded with permission from the participants and lasted for no longer than 30 minutes. Interviews were transcribed verbatim, de-identified and securely stored on the researcher’s computer.

Data analysis

Quantitative

Quantitative data was entered into SPSS version 17.0. and analysed using the Wilcoxon Signed-Ranks Test. This allowed for investigation of the direction and relative difference in scores prior to and following the MRWP (Portney & Watkins, 2000).

Qualitative

A thematic method of data analysis and an iterative framework was used to analyse qualitative data (Glaser & Strauss, 1996). A thematic method involved a low technology approach of reading through transcribed interviews and identifying themes (Lacey & Luff, 2007). An iterative framework was used to aid in developing themes. This involved the researcher observing, interviewing, transcribing and reflecting each interview before commencing the next. This enabled the researcher to develop themes throughout the interview process to aid in exploring these in subsequent interviews (King & Horrocks, 2010; Peacock & Paul-Ward, 2006).

Maintaining rigour

To ensure trustworthiness a research journal was maintained throughout the data analysis and data collection processes, this ensured credibility of the data. An audit trail was maintained throughout enabling the researcher to reflect on the process and ensure dependability of results (Krefting, 1991). Following analysis member checks were performed with all participants to ensure data collected was a true representation of the participants' perceptions (DePoy & Gitlin, 1998). An academic supervisor was asked to verify the accuracy of the thematic analysis process; no modifications were required to be made.

Results

Participant Characteristics

Eighteen residents met the inclusion exclusion criteria, of these six declined to participate and seven were unable to participate due to other commitments. Five CSRU residents, all female, agreed to participate. One of these five participants later withdrew from both the quantitative and qualitative sections of the study. Another participant withdrew from the qualitative section; three participants completed both the quantitative and qualitative sections of the research. Participants' ages ranged from 24-51 years (mean= 39.5 years). Two participants had a diagnosis of schizophrenia, one had a diagnosis of a personality disorder, and one a dual diagnosis of major depression and personality disorder.

Quantitative results

In order to test the null hypothesis that there was no significant difference between the initial and follow-up scores as measured by the Outcome Star a Wilcoxon Signed Ranks Test was conducted. This showed that there was no statistically significant difference between initial and follow-up scores ($Z = -1.473$, $p = 0.1408$). Despite the absence of a statistical difference the sum of the positive ranks were higher than the sum of the negative ranks (See Table 1)

	N	Mean Rank	Sum of ranks
Negative ranks	1	1	1
Positive ranks	3	3	9
Ties	0		
Total	4		

Table 1: Wilcoxon Signed Ranks Test Results

In the domains of self care/living skills, managing money, managing tenancy/accommodation and offending participants reported no changes in Outcome Star scores between initial to follow-up data collection. In the domains of motivation/taking responsibility, drug and alcohol misuse, physical health, meaningful use of time and emotional and mental health participants reported both positive and negative changes. In the domain of social networks and relationships all participants reported positive changes ranging from one to seven.

Qualitative findings

From the semi-structured interviews three main themes emerged regarding participants' thoughts and perceptions of the Outcome Star. The three themes described the utility, the clients' opinions regarding the completeness, and purpose of the Outcome Star. Major findings are presented according to these three themes.

*Theme 1: Utility**Layout*

Participants commonly described the importance of ease of use and clarity in determining their willingness to use the Outcome Star. Participants liked the use of both visual and written cues which helped them to quickly understand the scoring method. Respondents also indicated that the use of short explanations with additional longer written explanations on one page helped them to easily identify where they felt they were on the ladder of change. One of the respondents Debra who lives with depression and a personality disorder described the star as:

Covering the ten basic areas, and being able to give us a score out of one to ten, having it documented underneath and printed out which number from one to ten I would choose. I also found it very helpful to have shorter explanation and follow through onto longer explanations on the next page.

Lucy a resident living with schizophrenia indicated she preferred to simply read each explanation and found this a more useful way of using the tool:

It was [easy to understand] by reading it was perfect.

These findings support those of Burns (2008), who reported that consumers liked the clear visual presentation of the outcome star and found the language it used to be plain and simple. However, these findings stand in contrast with those of Boswell and Skillicorn (2009) who reported the wording and ladders of the Outcome Star were at times confusing and contradictory for clients. Overall the four participants in this study found the Outcome Star simple and easy to use and reported no difficulties or recommendations for improvement.

Scoring

Respondents described their experience of scoring themselves on a scale from one to ten. Two of the participants found this to be a positive experience, enabling them to identify where they felt they were in their recovery journey. Pauline a resident living with schizophrenia described her positive experience:

I thought it was pretty good...I suppose anything like that gives you a rough idea... of where you're at and you don't normally question it all the time, so when questioned you have to think about where you're at...so it makes you more self aware.

In contrast, one participant reported that they found the scoring process challenging and daunting. This appeared to link with the experience of 'slipping backwards' or feeling that they were not doing so well in certain domains. As Debra explained:

For me the only issue was the fact that if I'm talking about my health it reminds me of where I am or am not at the moment and that can be slightly confronting but it's also the truth so I've got to deal with that

Theme 2: Completeness

For participants the completeness of the Outcome Star was central. Respondents acknowledged they liked the holistic view it took of where they were and how it supported discussion in relation to all areas of their lives. No suggestions for other domains or areas to be covered by the outcome star were identified. As Debra explained:

I was happy with the way it covers every single aspect of my life... I couldn't think of another question you could of had, I think it covered absolutely everything... it's a really positive thing to be doing, like I said the holistic approach mind, body and soul, I think that's wonderful

This finding supports that of Burns (2008), who described the Outcome Star as using a person centred and holistic approach. He described the assessment process as being consumer focused and resulting in workers looking at the whole person not just the problems. For participants in this current study, completing the Outcome Star was described as a positive experience which was largely attributed to its holistic view of the person.

Theme 3: Purpose

Respondents provided insight into what they saw as the purpose of the Outcome Star's and how it had or could be used to support them on their recovery journey. Participant responses reflected mixed opinions on this theme. Two main purposes were described both were similar in that the ultimate goal was to positively assist and understand clients. Firstly the purpose of the Outcome Star was described by participants as a tool to help identify how they are managing and to provide a guide and direction for improvement. Lucy explained:

It's very good...It shows me where I'm at...and leaves room for improvement.

Secondly the Outcome Star was seen as an organisational tool to evaluate and monitor individuals on their recovery journey. It was also seen as allowing the organisation to better understand their clients and their unique circumstances. Pauline explained:

[It's purpose is] to evaluate where tenants are at in their recovery from mental disorders.

When asked what she believed the purpose of the Outcome Star was Debra Explained:

To better deal with their clients to have a deeper understanding of where people are and where they're coming from. From independence to dependence, mental

health, physical health, spiritual health...it's something that needs to be constantly looked at I think, as the ways of our world change.

Boswell and Skillicorn (2009) noted the importance of informing consumers about the purpose of the Outcome Star to encourage engagement. In the current study the participants identified varied purposes for the Outcome Star. Further education regarding the purpose of the Outcome Star may be required with clients of St Bartholomew's House.

Discussion

This study aimed to examine if Outcome Star was an effective tool to record recovery related changes in an individual living with a mental illness. Results from the quantitative study indicated that participation in the MRWP saw improvements in Outcome Star scores, although change scores did not reach statistical significance. This study found that three participants reported positive changes in their total Outcome Star scores and one experienced a slight reduction in her overall score. Although preliminary these findings suggest that the Outcome Star is sufficiently sensitive to record change following participation in a recovery orientated intervention. It can be argued that the participant that experienced a reduction in her total score could have developed increased awareness and insight as a result of completing the MRWP.

One major area targeted by the MRWP is building personal supports. Following participation in the program all participants reported improvements in their Outcome Star scores in the domain of social networks and relationships. A strong healthy support system is an important part of the recovery process strengthening resilience and independence (Spaniol, et al., 2009). Improvement in this domain following the MRWP suggests that the Outcome Star is able to capture positive changes in this domain. In contrast to this finding, the domains of self care/living skills, managing money, managing tenancy/accommodation and offending did not record any changes following the MRWP. These domains were not covered by the MRWP and are areas where change is more likely to occur over a longer period of time. Future research using a

longitudinal methodology including a sample of participants with a diverse range of diagnoses and circumstances may gain further insight into these scores domains.

In the domains of motivation/taking responsibility, drug and alcohol misuse, physical health, meaningful use of time and emotional and mental health participants reported both positive and negative changes. As previously described recovery is a non linear process; a person is expected to have ups, downs, setbacks and periods of little change (Davidson & Roe, 2007; Rogers, et al., 2005). Findings from the present study suggest that the Outcome Star may have particular utility in capturing the non-linear nature of the recovery process. Supporting clients to monitor and track fluctuations over time may allow them to develop a deeper understanding of causative factors and to help identify patterns over time.

Findings from this study have important implications for future research examining the use and implementation of the Outcome Star. One respondent identified that the scoring process was challenging. It is important that the workers using the Outcome Star are aware that this process could be daunting and difficult for the client. Providing the client with appropriate support may help them through this; this may include informing the client's case manager and receiving feedback from the client to see how they feel about their Outcome Star scores.

Qualitative data revealed that participants held mixed opinions in relation to the purpose of the Outcome Star. This finding highlighted the importance of ensuring that the purpose of the Outcome Star is clearly explained to clients prior to their initial interview. A clearer understanding of its purpose may encourage clients to be more open and honest in their responses and maximise the utility of the Outcome Star as a tool which supports recovery.

Limitations

Although this research has provided important first insights into the utility of the Outcome Star in a sample of people living with a mental illness findings must be interpreted in the context of several limitations. As there is a paucity of research about the Outcome Star the ability to compare findings from this study was limited. Findings from this study were compared to research undertaken with people receiving services from homeless organisations and qualitative data collected from employees of these organisations.

Mental illness has been known to impact on an individual's motivation, this can be due to dynamic energy, physical and emotional factors (Wood, Allen, & Pantelis, 2009). This had the potential to affect the willingness of residents at the CSRU to participate in this study. Six residents declined to participate in the research and two later withdrew from the study. Residents/participants were not required to provide a reason for declining to participate or withdrawing. Therefore the sample in this study may have been prone to selection bias.

Transferability refers to the ability for results to be transferred or generalised to other settings or contexts (Glausser & Strauss, 1996; Krefting, 1991). Due to the short time frame of the research recruiting a large sample was not feasible, this limits the ability for results to be generalised to other settings. Also due to the limited time frame available for research the Recovery Workbook program was not completed in the recommended time frame but rather in six sessions of one hour and in the clients own time. This meant there was less time for discussion and activities which had the potential to impact the overall effectiveness of the program.

Conclusion

This study found that following participation in the MRWP, three of the four participants reported improvement in their overall Outcome Star scores. However, this difference was not statistically significant. Prior to this research no study had directly sought consumer feedback in relation to the Outcome Star; therefore valuable insight into the consumers' experience and attitudes about using the Outcome Star was gained. Participants identified that the Outcome Star was simple and easy to use, they liked the holistic view it took of them and identified many benefits of its use. Within the field of mental health services there is a need for outcomes measures consistent with the recovery perspective, the Outcome Star should be considered as one such outcome measure.

References

- Anthony, W. A. (1993). Recovery from mental illness: The guiding vision of the mental health service system in the 1990s. *Psychosocial Rehabilitation Journal*, 16(4), 11-23.
- Australian Bureau of Statistics. (2009). *Australian social trends*.
- Barbic, S., Krupa, T., & Armstrong, I. (2009). A randomized controlled trial of the effectiveness of a modified recovery workbook program: preliminary findings. *Psychiatric Services*, 60(4), 491.
- Boswell, C., & Skillicorn, D. (2009). Validating the Outcome Star as a data collection tool. Cardiff: University of Wales Institute.
- Burns, S., MacKeith, J., & Graham, K. (2008). Using the Outcome Star: Impact and good practice. London: Triangle Consulting.
- Connelly, L. M. (2009). Mixed methods studies. *Medsurg Nursing*, 18(1).
- Corcoran, M. A. (2006). Using mixed methods designs to study therapy and its outcomes. In G. Kielhofner (Ed.), *Research in occupational therapy: Methods of inquiry for enhancing practice* (pp. 411-419). Philadelphia: F.A. Davis Company.
- Creswell, J. W. (2009). *Research Design: qualitative, quantitative, and mixed methods approaches* (3rd ed.). California: Sage Publications.
- Davidson, L., & Roe, D. (2007). Recovery from versus recovery in serious mental illness: one strategy for lessening confusion plaguing recovery. *Journal of Mental Health*, 16(4), 459-470.
- Deegan, P. E. (1988). Recovery: The lived experience of rehabilitation. *Psychosocial Rehabilitation Journal*, 11(4), 11-19.
- DePoy, E., & Gitlin, L. N. (1998). *Introduction to research: Understanding and applying multiple strategies* (2nd ed.). Philadelphia: Mosby Inc.
- Edmond, W. (2008). National mental health plan 2003-2008. Canberra: Department of Health and Ageing.

- Fox, N., Hunn, A., & Mathers, N. (2007). Sampling and sample size calculation: Trent RDSU.
- Glaser, B. G., & Strauss, A. L. (1996). The purpose and credibility of qualitative research. *Nursing Research*, 15(1), 56-61.
- Harper, L. (2004). First research results from the Outcome Star. London: St Mungos.
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: a research paradigm whose time has come. *Educational Researcher*, 33(7), 14-26.
- Jong-Wok, I. (2009). Investing in mental health. Geneva: World Health Organisation.
- King, N., & Horrocks, C. (2010). *Interviews in qualitative research*. London: Sage Publications.
- Kirsh, B., & Cockburn, L. (2009). The Canadian Occupational Performance Measure: A tool for recovery-based practice. *Psychiatric Rehabilitation Journal*, 32(3), 171-176.
- Krefting, L. (1991). Rigor in qualitative research: The assessment of trustworthiness. *The American Journal of Occupational Therapy*, 45(3), 214-222.
- Krupa, T., & Clark, C. (2004). Occupational therapy in the field of mental health: Promoting occupational perspectives on health and well-being. *The Canadian Journal of Occupational Therapy*, 71(2), 69-71.
- Lacey, A., & Luff, D. (2007). Qualitative data analysis. Sheffield: Trent RDSU.
- Leete, E. (1989). How I perceive and manage my illness. *Schizophrenia Bulletin*, 15(2), 197-200.
- MacKeith, J., Burns, S., & Graham, K. (2008). The Outcome Star. London: London Housing Foundation and Triangle Consulting.
- National Health and Medical Research Council. (2007). National statement on ethical conduct in human research. Retrieved from www.nhmrc.gov.au/publications
- Onwuegbuzie, A. J., Slate, J. R., Leech, N. L., & Collins, K. M. T. (2009). Mixed data analysis: Advanced integration techniques. *International Journal of Multiple Research Approaches*, 3(1), 13-33.

- Peacock, N., & Paul-Ward, A. (2006). Contemporary tools for managing and analysing qualitative data. In G. Kielhofner (Ed.), *Research in occupational therapy: Methods of inquiry for enhancing practice* (pp. 358-371). Philadelphia: F.A. Davis Company.
- Portney, L. G., & Watkins, M. P. (2000). *Foundations of clinical research: Applications to practice* (2nd ed.). New Jersey: Prentice Hall Health.
- Profitt, K. P. (2008). Realigning for recovery. *Behavioral Healthcare*, 28(1), 20.
- Rogers, E. S., Farkas, M., & Anthony, W. A. (2005). Recovery from Severe Mental Illnesses and Evidence-Based Practice Research. In C. E. Stout & R. A. Hayes (Eds.), *The evidence-based practice: Methods, models, and tools for mental health professionals*. (pp. 199-219). Hoboken, NJ US: John Wiley & Sons Inc.
- Spaniol, L., Koehler, M., & Hutchinson, D. (2009). *The recovery workbook: Practical coping and empowerment strategies for people with psychiatric disability* (Revised ed.). Boston: Boston Centre For Psychiatric Rehabilitation.
- St Bartholomew's House. (2010). Operational manual: Community supported residential units. Perth.
- St. Bartholomews House: Reconnecting lives. (2010) Retrieved March 19, 2010, from <http://www.stbarts.org.au/>
- Torrey, W. C., & Wyzik, p. (2000). The recovery vision as a service improvement guide for community mental health center providers. *Community Mental Health Journal*, 36(2), 209-216.
- Wood, S. J., Allen, N. B., & Pantelis, C. (2009). *The neuropsychology of mental illness*. Cambridge: Cambridge University press.

Appendix A: Interview Guide

Introduction

- Welcome
- Explain purpose of the interview
- Address confidentiality
- Explain recording equipment

Interview

1. How many Outcome Star assessments have you had completed?
2. Why do you think St Barts are using the Outcome Star? (What is its purpose)
- 3.
4. What do you think about the Outcome Star Assessment?
Was it easy to understand?
Was there anything that you didn't understand?
Can you give me an example?
5. What did you like/dislike most about the assessment?
Examples?
6. Do you think it has/ will help you?
How?
7. Is there anything you would like to change about it?
Examples?
Recommendations?
8. Do you have anything else you would like to say about the Outcome Star?

Explore theme brought up in any previous interviews

Conclusion

Sum up findings

Appendix B: Guidelines for Authors: Psychiatric Rehabilitation Journal

The research report will be submitted to the same journal as the literature review. Please refer to pages 23-25 for the submission guidelines.