



Recovery from Psychosis: An Integrated Model of Interpersonal and Intrapersonal Factors from the Perspective of Psychologists

Methma Supathmi Atapattu · Hugo M. Gonzales · Nigel Williams

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Abstract Psychosis is an encumbering cluster of mental illnesses which has a significant impact on the daily life of individuals. Recovery from psychosis is a personalised process due to the unique nature of the lived experiences of these individuals. Although numerous research have been conducted, there exists a research gap in taking into consideration the perspectives of practitioners in treating the illness. This study aimed to identify the perspectives of psychologists on the impact of interpersonal and intrapersonal factors that impact recovery from psychosis. Five participants were interviewed to qualitatively explore this utilising Interpretative Phenomenological Analysis (IPA). Findings suggested that recovery from psychosis can occur on four different dimensions; Behavioural, Insight, Cognitive, and Social Recovery. There are several interpersonal and intrapersonal factors impacting these dimensions collaboratively. An Integrated Recovery Model was generated to summarise these findings which could potentially assist the recovery process of individuals. Limitations of the study and future implications were also addressed.

Keywords Psychosis · Recovery · Individual recovery process · Interpersonal factors · Intrapersonal factors · Recovery model

Introduction

Psychosis is a severe and debilitating cluster of disorders which causes significant alterations of an individual's thoughts, perceptions, affects, and behaviour (NICE, 2014). With the common age of onset being late adolescence, the aetiology of psychosis consists of a high genetic susceptibility (Naheed et al., 2012). Psychosis is characterised by the presence of positive symptoms such as hallucinations (auditory, visual, tactile, and olfactory) and delusions (Unusual and peculiar ideas). Individuals with psychosis also experience social withdrawal, problems related to memory and attention, lack of interest in personal hygiene, agitation, and most importantly; a lack of insight or "impaired reality testing" (NICE, 2014). Most psychotic illnesses such as schizophrenia have a high prevalence owing to its chronic nature (Naheed et al., 2012).

Individual Recovery in Psychosis

The concept of recovery in psychosis was initially a scientific conceptualisation which was determined by

M. S. Atapattu · H. M. Gonzales (✉) · N. Williams
Murdoch University, Murdoch, WA, Australia
e-mail: methma.atapattu@gmail.com

H. M. Gonzales
e-mail: hugo.gonzales@murdoch.edu.au

N. Williams
e-mail: williams@iinet.net.au

psychiatrists and clinicians. This regarded recovery as the complete absence of symptoms and a return to the pre-morbid level of personal, social and occupational functioning (Drapalski et al., 2012). This was often measured by rates of remissions, hospitalisations, and symptoms, etc. (Andresen et al., 2006). As this notion of recovery did not consider the subjective experience of individuals with psychosis, there were often conflicts between the perception of recovery among service providers and patients (Andresen et al., 2006). Individuals with psychosis regarded recovery differently. According to studies based on the perspectives of individuals with psychosis, they regarded recovery as the ability to lead a meaningful life by overcoming the debilitating effects of psychosis (Law & Morrison, 2014; Drapalski et al., 2012).

The Role of Intrapersonal and Interpersonal Factors Commonly Associated with Recovery

Interpersonal factors are factors that occur within the individual's immediate environment such as relationships and social, peer, and community support (Howard et al., 2008). Intrapersonal factors are constructs that occur within the self, such as self-esteem, intrinsic motivation, and resilience, (Strohmeier et al., 2011; Williams et al., 2018). In addition to having an influence on the recovery process, interpersonal and intrapersonal factors have been found to be interdependent and therefore, are often influenced by each other (Williams et al., 2018).

A Delphi study by Law and Morrison (2014) exploring factors that impact recovery from the perspective of clients revealed many commonly occurring interpersonal and intrapersonal factors. It revealed that good insight about the illness, knowing they can receive help, and knowledge about self-care methods helped largely in recovery. Most individuals with psychosis on the path to recovery believe that choice, control, self-esteem, external support, individual goal-setting, a sense of purpose, high quality of life, positivity, and hope about recovery and life in general help facilitate recovery (Law & Morrison, 2014). A study based on perspectives of staff and patients revealed that experiences of trauma and grief contributed largely to the onset of psychosis and how it was maintained or exacerbated due to lack of positive interaction and a therapeutic relationship between patients and staff in hospitals (Wood et al., 2019).

Intrapersonal factors such as spirituality and religion, and interpersonal factors such as family and friend involvement were found to be helpful with recovery from psychosis (Wood et al., 2019).

Interpersonal factors such as substantial family support contributes to low levels of perceiving loneliness and improve social functioning, resulting in a positive outcome in the recovery process (Bjornestad et al., 2017; Davidson et al., 2004). Bjornestad et al. (2017) stated that age-appropriate autonomy helps in the recovery process. Friendship interactions were found to have a larger impact on developing age-appropriate autonomy and coping compared to family support (Bjornestad et al., 2017). Contemporary studies have drawn parallels between self-determination theory (Ryan & Deci, 2000) and recovery from psychosis by discovering intrapersonal psychological factors of autonomy, motivation, and self-efficacy to offset the positive relationship between cognitive performance and functional recovery from psychosis (Allot et al., 2020).

Insight has been interpreted in different ways relative to the recovery of psychosis. A study based on perspectives of mental health professionals emphasised the importance of gaining insight to not only address psychosis but also to reduce recidivism in crimes stemming from psychosis (Jackson-Blott et al., 2019). A later section discusses in-depth about the dual-role of insight on psychosis.

The Negative Role of Intrapersonal and Interpersonal Factors on Recovery

Certain interpersonal and intrapersonal factors can have a negative impact on recovery as well. Factors such as social isolation, lack of mental health support, non-collaborative intervention, and social stigma have been highly associated with hindrance in the recovery process. Some individuals have reported that medication which impacts memory and concentration, and ruminations on the impact of mental health problems on families were among factors that hinder recovery and impact the recovery process negatively (Law & Morrison, 2014).

The exposure to stress was found to impact the recovery process as well as having a causative relationship with psychosis onset (Reininghaus et al., 2016). However, Davidson et al. (2004) found that emotional friendships reduce the negative impacts of

stress-exposure in psychosis. Strengthening this view, Bjornestad et al. (2017) revealed that empathy and consolation received through friendship largely reduces the stress and burden of living with a mental illness. This shows that interpersonal factors can reduce the harmful effects of intrapersonal factors hindering recovery.

Internalised stigma is an intrapersonal factor which is linked with avoidant coping strategies, and depression, which negatively impacts recovery (Yanos et al., 2008). It can exacerbate depressive symptoms comorbid with psychosis, prolonging the effects of psychosis (Rossi et al., 2017). This internalised stigma reflects a tendency to conform to a particular role as a disabled individual who lacks capacity and worth. On the other hand, the impact of self-stigma can be reduced by resilience as an intrapersonal factor that acts as a protective factor (Rossi et al., 2017). Internalised stigma can be influenced by high insight as well (Warner et al., 1989). Additionally, high insight in psychosis and other serious mental illnesses have been associated with low self-esteem and an external locus of control (Lysaker et al., 2007).

The Dual Role of Insight

Although some studies state that high insight can have a negative impact on recovery, more evidence show that high insight is beneficial in the recovery process (Jackson-Blott et al., 2019; Law & Morrison, 2014; Warner et al., 1989). Studies have found that high insight can improve the quality of interpersonal relationships, which has a positive impact on the recovery process. Therefore, individuals who have high insight experience high quality in their personal relationships (Hélène et al., 2014). According to Lysaker et al. (2007), high insight could result in the individual actively seeking adequate support in their illness and in general functioning. Fagerberg et al. (2016) revealed that individuals who possess high insight on their condition but low internalised stigma experienced high levels of functioning.

This indicates that insight has a diverse role in the recovery process. However, high levels of internalised stigma mediated the positive effect of high insight in recovery (Lysaker et al., 2007). Furthermore, emphasising on the role of therapists and psychologists in recovery, Barrowclough et al. (2010) revealed that

high insight can be resulted by a strong therapeutic alliance between a clinician and the individual.

Use of Intrapersonal and Interpersonal Factors in Intervention

Strength-based and Positive Psychology interventions emphasise greatly on the role of intrapersonal and interpersonal factors on recovery as well (Browne et al., 2018). Many studies have recognised intrapersonal factors such as self-efficacy, hope for future, and having a purpose as critical tools for recovery (Resnick & Rosenheck, 2006; Tse et al., 2016; Wood & Tarrier, 2010). Personal strength is a crucial intrapersonal factor which can also be used in interventions aiming to enhance recovery (Browne et al., 2018). First Episode Psychosis (FEP) onset in adolescence or early adulthood disrupts vital developmental events in life such as graduating school and finding employment, which impacts greatly on the awareness of personal strength (Browne et al., 2018). There is evidence that focusing on personal strength in recovery interventions influences outcomes from FEP and Schizophrenia (Meyer et al., 2012).

Rationale

According to this study, recovery is currently defined as a journey in which individuals with severe mental illness lead a meaningful life, in the community of their individual choice, while aspiring to reach their full potential. As there is little qualitative research on the psychologists perspectives of recovery factors, this research may provide important insights that are not available using a quantitative methodology. Thus, a research gap exists in the consideration of the perspective of psychologists who play a pivotal role in the recovery journey of individuals and is one of the core interpersonal support factors which individuals with psychosis have identified as beneficial in recovery (Smith, 2000; Law & Morrison, 2014).

Methodology

Research Design

The aim of the current study was to explore perspectives of psychologists on the role of intrapersonal and interpersonal factors that impact recovery from psychosis. As it focuses on analysing experiential assertions, Interpretative Phenomenological Analysis (IPA) was used to explore understanding of psychologists. Braun and Clarke (2014) described IPA as a research design where the researcher seeks to interpret the lived experience of people and their interpretation of those experiences. Due to the richness of the data in this process and the in-depth dual analysis process, IPA can impact and contribute to theory (Pringle et al., 2011).

Participants

The target population of this study were psychologists who have had an active role in the individual recovery process of individuals who have been diagnosed with psychosis. Five participants were thus recruited using purposive sampling as their experiential data was necessary for the study. Three participants were male psychologists and two were female psychologists who reside and work in Perth, Western Australia who have varying degrees of experience.

Data Collection and Procedure

Hospitals and Psychology clinics in Australia were approached via recruitment emails with an attached information sheet comprising of an outline of the study and consent forms. Participants then responded to this email expressing their interest to take part in the study, considering the inclusion criteria of being Psychologists with experience in treating psychosis. Three participants were male psychologists and two were female psychologists who reside and work in Perth, Western Australia who have varying degrees of experience.

A semi-structured interview with open-ended questions regarding psychosis was conducted, and the interviews were audio-recorded by the researcher. This data was then stored in a password-protected computer, where it will remain for five years post-study.

Data Analysis

The audio-recorded interviews were transcribed verbatim by the researcher. Each transcript was then coded and analysed in detail, by using the dual interpretation process by taking into consideration the etic and emic approaches of data analysis (Smith & Osborne, 2009). Explorative comments were written on each dialogue of the transcript to assist the coding process. Upon this interpretation process, specific themes that emerged were categorised as “Emergent themes”. All emergent themes were clustered into main themes considering the availability of rich data. Subordinate themes were derived upon analysing the data of the emergent themes and the data were further categorised. The interpretation was then discussed with the supervisor and colleagues to ensure trustworthiness. As aforementioned, participant validation of the themes were also conducted to further strengthen the results of the study.

The clustered emergent themes of the study suggested an interconnectedness among the interpersonal and intrapersonal factors. Due to an interconnectedness of the themes, an indication of a model emerged from the data, which surpassed the initial phenomenological aspirations of the study. Thus, a model was created which represents the themes and sub-themes of the results (See “Results” section).

Participant Validation and Inter-rater Reliability

In order to improve trustworthiness and address the small sample size, participant validation was conducted after data analysis, where three of the five participants rechecked the analysed data. For the participant validation process, the participants were sent emails by the researcher requesting to take part in the process. Three out of five participants then expressed their interest, following which appointments were made for mutually discussed locations at a convenient time. The participants were then given a copy of the emerging themes, subordinate themes, and the tentative recovery model, which they analysed and provided feedback. The participants confirmed that the results were in accordance with their responses and accurately reflects their experience. Once the recovery model was created, participants were sent the models for feedback who confirmed that the model adequately summarises the data. To further ensure

trustworthiness, inter-rater reliability was also conducted where some transcripts with their exploratory comments were analysed by colleagues and compared for agreements.

Ethical Consideration

Ethical approval was obtained from the Human Research Ethics Committee of Murdoch University, Australia. Informed consent of participants was obtained. Identifying data were de-identified by giving pseudonyms and censoring specific details of client names, locations, or any other personal details to ensure anonymity and confidentiality of participants. All data related to this study is stored in a password protected computer at Murdoch University.

Results

Upon analysing the data, four superordinate themes were identified by the author: (1) Behavioural Recovery; (2) Insight; (3) Cognitive Recovery, and (4) Social Recovery, based on its prevalence among participant responses. These superordinate and subordinate themes have been used to construct a recovery model, indicating how the various themes interact with each other and contribute to holistic recovery in psychosis. The following table (Table 1) outlines the superordinate themes and their respective subordinate themes.

Table 1 Super-ordinate and subordinate themes

Super-ordinate themes	Sub-ordinate themes
Behavioural recovery	Family Peer and environmental support Psychoeducation Appropriate medication management
Insight	
Cognitive recovery	Reduced trauma/shame Motivation Autonomy
Social recovery	Career/vocation Peer connections Skills Reduced stigma

Behavioural Recovery

This superordinate theme indicates a category of interpersonal and intrapersonal factors that contribute to improvements pertaining to the behavioural aspects of the patients/clients with psychosis. Four subordinate themes emerged as contributors to this.

Family

All participants stated that family involvement in the individual’s recovery process assists recovery by instilling hope, providing useful resources, extending emotional support, and assisting with the recovery planning when the client/patient lacks insight or capability. In the discussion below, previous studies have discovered that external support provided by family assists in motivating individuals to improve behaviour-based symptoms of psychosis.

Family I think is a big factor, I think a sense of belonging and strong attachments with family and friends is important for recovery. Um, I can say that for my own patients with psychosis I think that’s really important. It gives them a sense of like, I wanna get well, I wanna do this with them, you know, a sense of purpose. Which is really important.

...So the unwell young people I see who are early in their illness have very supportive families and we try to work collaboratively with the families to protect all those connections. And I think that’s obviously a factor that plays is family support.

Peer and External Support

Majority of participants reported that the involvement of peers with lived experience and other external support parties brings about/maintains a sense of connection and belonging by building relationships and engagement. This could contribute to reducing the sense of social isolation and could also help clients/patients regain a sense of self which was disrupted by the experience of psychosis. Similar to family, this factor also acts as a motivator in addressing behavioural aspects of psychosis.

...can feel deprived and disconnected ... (if) you're a man and you became psychotic when you were eighteen or nineteen, and now they're mid 30s and have had this for ten years. a lot of their peers would've moved on and be working, have a family, and they're stuck in an almost teenage sort of lifestyle ... and the peer group has completely changed... we often see close connections with one or two parents, but limited peer groups...

Appropriate Medication Management

Four out of five participants noted that while antipsychotic medication is vital for alleviating psychotic symptoms which is an integral part of the recovery process, improper regulation of medication can be seen among clients/patients. They further reported that when antipsychotic medication is not adequately regulated for the individual need, it could result in cognitive inhibitions and inability to engage in meaningful recovery. While medication addresses behavioural symptoms of psychosis, lack of regulation could become an inhibitory factor in recovery.

The psychiatrists like to move the medication around depending on the symptoms that have come up, but it never takes it away. It might reduce the irritability, maybe ... the depression or the anxiety

...they're on very high level of depot medication, um anti-psychotic medication, is then quite restricted in their ability to be energetic, to pursue things that have a meaning, so the chemicals are quite stoic, has side effects of shaking hands, dry mouth and very withered in their appearance and the way they process things and is often then been on this medication for 10 or 15 years is quite an aggressive age to um... because of the fear to sort of return to risky behaviour. And it's a fine line.

Psychoeducation

Psychoeducation has been identified by all participants as a key contributing factor in recovery. This includes education about the illness, available treatments, and help clients/patients make sense of their experience. Therefore, it helps clients/patients detach

the problem from self, possibly contributing to the development of insight as well. Psychoeducation is an intrapersonal factor as it is facilitated by sources external to the client/patient such as the clinical team, peers, family, and other support personnel.

I see that as providing education to patients about the possibilities for recovery... instilling hope, providing education about what the recovery process can look like, assisting patients, managing distressing symptoms in a way that it's tolerable so that we don't end up with patients who believe it's the end of the line.

Insight

Majority of participants identified gaining insight to disorder and situation thereby gaining a sense of reality as integral in meaningfully engaging in the recovery process. Optimum functioning of a client/patient can depend on the insight they have towards themselves and their illness. Some participants recognised clinical insight and cognitive insight as two separate types of insight that are prevalent among clients/patients. Psychoeducation was stated as a contributor to developing insight. However, the participants stated psychoeducation to have an impact on all aspects of recovery therefore, the author did not consider this to be an exclusive subordinate theme for Insight.

Some people with psychosis have very limited insight which makes working with them very difficult. So I think if therapists can build insight, provide psychoeducation about this is what's happening, it's not their fault, I think that's really important. Um, looking at them it's like, okay these are the factors that we can actually improve for your functioning and that can actually improve insight. They can understand, okay this is why I'm diagnosed with psychosis, this is why I'm presenting like this, this is the best treatment, this is my recovery goals, I think that can all help.

Cognitive Recovery

This indicates a category of interpersonal and intrapersonal factors that contribute to improving cognitive functioning of clients/patients with psychosis.

Reduced Trauma/Shame

The presence of trauma and shame was identified as factors that could hinder recovery. Therefore, it was stated that the adverse effects of trauma and shame should be reduced with the use of ongoing support and therapy in order to facilitate the recovery process.

Maybe they ruptured a relationship in their life, maybe they um, were more aggressive, and then when they're not psychotic anymore, and they're medicated, then there's an amount of shame and guilt.

Motivation

At least half of participants reported that, upon gaining insight into their experience and/or illness, the motivation levels of clients/patients must be facilitated by either interpersonal or intrapersonal means. Recovery programmes can consist of methods to increase intrinsic and extrinsic motivation for recovery among clients/patients.

You can do as much as possible but if they're not wanting the support, then it's going to be very hard. And sometimes motivational interviewing can help as well to improve motivation to seek support to engage in help.

Autonomy

The participants stated that a sense of autonomy grounded in reality can be achieved through completing tasks independently, thereby gaining control of some aspects of life as they function at a developmentally appropriate level.

...so they're treated like a child. They maintain childlike behaviours. Like, you know, enjoying childlike activities, excited all the time, arrested development ... their interpersonal world can actually be enforced quite a lot ... rather than having a sort of more strong, cognitive plan, that

will give them more... autonomy and states for them to grow and develop.

Social Recovery

This superordinate theme is a category of interpersonal and intrapersonal factors that contribute to improving the social functioning of clients with psychosis.

Peer Connection

Clients/patients with psychosis have a tendency to disconnect from their social groups due to the illness. Majority of the participants reported that these social connections can be re-ignited by reconnecting them with peer groups.

Based on psychosocial factors so linking with the community, linking with maybe other peers that also have psychosis, there are so many recovery-based models, groups that are available.

...she was very unwell for months and months and we got her to a place where she regained insight and could then engage in like, peer support programmes and yeah, so that was helpful.

Skills

Skills are an important intrapersonal resource that can be harnessed for the recovery process. More than half of the participants stated that clients/patients can be assisted and encouraged in utilising their own skills to improve their lifestyle, and use them in education, vocation, or to engage in a hobby to keep them active.

There's a lack of self confidence in a lot of clients because they're kept in a sort of, arrested development phase. um, the like, maybe um, developing skill or means of getting self-confidence through achievement or something like that the rest of us get through work or whatever pursuits we have, often they lack that.

Career/Vocation

Majority of participants identified that following a career or a vocation helps clients/patients to develop a sense of purpose and gradually integrate them back into society. This next step in life can be facilitated by helping clients/patients to improve skills, connect with employment options, and empower them to follow a career.

I think it's good to engage in some vocational work if they're able to cause psychosis is like, if its managed well, you can actually engage in work and employment and I think that opportunity should be given to them.

Reduced Stigma

Psychosis and other mental illnesses are often subjected to stigma due to various reasons such as lack of education and awareness, and prejudice. The participants believed that practitioners could work on reducing this stigma as an important factor in re-engaging clients/patients back to society.

I don't wanna label it. And I don't believe in labelling and label usually comes from outside. Because that carries, the client carries the stigma so it prolongs the recovery time. And they have to cling on to medication. And if they keep on clinging to medication the recovery takes longer....

In addition to the main themes, all participants recognised working in a multi-disciplinary team and developing a strong therapeutic alliance with the client/patient are integral components in the recovery process.

Recovery Model

It was evident from the results obtained in this study that holistic recovery is a collaboration of a number of interpersonal and intrapersonal factors which contribute to the improvement of different aspects in an individual's life after psychosis. This indicated the inception of a recovery model (Fig. 1), which adequately summarises all the Super-ordinate themes and Sub-ordinate themes derived from the data.

This model visually represents the main dimensions of recovery in psychosis: Behavioural Recovery, Cognitive Recovery, Social Recovery, and Insight, and how these dimensions interact with each other, indicating that it is not a linear process but a system that works together. The interaction of these factors are evident by the presence of common factors in different dimensions, as per the results. Outside of these dimensions are the individual components that contribute to each stage of recovery, which are both interpersonal and intrapersonal factors.

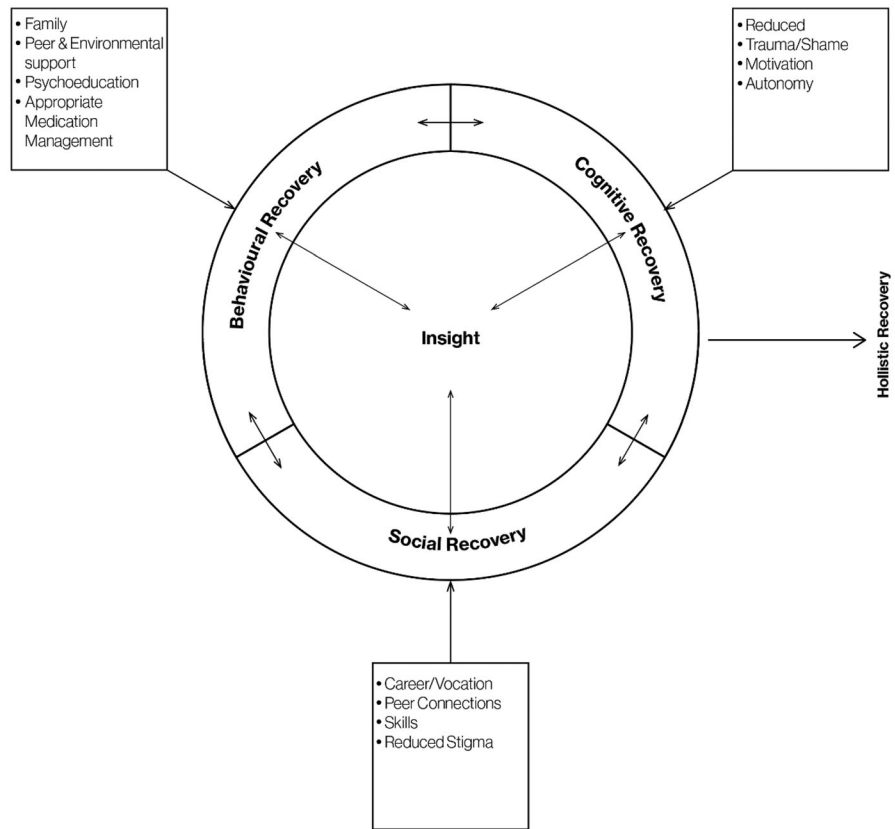
Discussion

The current study aimed to explore the perspective of psychologists on interpersonal and intrapersonal factors that contribute to recovery from psychosis. Due to the interconnectedness of these factors, the themes were divided into categories which represent a particular recovery stage, and thus exhibited an integration of both interpersonal and intrapersonal factors which work together. An important finding of this research was that this interconnectedness often impact each other to influence recovery. Due to this, a model emerged from the results which condensed vital components of recovery into different dimensions.

The recovery process is an amalgamation of individual life goals of patients and treatment goals, which consists of psychosocial and medical intervention, social re-engagement, and improvement of overall quality of life (Williams et al., 2018). The recovery process in psychosis is an individual experience, akin to the psychotic experience being an individual experience as well. Consequently, it is difficult to isolate single elements as causative factors of recovery (Williams et al., 2018).

The experience of psychosis results in significant impairment in an individual's behavioural, cognitive, and social functioning (NICE, 2014; Williams et al., 2018). Therefore, this research has categorised recovery as per the improvements made in those individual aspects whose functionality has been impaired as a result of psychosis. With the knowledge that schizophrenia inhibits functionality in mainly behavioural, cognitive, and social aspects of life; it was identified that recovery in psychosis can be categorised into behavioural recovery, cognitive recovery, and social recovery, based on consistent findings of the

Fig. 1 Integrated recovery model



study. In addition to these main categories, it was evident in the data that “Insight” is a crucial recovery component which is essential to achieve a meaningful recovery. However, due to the absence of sufficient data, sub-ordinate themes for Insight could not be derived. The significance of insight in recovery resulted in it being considered a stand-alone theme.

Behavioural Recovery

Schizophrenia has characteristic behavioural impairments such as disruptive behaviours, aggression, agitation, and lack of interest in personal hygiene (NICE, 2014). Behavioural recovery can be achieved by improving these behavioural aspects of a patient. For instance, helping them get accustomed to a meaningful routine that alleviates behavioural problems can lead to behavioural recovery, whether or not the individual has developed deep insight towards their illness. However, research have shown that at least a low level of clinical insight is helpful in compliance to medication, which is necessary for

recovery (Lysaker et al., 2018). The data suggests that this is especially useful in severe and chronic psychosis where the individual is unable to engage in more meaningful tasks such as social engagement. Therefore, this can be considered as a primary step in the recovery process in psychosis. Consistent with the current research, factors such as family and peer support, psychoeducation, and medication were identified by numerous research as helpful to improve behavioural impairments.

Family and peer support impact recovery by helping individuals with psychosis to improve coping, self-care, and self-management. However, the potential positive impact of family and peer support could be hindered by the lack of knowledge and awareness regarding psychosis of both family and patients alike (Duckworth and Halpern 2014). This amplifies the importance of psychoeducation for both families and patients, as reported in the current study.

Psychoeducation is vital in recovery as it enables behavioural changes in patients and fosters medication compliance. It also acknowledges the stigma related to

mental illness, which combined with peer support, works towards reducing negative effects of internal stigma such as rejecting treatment and medication non-compliance (Xia et al., 2010). Psychoeducation can be catered in accordance with the ability of the patients and family. It is helpful at the early stages even with cognitive deficits as the process of it includes affective and psychomotor processes as well (Xia et al., 2010). This person-centred learning will in turn foster behavioural, attitude and skill changes, enabling the recovery process to move forward.

Insight

The loss of insight is a characteristic feature of psychotic illness. Insight in the context of psychosis generally refers to the ability to recognise the presence of psychiatric illness and unusual psychological experiences such as hallucinations. It is broadly categorised into “Clinical Insight” and “Cognitive Insight”. Clinical insight refers to the awareness of the psychiatric illness while cognitive insight refers to complex metacognition where the individual has the ability to identify and assess distorted cognitive views (Narayanawamy et al., 2015). The results speak about the differentiation of “clinical insight” and “cognitive insight” in consistent with this literature.

Lack of insight has been linked to negative outcomes in recovery from Psychosis. While the “insight paradox” states that high insight leads to high levels of depression, studies claim that this association cannot be successfully made due to lack of evidence (Belvederi Murri et al., 2016). While insight is considered one of the most vital components in recovery, there is little knowledge on the underlying mechanisms of lack of insight in psychosis (Ouzir et al., 2012). From the psychodynamic perspective, poor insight is described as a denial of the illness as a defence mechanism to protect the individual from the distress they would experience as a result of the illness (Ouzir et al., 2012). According to Neuropsychological explanations, poor insight in psychosis occurs due to deficits in cognition that are resulted by dysfunction in neural processes (Lysaker and Bell 1994).

Contemporary research have revealed that cognitive impairment in psychosis such as impaired executive function, memory, and attention is correlated with poor insight. Lysaker et al., (2011) observed and concluded that poor insight in psychosis can be a result

of impaired metacognitive functions such as learning, problem-solving, and decision making. Although the current study does not have enough data to conclude interpersonal and intrapersonal factors that could improve insight, consistent with the above research, the results (Integrated Recovery Model) indicate that cognitive recovery and insight can positively impact each other. Furthermore, it shows that insight is central to recovery. This is evident in participants’ account on insight resulting in developing a cognitive understanding of individual’s diagnosis of psychosis.

Cognitive Recovery

Schizophrenia shows symptoms of decline in daily functioning due to changes in cognitive capacity. Cognitive impairment also includes a decline in executive functioning, attention, memory, processing speed, and overall intelligence (Jablensky 2010; Kim et al., 2015; Serper et al., 2017). It also impacts an individual’s empathy, making it difficult to maintain interpersonal relationships. As a result of cognitive impairment which impacts one’s problem-solving capacities, interpersonal capabilities are disrupted, causing these individuals to often be victimised and become dependent (Green et al., 2015). Therefore, it is clear that supporting activities that encourage and enable autonomy could benefit from making improvements from cognitive impairment, as per findings of the study.

Furthermore, research have discovered that individuals with schizophrenia often have a history of trauma which may be past experiences or experienced during the onset of the illness. Significant correlations have been found between childhood trauma and the development of psychosis/schizophrenia. In addition, individuals have also experienced trauma during different aspects of treatment such as involuntary hospitalisation. History of trauma elicits emotional symptoms; anger, sadness, and confusion and also brings about cognitive impairments such as catatonia, paranoia and delusions, suicidal thoughts, and disorganised thoughts (Lu et al., 2017). Therefore, it is evident that underlying trauma needs to be addressed in order to achieve effective cognitive recovery, consistent with the findings of the current study.

Motivation is another important recovery factor in psychosis, as observed in the results of the current study. In psychosis, dysfunctional attitudes and

negative beliefs about one's abilities are caused by negative life experiences which were a result of cognitive impairments. These dysfunctional attitudes then contribute to a lack of motivation which is a prevalent negative symptom. Due to this link, it can be speculated that activities which foster motivation can result in cognitive improvements (Green et al., 2015).

Furthermore, according to the Self Determination Theory (SDT), the expression of human potential is impacted by one's environment. It further hypothesises that an environment which fosters and enables autonomy, competence, and a sense of belongingness will facilitate growth, wellbeing, and motivation (Ryan & Desi, 2000). Therefore, the concoction of recovery factors such as helpful environment, autonomy, interpersonal relationships, and motivation work together to positively impact different aspects of recovery.

Social Recovery

Social cognition is defined as the basal psychological process of social interactions (Javed and Charles 2018). As discussed above, owing to the cognitive decline that occurs in schizophrenia; interpersonal skills and social cognition of individuals are also significantly impaired. Furthermore, it is speculated that social cognition mediates a relationship between neurocognition and social functioning in schizophrenia, making it a vital factor in recovery which needs to be addressed (Javed and Charles 2018).

According to past research, support from family, peers, and friends resulted in reducing loneliness and improving social functioning which contributed to social recovery (Bjornstead et al., 2017; Davidson et al., 2004). The current study found peer connections to be a contributor to social recovery. Consistent with the results of the current research, this was a key driver in achieving holistic recovery in schizophrenia.

In further studies, social intelligence and an individual's perception of their capability to be loved had a great positive impact on recovery (Browne et al., 2018; Lysaker et al., 2007; Park et al., 2006.) This was improved when these individuals had perceived leadership, empowerment, and an internal locus of control. These factors can be brought forward by engaging in a career/vocation and making use of one's skills. It was also helpful in reducing internalised stigma (Warner et al., 1989). Carre/vocation, personal skills, and

reduced stigma were noted in the present study as contributing factors to improve social recovery. The derived factors for social recovery in the current study are thus consistent with these studies and evidently assists holistic recovery.

Integrated Recovery Model

Recovery models are espoused to be person-centred and flexible. While the Integrated Recovery Model of the current study is different from self-reported measures, it takes into consideration the unique experiences of individuals, and, the importance of autonomy and person-centred approach. Furthermore, the broad recovery categories and their assistive factors allow for flexibility in action. In addition, this model takes into consideration the useful, phenomenological experience of the practitioners who have been actively involved in the recovery process, and gives equal importance to all aspects of recovery.

This model has condensed the complexity of the recovery process and its components into a simple visual representation which can be easily referred to by practitioners as well as clients/patients alike. It can easily guide the recovery process and help those involved in the recovery process to gain an understanding of the recovery dimensions that need to be achieved in order to move towards a holistic recovery. Upon understanding this, it can assist them to gauge the presence or absence of vital components that can help or hinder the recovery process in psychosis. Most importantly, it is simple to comprehend and refer to, which allows easy reference by practitioners, recovery workers, as well as the client/patients.

The recovery factors discussed in the literature and findings are descriptive of this proposed recovery model. Furthermore, these recovery factors are interconnected and evidently contribute to more than one stage of recovery.

Limitations and Future Directions

Due to time constraints and availability of participants, the sample size of this study although within an acceptable range for IPA, is low. The current study has attempted to address this limitation by conducting participant validation, however, this sample is only able to provide a limited snapshot of the experience.

All participants were from Western Australia, which may contribute to a lack of diversity in the phenomenological experience of the participants. Additionally, due to lack of data, the superordinate theme “Insight” could not derive subordinate themes which may have been useful for the recovery model.

The merit of this study is that it provides a substantial amount of data due to the qualitative research design. This provides an opportunity to reveal more important information regarding recovery in psychosis, which leads to a better understanding of how recovery can be best supported. The results of this study can be beneficial for further research in the area which could to policy making in the health sector. The proposed recovery model can be studied further by application on larger clinical samples and practitioners in different contexts such as cultures and environments for validation.

Conclusion

Psychosis is a debilitating disorder which is prevalent among the Australian society. While many research have been conducted pertaining to its recovery, a significant gap exists in phenomenological accounts of practitioners who have been involved in the recovery process. Holistic recovery from psychosis is an amalgamation of numerous internal and external factors and therefore, it is important to consider the point of view of practitioners who have first-hand experience in facilitating the outcome of current recovery processes.

The current study set out to explore the intrapersonal and interpersonal aspects of recovery. However, due to an emergence of patterns of information, the study deflected into proposing an Integrated Recovery Model which, upon conducting further research, may potentially be useful for practitioners and clients to streamline the recovery process of psychosis.

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Declarations

Conflict of interest There are no conflicts of interest in this study.

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