Reasons for Use Package: Outcomes From a Case Comparison Evaluation

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Abstract
The objective was to explore the efficacy of a dual diagnosis resource—the Reasons For Use Package (RFUP)—to build staff capacity to work with service users and explore service user experiences. A two-state case comparison evaluation was conducted employing a mixed methods action research design, utilizing staff and service user surveys combined with focus groups involving staff trained and mentored in use of the RFUP. Results were that both staff and service users responded positively to the RFUP. Staff self-reported improvements in knowledge and confidence, and service users reported the RFUP assisted them with reflecting on interactions between their mental health and substance use; this assisted them with goal planning and improved their working relationship with staff. Implications were that training and mentoring in the RFUP can contribute to building staff knowledge and confidence in dual diagnosis interventions in mental health community services, and benefit service users.

Keywords
addictions, field of practice, mental health, case control study, outcome study, mixed methods, dual diagnosis

Service users who experience mental health issues frequently also have substance use issues (Meque et al., 2019). This is likely to be the “exception not the exception” (Minkoff & Cline, 2005) and indeed is often associated with other complex presentations such as physical health problems. There is not a homogenous group but there are some common themes.

In this article, the term “dual diagnosis” is used as two of the authors are associated with the Victorian Dual Diagnosis Initiative (VDDI). This term, however, is neither the best nor the only descriptor. Other phrases such as comorbid, co-occurring, and so on, appear in the literature that is cited in this article. This article specifically explores quantitative data collected during a two-state case comparison evaluation of a dual diagnosis resource called the Reasons For Use Package (RFUP) and its efficacy for building staff knowledge and confidence in dual diagnosis interventions. The experiences of service users who were involved in a national comparison trial have also been gathered through mixed methods data collection (Myers, Kroes, O’Connor, & Petrakis, 2018).

Background Literature
This article and research is informed by international literature regarding the extent of comorbidity experienced by people suffering from mental illness and using alcohol and other drugs (AODs), and the problems with parallel treatment systems (Drake et al., 1998), and findings from overseas (SAMHSA, 2002). There is a large body of literature going back over 30 years both in Australia and internationally, which explores dual diagnosis. Seminal texts in Australia include McDermott and Pyett (1993) “Not welcome anywhere,” which highlighted the systemic issues relating to siloed service design which had a negative impact on these service users who often fell through the gaps. The report also argued that approaches which operated within the philosophy of harm minimization showed promise. Australian and international literature is extensive in terms of identifying the prevalence and problems associated with service responses to service users with dual diagnosis issues. A 2010 article looking at the global burden of disease for mental health and substance use disorders in The Lancet interpreted the data as follows:

Mental and substance use disorders are major contributors to the global burden of disease and their contribution is rising, especially in developing countries. Cost-effective interventions are available for most disorders but adequate financial and human resources are

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needed to deliver these interventions. Mental health policy and services research is necessary to identify more effective ways to provide sustainable mental health services, especially in resource-constrained environments, if the burden of mental and substance use disorders is to be reduced. (Whiteford et al., 2013, p. 1583)

Systematic Literature Review
As part of this research study, a systematic literature review was conducted in 2015, which looked at literature regarding approaches to staff training in dual diagnosis competencies. Some of the key themes emerging included the following point, “In particular there is limited literature regarding the efficacy of dual diagnosis competency resources, and a gap as to use of the mentoring in dual diagnosis capacity building” (Petrakis et al., 2018, p. 53).

Australian Dual Diagnosis Initiatives
At a national level in Australia, in the late 1990s, the National Drug Strategy and National Mental Health Strategy developed the “National Comorbidity Project” (Teesson & Burns, 2001). The VDDI, of which the capacity building service in the current study is a component part, commenced in 2000. Similar initiatives were developed in other states in Australia (New South Wales Health, 2000; Pennebaker et al., 2001).

The purpose of the VDDI is to promote development of a systematic and integrated approach to service provision, so that people of any age experiencing dual diagnosis have prompt access to quality treatment and support, focused on recovery and optimizing individual outcomes. The intention has been to provide a coordinated hierarchy of client-centered service responses that respond to varying levels and complexity of need. Dual diagnosis should be managed early in the most appropriate service setting, with clear referral pathways in place. The emphasis has been that through the VDDI, services provide a balance of direct care and consultation and support to primary care and other sectors working with people experiencing dual diagnosis (which would include housing, employment, education, and community organizations). The priorities included that service users and families/carers were to be involved in policy and service development both centrally and locally to enable services to be easier to use, seen as useful and aligned with their needs.

Policy Directions to Address Dual Diagnosis in Victoria, Australia
In Victoria, Australia, in 2007, the state government released a report: “Key directions and priorities for service development.” There are five key directions/priorities identified in this document:

1. Dual diagnosis is systematically identified and responded to in a timely, evidence-based manner as core business in both mental health and drug and alcohol services.
2. Staff in mental health and AOD services are “dual diagnosis capable,” that is, they have the knowledge and skills necessary to identify and respond appropriately to dual diagnosis clients, and advanced practitioners can provide integrated treatment and care.
3. Specialist mental health and AOD services establish effective partnerships and agreed mechanisms that support integrated treatment and care.
4. Working with dual diagnosis as core business within each sector will ensure that people of all ages are not excluded from a service. Their needs will be addressed within the most appropriate service setting by suitably trained staff, and treatment and care that they receive is of high quality.
5. Outcomes and service responsiveness for dual diagnosis clients are monitored and regularly reviewed.
6. Consumers and carers are involved in the planning and evaluation of service responses to dual diagnosis (Department of Human Services, 2007).

RFUP Research Partnership Service Descriptions
The capacity building clinical service. The current clinical capacity building service is a dual diagnosis service based at an inner urban public hospital in Melbourne, Victoria. The service was established in 2000 as part of the VDDI. The service works with more than 40 agencies in urban, regional, rural, and remote settings. The service is a multidisciplinary team with staff from nursing, social work, and psychology backgrounds. It is not a direct clinical service provider. The key role of the service is to enhance dual diagnosis capability of staff in mental health, AOD, and mental health community support services (MHCSS). To do this, a range of methods are employed, including training, facilitation, and consultation within the context of a close working relationship with stakeholders, addressing gaps and opportunities. It is worth noting that Nexus has a consultation rather than a direct service user relationship. Thus, the direct duty of care for service users is held by the treating team at the clinical mental health service and MHCSS.

MHCSS
The MHCSS involved in the current study is supporting people living with mental illness to live independently in the community.

Academic partner setting. The collaborating university social work department is partnering here to support evidence-based practice implementation and research engagement with the field.

Rationale for Developing the RFUP
Screening for substance use and/or mental health. The literature suggests at least two major issues with current screening. First, screening tools tend to be single issue either mental health or
The capacity building service was particularly interested in user-friendly interventions that assist staff in opening up dual diagnosis conversations with clients. Using screens or other tools can be useful in these processes (Byron, 2019). One such tool is the Reasons for Use Scale (RFUS; Spencer et al., 2002).

Myers and Kroes had extensive experience in the RFUS, which was originally part of an eight-session Dual Diagnosis Collaborative Therapy Group program. The rationale for this study was staff observations that service users often showed a high degree of engagement with this tool and that it could be used separately as a brief intervention.

Reflective practice sessions, meetings with various agencies, and discussions with staff about the best ways to develop their capacity to provide evidence-based dual diagnosis treatment indicated staff were asking for resources to assist them in developing treatment options. Staff reported they did not know, or did not feel confident in, how to implement or decide on the next intervention to use with clients after they have done initial screening to detect dual diagnosis issues. Kroes identified that the RFUS could be used to address this gap and built a prototype RFUP and together with Myers further developed and researched the efficacy of this resource. The RFUP was designed and intended to act as a user-friendly tool to assist workers from mental health, MHCSS, and AOD when they develop treatment plans with service users experiencing dual diagnosis challenges. The capacity building service set out to design a package that aligned with the broad skill base, philosophies, and contextual settings of the sector. Elsewhere, the authors have described some key elements of dual diagnosis best practice (Myers, Kroes, & Petrakis, 2018). Key aspects include welcoming, recovery-focused, person- and family-centered, harm minimization–integrated treatment.

Once staff members have used the package across a number of occasions, they do not necessarily assist in integrated treatment planning for service users or staff. Thus, screening often leads to the question: What next? One of the main drivers behind designing the RFUP was to assist staff in developing next steps with service users.

**Asking about Reasons for Use**

The RFUS (Spencer et al., 2002) is a 26-item self-report instrument. It includes items from the Drinking Motives Questionnaire (Cooper et al., 1995) and additional items specific to symptoms of mental illness. Its reliability and validity has been demonstrated among individuals diagnosed with psychotic disorders and substance use/cannabis use (Spencer et al., 2002). It is used to explore service user reasons for substance use with the hope that this will assist in interventions that are individually tailored. The 26 items relate to the five subscales (with Domain 1 divided into two parts in the RFUP) that are believed to reflect a participant’s reasons for drug use. The RFUS assists exploring the relationship between mental health and substance use and impacts.

The RFUP is a dual diagnosis resource that was developed as a tool, which would be simultaneously useful to service users as well as building dual diagnosis capacity for staff (Myers et al., 2017). The RFUP has three basic steps: a 26-item RFUS questionnaire, which creates a graph of results, a reflective consultation menu of options, and a treatment planning section. Following numerous successful trials, Kroes and Myers secured funding to develop the RFUP into a stand-alone website that was launched in May 2018.

Through use of the RFUP, the aim is to significantly change the core practices of staff. It assists to widen staff understanding of the nature of dual diagnosis and change staff approach in terms of opening up conversations based on lived experience wisdom of the service user in collaboration with staff practice wisdom. Additionally, the aim is to impact the service user to staff power relationship, shifting it toward a more service user–centered one. In the treatment planning process, the aim is that potential options are openly discussed rather than being the sole domain of the staff member. Building a reflective space rather than rushing to solutions is the goal.

**Pilot initiatives.** Three pilots with a range of health, welfare, and housing staff in 2012, 2013, and 2014 have overwhelmingly endorsed the RFUP for its utility in building staff confidence and knowledge of dual diagnosis interventions. Indirect reports from service users indicated that they found the RFUP a useful way to explore their dual diagnosis issues. The first pilot in 2012 included six staff in October 2012 who enthusiastically called on management to support a wider rollout within their organization.

**The Two-State Case Comparison Evaluation**

The successful pilots of the RFUP lead to an agreement between the capacity building service, the community support service, and the university to research the impact of training and mentoring in the RFUP on staff knowledge and confidence in dual diagnosis interventions. The evaluation also aimed to gather service user feedback on their experience of using the RFUP with their worker (Myers et al., 2017).

**Method**

**Research Design for National Comparison Evaluation**

**Methodology.** The methodology had to take into account the multiple roles and relationships to the phenomenon under
The designers of the RFUP, Kroes and Myers, also have consultation roles with the community service around their response to dual diagnosis issues. Furthermore, the interaction between quantitative and qualitative methods and any interpretation of data is a collaborative process. This research has adopted a pragmatic approach. Pragmatic researchers focus on the “what” and “how” of the research problem (Creswell, 2014, p. 11). This research is based on inductive reasoning, clarifying meaning, analyzing, and exploring phenomenon. The research takes place in a specific social context and is in turn affected by social interaction between researcher and participants.

Pragmatic research accepts the “situating of the researcher within the context under investigation” (p. 82, Maxcy, cited in Tashakkori & Teddlie, 2003). The research will reflect the subjective understanding of the participants rather than an objective “truth.” Pragmatic research is aimed towards increasing understanding of the research problem utilizing methods that aid this process; thus, the test of whether method should be used is whether it actually increases understanding of the research problem (Mackenzie & Knipe, 2006). The research partnership collaborated at all stages of design, recruitment, running the evaluation interpretation of data, and dissemination including conference presentations and writing articles for publication.

A mixed methods approach was employed in order to gather data including service user and staff questionnaires, focus groups, mentor session notes, and a case study. As mentioned above, this article focuses on the staff quantitative data, while being aware that the service user experience of using the RFUP with their worker is likely to have a direct bearing on the confidence of the said workers. We would also postulate that increased self-report of staff confidence is likely to be positively correlated with self-reported increases in knowledge. The service user experience has been discussed elsewhere (Myers, Kroes, O’Connor, & Petrakis, 2018), illustrated through a case study and aggregated service user feedback data.

Research Design for the Evaluation

A control and intervention group of staff from the community support service, who worked with similar cohorts of service users, were recruited in New South Wales (NSW) and Victoria. The NSW group were the control group. The Victorian group received training and mentoring in the RFUP. Both groups were surveyed at three time points coinciding with pretraining, posttraining, and postmentoring of the Victorian participants. Mentor notes and focus groups of mentors and mentees provided further qualitative data. Service users in Victoria who experienced the RFUP were given the opportunity to provide feedback via a questionnaire.

Ethics. An earlier Needs Analysis study was registered as a quality improvement project at St. Vincent’s Hospital (Melbourne) in May 2012. When the initiative became a research study in 2015, full ethics clearance was sought and obtained from both the clinical and MHCSS organizations involved. Ethics approval was gained from the hospital Human Research Ethics Committee, the university ethics, and the MHCSS Research Committee.

Recruitment. In Phase 1, 10 existing lead practitioners from the MHCSS were trained and mentored in the RFUP by the capacity building service. These mentors then went on to provide mentoring to their Victorian colleagues who received training as part of a national comparison trial.

Two groups of over 40 MHCSS staff were recruited from comparable sites. Similar service user and staff profiles were matched by the service development officer in the community service.

Intervention group: Victorian sites. Intervention sites in Victoria received 5 hr training and $2 \times 1$-hr mentoring sessions on how to use the RFUP. MHCSS mentors in Victoria had previously been trained and mentored by the capacity building service in early 2015. These mentors also recorded de-identified notes from their mentoring sessions using a mentoring template and matched survey of both staff groups to coincide with three time points: pretraining, posttraining, and postmentoring.

Staff survey involved 12 questions on knowledge and confidence in dual diagnosis interventions. These were based on the five domains of the RFUS. The first domain was divided into two in the RFUP, to better reflect the possibility that positive symptoms and medication side effects can be both linked and/or separate reasons for use; thus, there were 12 rather than 10 questions. Focus groups of mentors and mentees were held in order to gain qualitative data.

Service users who consented to participate in the RFUP evaluation were offered a feedback questionnaire. The service user experience has been discussed elsewhere (Myers, Kroes, O’Connor, & Petrakis, 2018) with aggregated survey questions and illuminated through a case study example.

Participants. A total of 92 support workers participated in this study as well as a further 10 lead practitioners in Victoria who acted as mentors. The intervention group consisted of 48 support workers from Victoria. The comparison group consisted of 44 support workers from New South Wales.

Measures. Participants were surveyed using a questionnaire that required them to respond to 12 self-report measures of knowledge in using dual diagnosis strategies in their practice. Measures of knowledge and confidence in using dual diagnosis strategies in their practice, which relate to responses, were measured on a 6-point Likert-type scale (1 = strongly disagree, 2 = disagree, 3 = slightly disagree, 4 = slightly agree, 5 = agree, 6 = strongly agree).

Procedure. The questionnaire was administered to participants in the intervention group at three time points: (1) pretraining, (2) posttraining, and (3) postmentoring. The postmentoring time point was defined as a worker having used the RFUP with at least one service user and having completed at least two
sessions with a RFUP mentor. Participants in the comparison group did not complete training or mentoring but completed the survey at comparable time points.

**Data analysis.** Responses were analyzed utilizing the Survey Methods software package to examine raw numbers, percentages, and strength of agreement or disagreement to the proposed package of strategies for interventions with service users.

**Statistical analyses.** Multiple two-way repeated measures analysis of variances were run to determine the effect of training and mentoring over three time points on confidence and knowledge measures.

**Results**

The analysis demonstrated that the state that received the training (VIC) demonstrated a statistically significant increase in confidence and knowledge on all aspects (the 12 questions) from pretraining to posttraining, compared to the state that did not receive the training/mentoring (NSW). This increase in knowledge and confidence was maintained at the follow-up time point postmentoring (all $p < .05$) for all aspects except Question 1, which was approaching significance ($p = .058$).

**Knowledge**

Workers’ scores for self-reported knowledge in the intervention (VIC) group significantly increased from pretraining to postraining ($p \leq .05$; see Figure 1) on all six measures of knowledge. This increase in knowledge was maintained postmentoring as demonstrated by significant increases between pretraining scores to postmentoring scores on all six measures of knowledge ($p \leq .05$; see Figures 1 and 2).

**Confidence**

There was a statistically significant main effect of training, $F(2, 76) = 14.559, p < .001$, partial $\eta^2 = .381$. There was a statistically significant interaction between training and time on “confidence measures,” $F(2, 76) = 5.513, p = .006$, partial $\eta^2 = .127$ (Table 1). This increase in confidence was maintained postmentoring (see Figures 3 and 4).

**Discussion and Applications to Practice**

Stakeholders have consistently expressed the need to improve their skills, knowledge, and confidence in having meaningful conversations with clients about the interaction of their mental health and AOD issues. The “Psychiatric Disability and
Rehabilitation and Support Services Reform Framework Consultation Paper” (Department of Health, 2012; the previous name for MHCSS) states the need to develop and deliver “training and professional development programs to support use of evidence-based recovery models and tailored training and professional development to improve capability, capacity and confidence” (p. 45). The MHCSS service wanted to clarify how to fulfill this need within the sector.

Results show a greater staff awareness of how to apply existing knowledge base of interventions from a dual diagnosis perspective and develop new skills where required. This was demonstrated in the staff self-reported knowledge and confidence scores after using the RFUP in the field. We would contend that there is a strong likelihood that there is a relationship between the positive service user experience (Myers, Kroes, O’Connor, & Petrakis, 2018) and self-rated staff surveys on their knowledge and confidence. As the study design maintained the need for de-identified service user data, it is not possible to definitively address this connection. This is worthy of further study.

The limitations in this study are that the case comparison study took place within a particular organization within a specific context. While the results are likely to be of interest to similar organization staff and service users, the degree to which these results could be replicated is worthy of further study as each individual organizational culture could impact on results. It is worth noting that there were consistently higher baseline ratings of staff knowledge and confidence pretraining for New South Wales compared to Victoria. Explaining these differences between groups was not within the scope of the current study.

In conclusion, the self-report measures of knowledge and confidence of the Victorian-based staff who received training and mentoring in the RFUP indicated statistically significant increases in five out of six domains. Additionally, the sixth domain showed marked improvement. Further exploration of
the use of this resource is therefore warranted. In Victoria, the state government 2019-2020 Royal Commission into Victoria’s Mental Health System is specifically asking for solutions to complex issues such as dual diagnosis presentations. Rather than merely describing the problems associated with dual diagnosis, the evidence in the current study strongly suggests that the RFUP is both useful for service users and effectively increases service capacity that can make a significant contribution to better outcomes.

The wider implications of this study are that the success of the RFUP trial described herein leads to a national rollout of the RFUP with the MHCSS involved in the trial and interest from international observers from Denmark, United Kingdom, China, and South Africa. A range of AODs, housing services, and mental health services in Melbourne are now using the RFUP.

Acknowledgments

The authors would like to acknowledge Dr. Andrea Phillipou and Zoe Jenkins for statistical assistance and Merissa Van Setten for copyediting in the production of this article.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

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