Using Repertory Grid to Establish Patients’ Views of Psycho-Education

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Abstract

Objectives: This article aims to describe the use of Repertory Grid to assess participants’ perception of a psycho-education programme for psychosis, prior to and following on from attendance at an eleven week group intervention, delivered across high and medium secure forensic services in Scotland.

Design: As part of a wider randomised controlled trial, a cohort of patients (n=20) were selected to discuss their views on what might change as a result of attending the Coping With Mental Illness (CWMI) group, a psycho-education group, designed for people who suffer from psychosis.

Methods: Group participants received 22 sessions of psycho-education. Participants were assessed using structured interviews at two time points, pre and post intervention, using Repertory Grids.

Results: A specialised computer programme (Gridsuite) was used to analyse data generated from the Repertory Grids. Principal component analysis indicated a number of factors were responsible for the change in participants’ experience of the group.

Conclusions: Conclusions suggest that Repertory Grid is a useful alternative to interview when exploring views of psychological interventions in a group of mentally disordered offenders. There is evidence to suggest that the intervention did prompt a change in patient perception.

Practitioner Points

I. Findings may well be used to aid engagement of future patients in the CWMI programme or similar psycho-educational initiatives.

II. Repertory Grid offers the flexibility of supplied or elicited grids thus can generate individual or group data on an intervention or on a specific subject / initiative.

Clinical Implications

I. There are clear limitations in relation to the general is ability of findings using such a small group of participants.

II. The Repertory Grid does take longer to complete than many routine assessments- approximately thirty to forty minutes- and may be less clinically viable as a consequence, however the results do offer a rare insight into the patient experience.

Keywords: Personal Construct Theory; Repertory Grid; Psychosis; Forensic; Psycho-education

Introduction

Psycho-education is a mechanism by which people with mental health problems, their carers and families are offered information about mental disorder with an aim of empowerment [1], prevention of relapse [2], improvement in general mental health and well-being [3], quality of life [4,2], improvement in compliance [5], social interaction [6] and preventing relapse and re-hospitalisation [7-9].

Various outcome measures have been used to establish the efficacy of psycho-education programmes for people suffering from psychosis. Studies which have sought to explore such outcomes have used a range of well-established psychometric tools [3]. These tools gather information on what has changed but fail to capture why participants feel change has occurred. A different approach is used to gather information on change from the patients’ perspective, using Repertory Grids (or ‘Rep Grids’) developed by George Kelly [10]. In keeping with the quantitative nature of the overall study, and associated time constraints for the wider study, it was considered both relevant and appropriate to include a more structured approach to gathering participant perception.

George Kelly (1905-1966) offered an approach to psychology of the individual based on ‘constructive alternativism’ [11], although his theory has also been referred to as phenomenological, cognitive, existential and humanistic [12]. Kelly’s theory was that people actively interpret the events around them, and that their behaviour needs to be understood in terms of personally constructed ideas and explanations of how the world works [10]. These theories may be precise and systematic or may be vague and untested, depending on the past experience of the individual. Kelly did suggest that people need not be victims of their biographical history because the ways in which they see the world are open to alternative interpretations and constructions. The theories provide the individual with a frame of reference for understanding current experience and future action. Thus they are anticipatory and experiential, rather than responsive. In this way Kelly conceived of man as a ’scientist’, constantly testing out his personal theories or hypotheses about his world and modifying/consolidating such theories in the face of personal experience.

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The Rep Grid is a method of gaining insight into the personal construing of an individual and is a: "set of representations of the relationships between the set of things a person construes (the elements) and the set of ways the person construes them (the constructs)" [13].

In Rep Grids, 'elements' are often presented in combination (commonly in groups of three or 'triads'), in order to encourage the participant to consider similarity and contrast between them and in so doing 'generate' or 'elicit' constructs. As such, Rep Grids provide the structure to an interview [14-17] and a "unique way of guiding and documenting a conversation" [18].

In Personal Construct Psychology (PCP) theory, each elicited construct has two poles and as such a construct is bipolar. There is an emergent pole "which embraces most of the immediately perceived context" [10]; and the opposing implicit pole, affording contrast. In this way, the construct is seen to be bipolar or 'dichotomous' where:

"The elements associated at each pole are like each other with respect to the construct and are unlike elements at the other pole" [10].

The key aim of research using a PCP approach is the attempt to assist the participant to share their bipolar constructs, and how such constructs might be organized into a system. Another important consideration for PCP researchers is the emphasis on supporting the participants' articulation of their construction system – this is not 'simply' a matter of interpretation. For example, the articulation of increasingly superordinate constructions is carried out by the 'laddering' process which emphasizes the participants' role in articulating constructs of increasing personal meaning.

In essence, PCP aims to understand and reveal an aspect of the participants' world as it is perceived and constructed by them. Most importantly, PCP methods structure the person's reach for meaning, helping them to articulate their particular and personal worldview, and assist them to express themselves in a way which may be problematic for them in semi-structured or unstructured interview [19]. PCP theory and research methodologies often combine the qualitative and quantitative. As such, empirical data can be useful in being more precise in asking participants to reveal their constructs and also subsequently being able to more reliably measure any changes in such constructs over time.

PCP approaches are considered not only with the phenomenological and the idiographic, but also the normative and nomothetic, in that, assessments have meanings for groups [20]. Houston [21] urges caution with the grouping of scores or the nomothetic process, suggesting it its very nature aims to identify the personal meaning of, for example, offending, to a particular patient, as well as the way in which their previous history and experiences have contributed to the development of their unique personal construct system.

Research in forensic settings using a PCP approach has been reported on many occasions such as exploring mental illness and offending [22,23], alcohol, drugs and offending [24], sex offenders [25], young offenders and delinquency [26,27], violence and aggression [28,24] and personality disordered offenders [29,30].

**Aim**

This research aims to provide new evidence to support the use of PCP in the context of psycho-education by using Repertory Grids to gather information about personal construing from participants.

**Hypothesis**

Attendance at the Coping With Mental Illness (CWMI) group will promote a change in the way patients view their illness.

**Study**

The wider study - reported elsewhere [3] - is a Randomised Controlled Trial (RCT) of a psycho-education programme in Scotland, carried out across four sites, including, high, medium and low secure care, over a three and a half year period. This smaller scale study was designed to complement the original programme of work and gather further evidence to support the patients' perspective. This study was carried out across two forensic units including one high secure The State Hospital (TSH) and one medium secure Orchard Clinic (OC) unit, during the last year of the wider study. During this time (n=20) patients referred to the CWMI group (Box 1) were approached, prior to and, on completion of the programme and asked to discuss their views of the psycho-education programme. Results from each of these interviews were compared and contrasted.

**Methodology**

**Sample selection**

A purposive sample was obtained by approaching all Consultant Psychiatrists (across two sites) who had patients referred to the CWMI group. Patients who were drawn from TSH sample were due to be included in the final two groups of the RCT and the final group at the OC, during the data collection phase (between 2011 and 2012). All Consultant Psychiatrists were given written information on the study and asked if the Chief Investigator (CI) could approach their patients for consent. The CI then asked them to select a number of patients for inclusion in the project and sign a consent form allowing the CI to approach their patients. Each were advised of the criteria for inclusion into this element of the study and that participants were already involved in data collection for the first phase, which in itself included completion of a significant number of psychometric tests. This second phase involved further discussion as part of a structured interview and completion of a Repertory Grid.

**Inclusion and exclusion criteria**

People eligible for the study were all inpatients between the ages of 18-65 and had a primary diagnosis of psychosis. Patients were residing at either TSH or the OC. All patients were able to take part in the CWMI education programme, for the duration of 11 weeks. Patients were excluded if they had a primary diagnosis of Learning Disability or were too unwell to take part, as decided by the Consultant Psychiatrist, using their clinical judgement.
Consent to participate

Prior to engaging in the project, all participants were approached by the CI and asked if they would like to participate in the study. They were issued with an information sheet detailing the purpose and process of the study. They were also asked to sign a consent form. Everyone approached was advised that their care would not be affected whether they did or did not take part. All potential participants had seven days to consider inclusion in the study.

Ethical considerations

Ethical considerations are crucial to the integrity of the researcher and a number of issues were considered. One of the key considerations was whether participants were willing to engage in both the RCT and this additional study, without feeling obliged. Anecdotal feedback of research projects in secure settings has shown that many participants enjoy the research process because it gives participants ‘something different to do’ and they ‘get the chance to speak to someone different’. This attitude clearly does not apply to all concerned, but it is the majority viewpoint in the experience of the CI. All participants were offered the opportunity to receive feedback on their individual results from the study and all wanted this feedback to be made to them verbally. Anonymity was another consideration. Participants were reassured that external reports, for example, journal articles for publication, may include individual scores, but no individual could be identified. An application was made to the Integrated Research Application System (IRAS) and approved in 2010.

Method

The first stage of this project was essentially the planning stage, allowing the CI to generate information from discussion with former attendees of the CWMI group, to aid the development of a Rep Grid, for use in the structured interviews. The second stage involved applying the Rep Grid technique with twenty participants at two time points, pre and post intervention (after eleven weeks).

Houston [21] highlights the advantages of using Rep Grids. Firstly, the technique does not force a response choice on the individual in the same way a questionnaire does, the clinician can therefore use the patients own starting point rather than impose a tight structure on them. This is particularly helpful when working with people who may try and tell you what you want to hear – Rep Grids are much less open to distorted responding. In particular this approach seems to provide information over and above what can be gathered from standard interview assessment plus psychometric measures. It offers an understanding of the unique way in which each individual makes sense of their and their views are acknowledged as adding value to the overall project. Table 1 highlights the repertory grid used in the RCT.

Stage 1: The planning stage; development of the Rep Grid: Discussions were held between the CI and a selection of TSH participants (n=8) who attended the intervention (CWMI psycho-education group) in the past. Patients already involved in the RCT were not approached because the Chief Investigator wanted to remain blind to participant involvement. From these discussions a Rep Grid made from constructs generated from the patients themselves was created. The discussions were designed to establish what the patients’ perceptions were of the group. It is considered unlikely that patients’ opinion from the medium secure unit was likely to differ greatly from those in the high secure unit, so it seemed acceptable to use patients from the high secure population to generate ideas that would in turn inform the Rep Grid.

This stage was extremely important because simple differences in Rep Grid construction can affect the results that are obtained. However when the aim is to try to get a glimpse of how another person construes his world, some of these differences don’t matter too much. That is, the aim is to understand an individual’s subjective personal construal rather than to ascertain their understanding of an individual’s objective truth:

“to the extent that a Rep Grid gives us a map of an individuals construct system, it is probably about as accurate and informative as the maps of the American coastline which Columbus provided” [19].

Another key point is that Rep Grids only offer a window to one aspect of construing and not to the person’s entire construct system.

Selection of elements: As part of the process decisions had to be made in relation to how information could be best gathered, in order to create the Rep Grid. In keeping with the principles outlined by Fransella et al. [19], the grid creator (in this case the CI, in consultation with the supervisor ST) firstly selected the elements to be construed. This was done in relation to what questions the Rep Grid was supposed to be addressing. The ten elements selected were designed to enable the potential participant to consider his/her response from how he/she felt historically, for example, 10 years ago (past self), currently (self now and self as a learner) and in the future (ideal self and expected self). Other elements were created to enable the participant to think of himself/herself as others see him/her, for example, from the viewpoint of someone he/she admired, someone who has faith in him/her and someone he/she disliked, also from a fellow learner’s view and from his/her doctors view (Box 2). A conscious effort was made to ensure that elements did not overlap or contain one another and that they were concrete and discrete. In addition to this the element set was designed to be homogeneous, that is, each element carried the same ‘weight’ and had the same right to be in the element set.

Gathering of constructs: Constructs are the templates by which a person comes to know and anticipate their personal world [10]. It is by means of personal constructs that individuals anticipate the outcome of a particular event. It is through experience that constructs develop, but they are also tested, confirmed or disconfirmed, and revised as a result of experience [10]. A decision was made to supply the majority of constructs (7) and elicit an additional few (3), this was in order that comparisons could be made across data generated from the entire sample, whilst still allowing for unique individual contributions. This topic of whether using ‘supplied’ or ‘elicited’ constructs makes a difference is a much debated issue and quite a literature has developed over the years. The traditional method was to elicit constructs and there is evidence to show that elicited constructs produce more differentiation or cognitive complexity [31]. Bonarius [32] supports this, claiming that people give more extreme ratings on constructs elicited from them than on supplied constructs (the assumption being, that the more extreme rating, the more meaningful the construct). More recently Adams-Webber [33] found that people could more easily make inferences...
about another person on constructs that had been supplied, but ease of use depends on the skills of the designer in providing meaningful constructs. Neimeyer and Leso [34] do concede that it may just be that the difference, when found, between elicited and supplied constructs stems from the fact that the interviewee has been asked to construe his or her own construing processes during the elicitation process, and so is more sure about them than when faced with the constructs 'cold', so to speak.

Constructs were drawn from open ended discussions with the patients, where they were asked to firstly consider what were the key features of this psycho-education group and what they thought other people (fellow patients) might get from their participation in such a group. Thoughts focussed on being hopeful, confident, knowledgeable, understanding, valuable, in control and self aware. Discussions then centred on exploring the bi-polar nature of each area the patient had focussed on. For example, when 'hopeful' was mentioned patients were asked ‘what is the opposite of this in your own words and how can this be worded in relation to what people take from the group?’, until eventually seven bi-polar constructs were created that all patients agreed on: (1) have hope to move on versus (vs.) have no sense of hope to move on (2) have confidence to engage in groups vs. have negative feelings towards groups (3) understand my own illness and how it affects me vs. have no understand my own illness and how it affects me (4) realise others have the same problems vs. do not realise others have the same problems (5) realise I am a valuable person in society vs. think I am worthless (6) have control over my illness vs. have little or no control over how I think and feel (7) feel normal vs. don't feel normal.

Rep Grids are commonly reported to have ten elements and ten constructs [19]. With seven 'supplied' constructs, this allowed a degree of freedom for participants to 'elicit' three further unique personal constructs as part of the interview process. A seven point scale was used of freedom for participants to 'elicit' three further unique personal constructs [19]. With seven 'supplied' constructs, this allowed a degree of freedom for participants to 'elicit' three further unique personal constructs [19].

Stage 2: Structured interviews using supplied Rep Grid: One to one interviews were undertaken (n=13, TSH and n=5, OC) between the CI and each of the participants at two stages in their journey (pre and post intervention). Field notes were taken from interviews. The participants were all offered the same introductory information prior to commencing the interview (this was scripted and read by the CI). The CI was aware of the likelihood of the patients being somewhat concerned about not being able to see what was being written and all were actively reassured that this was a necessary part of the process and that they were more than welcome to get feedback at the end of the session, but not during it.

All were given the supplied Rep Grid (Table 1) and asked to rate each construct on a score of 1-7. The grid offered to the patients was blank and the interviewer completed her own grid - held out of sight of the participant. This was done in order that the participant did not try and set a pattern unconsciously and was explained at the outset. Laminated cards were presented to the patients identifying the constructs they were being asked to rank. Further detailed exploration of the constructs was undertaken during the interview schedule using a 'laddering' approach, in order to elicit a further three constructs. Laddering, described by Hinkle [35], was used when there was a construct that the interviewer wanted to explore in more detail, and where, for example, the participant became quite animated when scoring a particular construct, such as, in control versus not in control. The interviewer would say 'lets have a look at this in more detail' and ask 'why would you describe yourself as being in control' (this is evident through the score that has been attached to this construct, for example 1 or 7), the next step (in the ladder) is to say 'why is it important to be in control as opposed to not be in control?', from this another construct can be elicited that is personal to the individual, for example, 'more able to deal with stress in life'.

The intention was to make comparisons between results generated from the individual results (pre and post intervention) and explore

| A (1) | How I was 10 years ago (past self) | How I am now (actual self) | How I am as a learner now | How someone who has faith in me sees me | How my Doctor sees me | How someone I admire sees me now | How a person I don't like sees me now | How another patient sees me (learner) | How I would like to be (ideal self) in the future | How I expect to be (expected self) in the future |
|-------|-----------------------------------|--------------------------|-------------------------|-------------------------------------|----------------------|-------------------------------|-----------------------------|--------------------------------|------------------------------------------|------------------------------------------|
| Have hope to move on | Have confidence to engage in groups | Understand my own illness and how it affects me | Don't realise others have the same problems | Realise I am a valuable person in society | Have little or no control over how I think and feel | Feel normal | Have no sense of hope to move on | Negative feelings about groups | Have no understanding of what illness is all about | Realise that others have the same problems | Think I am worthless | Have control of my illness | Don't feel normal |

Table 1: Repertory Grid.
changes. Each structured interview started with the same questions. Following the second, Time 2 [T2] or post group - analyses, participants were asked to compare the most recent grid with their previous grid. Intra rater reliability checks were carried out on three participants, which made up 10% of the sample. Once the results had been analysed and interpreted by the CI one final visit was made to meet with the participant and check for accuracy of interpretation.

Results

A sample of 18 participants rated each of the ten elements on each of the seven bipolar constructs. Demographic characteristics of the participants can be seen in table 2. Data analysis was undertaken using Gridsuite [36], a computer programme specifically designed to analyse Rep Grids. Two participants were unable to complete the interview and were therefore excluded from the sample.

Characteristics of participants

A single case study is used to illustrate sample results from the Rep Grids (Table 2). The participant (Dave) is somewhat typical of the wider group and shares a similar pattern of scores on the grid. Dave was born in the West of Scotland, has a dual diagnosis of paranoid psychosis and anti-social personality disorder and has been a patient in TSH for eighteen months, following the attempted murder of his uncle. Aged 31, Dave is white, single and was unemployed prior to his admission, his IQ is in the low average category (80-89) and he has a history of both drug and alcohol misuse since his early teens. During the initial interview, undertaken prior to attendance at the group, Dave was particularly anxious about a pending court appearance and was very unsure as to whether his ‘head was in the right place’ for doing the group. By his own admission he was ‘feeling low’ and was worried about the potential success of his appeal to a lower level of security. He thought the group might ‘be no more than a useful distraction at this point in time’ but did state he was ‘keen to learn more about psychosis and how it affects you’. On analysing Dave’s response to the questions posed, it was evident his perception of how he was ten years ago was radically different from his current presentation. Yet it would seem his view of the future self and expected self, which are extremely similar, are closer to how he saw himself in the past. In essence he wants to recover to the point that he can function as well as he use to. He illustrates a somewhat negative picture of his current position (Figure 1) and clearly thinks this is also how others see him.

Research findings underpinning Dave’s story

Dave’s scores on the psychometric tests at baseline (T1) indicated that he already had a fair degree of insight as measured by Assessment of Insight scale (AOI) [37]. Dave’s insight score (16) was higher than the group as a whole (mean = 10, standard deviation (SD) 5.2, n=18). Yet his knowledge of illness as measured by the Forensic Assessment of Knowledge Tool (FAKT) [3] was poor (13) and considerably lower than the rest of the group (mean=29, SD=9.3, n=18). Self esteem [38] score was (14), lower than the group average (mean=19, SD=5.8, n=18) and would fall into the category of ‘low self esteem’.

Gridsuite analyses the findings from the Rep Grid by means of a Principal Component Analysis (PCA) with varimax rotation. With the varimax rotation, the rotation of the co-ordinate axes around the origin, the attempt is made to obtain the purest possible components. In calculations, these are high correlations of a group of variables with a reference axis. Viewed graphically, these are axes as close as possible to clouds / groups of variables. This rotation does not change the data and the relationships among the data; what is changed is the relation of the variables to the principle components. In this example, the various indicators of factorability were good, and the residuals indicate that the solution was a good one. Three components with an eigenvalue of greater than 1.0 were found; the scree plot also indicates three components. There is evidence here of a distinct break between the steep slope of the first three factors and the gradual trailing off of the other factors. The components can be thought of as representing the way Dave perceived things were for him, component one included ‘feeling normal, hopeful, confident and valued by others’ accounting for

| Characteristic          | Number % age | Mean (SD) | Median |
|-------------------------|--------------|-----------|--------|
| Gender (Male)           |              |           |        |
| Age                     | Between 18-24| 2 (11%)   | 6 (10.46) |
|                         | 25-34        | 6 (33%)   | 36 (10.46) |
|                         | 35-44        | 6 (33%)   | 36 (10.46) |
|                         | 45-54        | 3 (17%)   | 36 (10.46) |
|                         | 55-64        | 1 (6%)    | 36 (10.46) |
| Ethnic origin           | White        | 17 (89%)  | 36 (10.46) |
|                         | Other        | 1 (11%)   | 36 (10.46) |
| Marital status          | Single       | 12 (68%)  | 36 (10.46) |
| Prior to admission      | Married      | 1 (6%)    | 36 (10.46) |
|                         | Divorced/separated | 1 (6%)  | 36 (10.46) |
|                         | Widowed      | 1 (6%)    | 36 (10.46) |
| Intelligence Quotient (IQ)| Below 69 extremely low | 2 (11%) | 90 (9.31) |
|                         | 70-79 borderline | 9 (50%) | 90 (9.31) |
|                         | 80-89 low av  | 6 (33%)   | 90 (9.31) |
|                         | 90-109 average | 1 (5%)  | 90 (9.31) |
| Diagnosis 1             | Psychosis    | 18 (100%) | 90 (9.31) |
| Diagnosis 2             | Mood / affective disorder | 4 (22%) | 90 (9.31) |
| History of drug abuse   | Yes          | 11 (61%)  | 90 (9.31) |
|                         | No           | 7 (39%)   | 90 (9.31) |
| History of alcohol abuse| Yes          | 13 (72%)  | 90 (9.31) |
|                         | No           | 5 (28%)   | 90 (9.31) |
| Left school with formal qualifications | Yes | 6 (33%) | 90 (9.31) |
|                         | No           | 12 (67%)  | 90 (9.31) |
| Employment status prior to admission | Unemployed | 15 (83%) | 90 (9.31) |
|                         | Employed    | 3 (17%)   | 90 (9.31) |
| Index offence           | No offence   | 9 (50%)   | 90 (9.31) |
|                         | Serious offence e.g. murder or attempted murder | 7 (39%) | 90 (9.31) |
|                         | Sexual related offence | - 2 (11%) | 90 (9.31) |
|                         | Other        | -         | 90 (9.31) |

Table 2: Characteristics of participants.
59.8% of the variance; component two ‘being in control’ for 16.8%, and component three ‘able to do stuff without being annoyed’ for 13.7%. In see Table 3 for breakdown of components and variables that load on them.

In the initial interview, Dave was somewhat distracted by the pending court case and had subsequently become quite pre-occupied with this. In exploring super-ordinate construing using the construct have hope to move on – have no sense of hope to move on as the bottom rung led to able to do stuff without being annoyed – not able to do stuff without being annoyed. The link was made because although Dave was in control of how he thought and felt, he was still unable to make key decisions about his future, leading to a feeling of frustration and annoyance. For Dave the construct hope to move on was closely correlated with constructs relating to feeling normal; realising I am a valuable person in society and having confidence to engage in groups. His overall interpretation is indicated below.

“T'm fairly certain, that, before the programme, I felt that people I didn't like and those I admired saw me and my future negatively. I felt that I wanted to be and expected to be how I was ten years ago, even though at that time I had little control over my illness. I felt that a person I didn’t like saw me before the programme as not being able to do stuff without being annoyed and having little control over my illness. Having confidence to engage with the group could help me to feel more hopeful to move on. I could then feel I was a normal and a valuable person in society”.

Following attendance at the group, Dave’s view seems to have changed, as opposed to the earlier negativity, in the main he was more ambivalent about his current circumstances, but seemingly more realistic about his future (Figure 2). Following a period of reflection during the course of the group there is evidence to suggest that he has accepted his past self maybe wasn't as idealistic as he initially thought and that there are ‘areas of life that will need to change’, if a successful future is what is wanted. A clear example of this is his drug use. Dave was ‘getting by’ through regular use of ‘hash, amongst other things’ and a few members of his family actively encouraged this, indeed it seemed to be the norm for both family and many of his closest friends. He was able to identify the links between the effect of drugs on his anti-social behaviour and the deterioration in his mental state, causing an increase in paranoid ideation. This paranoid ideation increased to an uncontrollable level, culminating in the act of attempted murder.

Dave’s insight score improved marginally to (17) post intervention and again was higher than the group as a whole (mean = 11, Standard Deviation (SD) 5.1, n=18). His knowledge of illness was much improved at (32) and on a par with others (mean=32, SD=9.5, n=18). Self esteem lifted slightly to (15), still lower than the group average (mean=19, SD=5.8, n=18) and on the threshold of low self esteem.

Three components with an eigenvalue of greater than 1.0 were found again at post intervention. Component one was responsible for 40.7% of the variance, including similar constructs as the first time point, although less marked than before (Table 4). Component two almost equally weighted the weighting of component one, at 37.8% and component three accounted for 16.4% of the variance. The wider interpretation of this from Dave's viewpoint is: 'I'm fairly certain, that, after the programme, I feel that I have little sense of hope, but I would like to be hopeful. I feel that a person I don't like will see me as having no control over my anger, but I would like to have this control. I would also like to a valuable person in society and understand my illness and how it affects me. Ten years ago I feel I was worthless and not aware of my illness'.

During a follow up discussion with Dave the CI showed and explained the findings generated by Gridsuite. Dave was quite amazed how well the Rep Grid managed to capture his personal construal and did not want to change the interpretation.

**Discussion**

Due to the very nature of quantitative research gaps can emerge in the supporting evidence. The use of Rep Grid here has enhanced the information gathered and substantiated the findings drawn from the range of psychometric assessments employed within the wider trial. The Rep Grids do take longer to complete than many routine interviews- approximately thirty to forty minutes- but the results do offer a rare insight into the patient experience. Initial fears associated with the use of supplied grids proved to be ill founded and the majority of the participants were clearly able to relate to the constructs presented before them and indeed many made comment about their relevance. The literature does support this finding and [39] purports traditional research methods using questionnaire implicitly assume respondents construe the material present in a similar fashion. A small proportion (n=2) of the participants did find the Rep Grid challenging, and were quite confused particularly when the scores were reversed. The patient population in high and medium secure services do reputedly experience greater challenges in learning situations. It is suggested

| Component 1                  | Component 2                      | Component 3                     |
|-----------------------------|----------------------------------|---------------------------------|
| Have hope to move on        | Have little or no control over how I think and feel | Able to do stuff without being annoyed |
| Have confidence to engage in groups |                             |                                  |
| Realise I am a valuable person in society |                             |                                  |
| Feel normal                  |                                  |                                  |

Table 3: The components found by the principal component analysis and the variables that load on them are indicated in relation to post intervention scores.

![Figure 2](https://example.com/figure2.png) Principal Component Analysis highlighting the relationship between constructs and elements for participant 1 (Dave) at the post intervention stage.
[4] that people with mental health problems in forensic services have often had little active involvement in their own care, for some the active collaborative approach, central to the success of the psycho-educational programme and subsequent evaluation, is very daunting and sometimes unwelcome. Added to the relational difficulties there is evidence to suggest that people suffering from a psychotic illness have defects of cognitive functions such as problem solving ability, explicit memory, knowledge and general intellectual capacities [40]. Arguably results of the magnitude of intellectual deficit in patients with psychosis do not show a clear pattern [41]. One of the suggestions for poorer performance is the use of anti-psychotic medication [42]. There is further evidence to suggest forensic patients have a poor history of educational achievement consequently require more persuasion to engage in educational initiatives. Whilst acknowledging these cognitive complexities do make the use of such a technique more difficult than the average interview, the interest generated from the findings far outweighs the effort required.

A single case study has been presented here, thus only touching on some of the issues for that particular individual. As a collective group, following the nomothetic model, some common themes emerged and will be reported in full at a later date. One of the most striking findings that emerged within the results of the entire group (n=18) was the use of extreme scores, for example, scoring number one across the majority of the grid. This was evident in instances where the participant seemed particularly eager to show themselves in a positive light. In the three cases where this occurred neither participant was able to think of a person they didn't like - because they 'liked everyone' in society, all felt this element was not applicable. They were all very keen to indicate that 'everything was going well' for them and all shared the view that there was 'absolutely no need for them to be in a secure setting'. These findings are in stark contrast to the majority of participants and perhaps their motivations differed from the wider group, further analysis of the data is required to establish a clearer picture.

There are clear limitations of the generalisability of findings using such a small group of participants, but such reports are still of interest to clinicians seeking to gather information using legitimate methodology.

Conclusion

Despite the apparent challenges associated with psycho-education for Mentally Disordered Offenders, Rep Grid is a useful method that can be used to systematically gather patients' views of an intervention. Its use in forensic services to explore the value of psycho-education is quite unique and has proven to be challenging but worthwhile. The Rep Grid certainly demands that clinicians spend further time to gather information from the participants. Arguably the additional information achieves a richer, fuller, more balanced assessment to include a unique patient perspective.

Clinical implications

Findings from this study have indicated the value of working with patients to further enhance the evidence base for psychosocial interventions. This information may well be used to aid engagement of future patients in the CWMI programme or similar psycho-educational initiatives.

Recommendations

In instances where there is no existing questionnaire used to establish patient perception, the development of a Rep Grid has proved to be a worthwhile strategy and is recommended for use with psycho-educational programmes. It offers the flexibility of supplied or elicited grids thus can generate individual or group data on an intervention or on a specific subject / initiative.

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