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Citation:

Linstead, H and Brooks, R (2015) A Mixed Methods Study of the Re-Animation Approach within a Forensic Mental Health Setting. *Occupational Therapy in Mental Health: a journal of psychosocial practice and research*, 31 (4). 402 - 420. ISSN 1541-3101 DOI: <https://doi.org/10.1080/0164212X.2015.1067157>

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Document Version:

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A Mixed Methods Study of the Re-Animation Approach within a Forensic Mental Health  
Setting

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**ABSTRACT.**

This mixed-methods study investigated the impact of the Re-Animation Approach, a creative occupational therapy, on the well-being and occupational performance of three male patients in a forensic mental health setting. Quantitative data were gathered through Goal Attainment Scaling (GAS) and qualitative data using semi-structured interviews. GAS t-scores demonstrated an over-achievement of expected outcomes in goals related to improving skills, well-being and time use. Issues emerging from thematic analysis of the interviews are consistent with the GAS results. The Re-Animation Approach had a positive impact on participants' health and well-being, addressed a range of occupational needs and can be graded.

**KEYWORDS.**

Creativity, animation, occupational therapy, intervention

## *INTRODUCTION*

The Re-Animation Approach was conceptualized by occupational therapist Helen Mason (Mason, 2009). The approach uses stop motion animation techniques, whereby objects or people are photographed, moved in a small increment, photographed and then moved again. Figures 1 and 2 illustrate objects and people being positioned to be photographed. This stop motion technique creates the illusion of movement when the series of still images are played as a continuous sequence using real time animation software (Mason, 2009). The Re-Animation Approach has foundations in occupational therapy practice and occupational science and draws on principles from the Model of Creative Ability (De Witt, 1997) and Model of Human Occupation (Kielhofner, 2008). The Re-Animation Approach has three levels of intervention with five stages progressing from just for fun sensory level to performance animation, Table 1 details the levels and training required. In addition to occupational therapy the intervention is used in psychology, creative psychotherapies and systemic family therapy as well as having been adapted for use by community artists. The approach has been applied within a variety of settings, such as child and adolescents services, learning disabilities and autism, dementia, young offenders and oncology (Mason, 2009 & 2011). It is also currently used in a small number of forensic mental health units in the United Kingdom (UK). Despite its growing use in clinical practice the Re-Animation Approach has only been the subject of two journal articles based on clinical experience and observations (Mason, 2009 & 2011). While these reflective commentaries provide an insight into the use of the Re-Animation Approach they do not demonstrate evidence of its effectiveness.

<Insert Figure 1>

<Insert Figure 2>

<Insert Table 1>

Occupational therapy was founded in the arts and crafts movement of the early 20<sup>th</sup> century (Paterson, 2014). Activities such as the manipulation of images on computers and digital photography could be viewed as today's alternatives to cord knotting and weaving. The Re-Animation Approach could be seen as a modern day arts and crafts (Chard, 2007). The therapeutic use of creative occupations, once the main tools of practice used by occupational therapists, has attracted limited research over the past decade (Timmons & McDonald, 2008). The paucity of research is apparent within the latest literature review investigating the therapeutic use of creative occupations by Perruzza and Kinsella (2010). Concentrating on the years 2000-2008, the researchers were compelled to turn to literature from the fields of psychology and nursing because of the lack of research specific to occupational therapy. Perruzza and Kinsella (2010) urged the spotlight to be put on the use of creative activity occupations within occupational therapy, "a profession whose historical roots recognised the therapeutic potential of such occupations" (p. 267).

Over the past decade a small number of studies have addressed creative activity interventions within mental health settings including creative writing (Cooper, 2013), dance (Froggett & Little, 2012), poetry (Hilse, Griffith, & Corr, 2007) and the use of clay (Timmons & MacDonald, 2008). Other research has been more broadly concerned with a range of creative activities including: painting, drawing, collage, card making, textiles, needlecraft, pottery and woodwork (Griffith, 2008; Griffith & Corr, 2007; Lloyd, Wong, & Petchkovsky, 2007; Schmid, 2004).

Griffith (2008) suggested that creative activities facilitate occupational gains, which can be grouped into manual skills, specific to the activity (sewing, drawing, etc.) and more generic task performance skills, (such as concentration and problem solving). For many people art is also a preferred way of expressing thoughts and emotions (Perruzza & Kinsella, 2010). Art can enable people to regulate and control what and how much they choose to

communicate, resulting in a sense of empowerment and independence (Lloyd et al., 2007). Additionally, creative activities can provide structure for chaotic feelings and thoughts (Hilse et al., 2007) and allow for the articulation of future hopes and dreams (Lloyd et al., 2007). A positive outlook on the future can also be fostered through the potential of creative activities to build a sense of purpose (Griffith, 2008), aiding the realization of one's potential (Schmid, 2004). Griffith (2008), however, identified the fact that low self-concept and negative thoughts can hinder engagement in creative activities. Overall, the studies described suggest that creativity can contribute positively to health and well-being, and can be particularly valuable for those deprived of an adequate spectrum of activities caused by illness or disability (Creek, 2008). All of the studies cited did, however, focus on the use of interventions within group settings, yet it has been suggested that 69% of occupational therapists in mental health settings use creative activities as a one-to-one intervention (Griffith & Corr, 2007). Samples of participants were predominantly female, and the studies were largely conducted in community mental health settings.

The limited research addressing creative interventions does not, however, appear to reflect the realities of practice. Exploring the utility of creative interventions by occupational therapists in mental health settings in the UK, Griffith and Corr (2007) found that 82% of their sample used creative activities as an intervention, with 94% of those using them at least once a week. Despite the small sample of 66 occupational therapists, this research has built on the findings of Craik, Chackfield and Richards (1998) who identified the fact that 80% of the mental health occupational therapists sampled used creative activities, with 80% using them at least once a week. Creative activities have been described as affording the occupational therapist a multitude of possibilities for grading, enabling occupational therapists to facilitate the "just-right" match of task level and performance capacity (Schmid, 2004). The appropriate grading of a creative activity can expedite the acquisition of skills and

mastery, allowing patients to retain a sense of control regardless of ability (Timmons & MacDonald, 2008).

In summary, the evaluation of creative occupational therapy interventions is limited. Research has not been conducted within a forensic mental health setting or with a one to one intervention. The Re-Animation Approach is being increasingly used as a creative occupational therapy but currently lacks evidence to support its use. To address these under-researched areas, this study presents the application of a creative occupational therapy intervention delivered through one-to-one sessions, to an exclusively male participant group within forensic mental health unit. It aimed to uncover the experience of three service users engaged in Level 1 of the Re-Animation Approach through weekly sessions over a period of three months, specifically focusing on the impact of the intervention on the participants' occupational performance and well-being.

## ***METHOD***

### ***Design***

A mixed methods approach was used to provide a “practical” way to address a study which could not fully be explored through either method alone (Creswell & Plano Clark, 2010). Quantitative and qualitative data collection was conducted concurrently and a parallel mixed data analysis has been utilized, whereby the methods have been analyzed independently and subsequently integrated into the discussion (Teddlie & Tashakkori, 2009).

### ***Ethics***

Full ethical approval was obtained from both Leeds Beckett University and the National Health Service (NHS) Research Authority. Site specific permission was issued by St. Andrews Health Care.

## ***Participants***

The research was conducted at an inpatient forensic mental health unit. Reputational case sampling was used to select the research site whereby possible sites are selected on the recommendation of an expert (Teddlie & Tashakkori, 2009). Animation Therapy Limited acted as the expert and provided the researcher with information on possible research sites. All occupational therapists at the research site were provided with the participant information sheets, and they subsequently approached patients matching the inclusion criteria on behalf of the researcher. Participants were eligible for inclusion if they had chosen to begin engagement in the Re-Animation Approach during a two month recruitment window. They were between 18 and 65 years of age, fluent in English and had the capacity to consent to participation. The written content of the participant information sheets was also communicated verbally to the participants who were given three days to decide if they wished to take part in the study. Three participants agreed to take part in the study and are presented in Table 1. The participants' lead clinician was consulted to ensure capacity to consent, and, for participants and researcher safety, all members of the care team were made aware of each participant's engagement in the study. The occupational therapy technical instructor conducting the intervention was also provided with a participant information sheet and consented to participate, with the participants being aware of this. For clarity, the occupational therapy technical instructor is referred to as "the technical instructor" within this article, and the patients are referred to as "the participants".

<Insert Table 2>

## ***Intervention***



Over three months, the participants attended weekly Re-Animation Approach sessions, engaging in level one of the approach at the free play or simple product level, lasting one hour for each session. The sessions took place at the research site, in a therapy room, and were conducted by the technical instructor, qualified to level 2 and with over a year's experience of facilitating Re-Animation Therapy sessions. The participants continued to engage in their usual range of therapies with the multi-disciplinary team and were able to continue attending the Re-Animation Approach sessions indefinitely following the data collection.

### ***Data Collection***

Triangulation was used to increase the overall legitimacy and trustworthiness of the conclusions drawn from this research (Teddlie & Tashakkori, 2009). Information was gathered from three sources; Goal Attainment Scaling, interviews with participants, and an interview with the technical instructor.

### ***Goal Attainment Scaling***

Goal Attainment Scaling (GAS) is a standardized method for setting goals and quantifying achievement by creating an individualized 5-point scale of potential outcomes for each activity undertaken and applying a statistical test to measure change (Turner-Stokes, 2009). First introduced in the 1960's by Kiresuk and Sherman (Marson, Wei, & Wasserman, 2009) for assessing outcomes in mental health settings, research has proposed that the tool offers a collaborative patient-therapist approach, allowing for customised goals and agreement on expected outcomes. Studies evaluating the validity and reliability of the tool advocate GAS for its sensitivity to change, allowing for more discrimination than simply recording achievement as a "pass" or "fail" (Turner-Stokes, 2009). In this study, each participant, in collaboration with the occupational therapist, set goals and predicted outcomes

pre-intervention, which were then evaluated three months later. The goals were not shared with the technical instructor conducting the intervention.

### ***Interviews***

Interviews were also conducted with the participants pre-intervention and three months later. A semi-structured interview approach was employed, allowing for the examination of new ideas presented by the participants, building on the researchers' framework of ideas for exploration (Creswell & Plano Clark, 2010). The interviews took place in a quiet room at the research site and were attended by the participants' occupational therapist. With the participants consent the interviews were audio recorded and transcribed verbatim. Subsequently, the technical instructor was interviewed, with questions informed by the outcome of the participant's experience of the intervention.

## ***DATA ANALYSIS***

### ***Quantitative***

GAS scores were calculated in accordance with guidance from Turner-Stokes (2009). Table 3 details the participant's goals, GAS scores and t-scores. Pre-intervention, each goal was weighted by level of importance from 0 to 3 where 0 = not at all important and 3 = very important, level of difficulty where 0 = not at all difficult and 3 = very difficult, and a baseline score of -1 or -2 where -1 = some function already present and -2 = no function present. The baseline score is usually rated -1 (Turner-Stokes, 2009). Three months later, the goals were evaluated based on the individual 5-point scale of potential outcomes. If the patient achieved their expected outcome they received a score of 0, if they achieved better than expected this was scored +1 (somewhat better) or +2 (much better), if they achieved worse than expected this was scored -1 (somewhat worse) or -2 (much worse). For each participant t-scores were then calculated; t-scores are calculated with a mean of 50 and a

standard deviation of 10 (Turner-Stokes, 2009). A t-score of 50 = goals have been achieved as expected, t-score < 50 = goals have not been achieved (under-achievement) as expected, t-score > 50 = goals have been achieved better (over-achievement) than expected. A single numerical outcome was generated for each participant, amalgamating several goals into one overall score, to provide a measure of the overall success of the intervention (Marson et al., 2009).

### *Qualitative*

A thematic analysis approach was applied to scrutinize the interview data, inductively gathering insights about the data without imposing predetermined theories or categories (Creswell, 2012). The six phases of thematic analysis specified by Braun and Clarke (2006) were utilized; familiarizing yourself with your data, generating initial codes, searching for themes, reviewing themes, defining and naming themes and producing the report.

## ***FINDINGS***

### ***Results of the Quantitative Data***

Ranging from 64.2 to 66.6, the participants' t-scores demonstrate a distinct over-achievement of goals, surpassing the expected GAS t-score of 50 (Turner-Stokes, 2009). Furthermore, the goals can be placed within three categories which generate comparable t-scores: improving skills, well-being and time use. The shading in Table 3 presents the allocation of goals to categories. Figure 3 shows the over-achievement of goals when categorized.

<Insert Table 3>

<Insert Figure 3>

### ***Findings of the Qualitative Data***

This section described the four themes emerged from the interviews.

#### **Theme one: “*It’s more than just an activity to fill my timetable*”**

Motivation to begin the intervention stemmed from the high value the participants placed on using their time productively. Recounting a wide array of activities that “filled up” their timetables, the participants all viewed the Re-Animation Approach as another means to circumvent boredom: “I’ll do all sorts of things. Anything to keep my hands busy, or my mind” (Dominic).

After three months, however, the participants spoke of the intervention as a meaningful occupation: “It’s more than just an activity to fill my timetable, it’s a real interest” (Colin). Sessions were eagerly anticipated by the participants, who were motivated by genuine enjoyment which participants described in terms of creative freedom, feelings of satisfaction and the opportunity for play and humor.

The broad range of creative opportunities afforded by animation facilitated creative freedom. The participants had choice and were in control: “I’ve been able to pick the characters, what I want to base my storyline on, so I’ve based it on loads of different meerkats cos I like meerkats.” (Dominic).

The sessions, requiring commitment, focus and patience, presented a challenge for Frank and Colin. Overcoming these challenges resulted in a great sense of satisfaction and personal achievement: “...it’s something what I’ve done and I’ve spent my time working hard on it. I think it’s really good. You have to do it in small steps and build it up” (Colin). For Frank, the activity led to increased self-confidence and a realization of his own potential: “I’ve actually

found something what I like and it feels good that I've found something what I like and something what I'm good at."

Opportunities for play and humor were presented as powerful components of the intervention: "Oh boy, do I have fun or do I have fun! It's a time for the big kid to come out and have a laugh doing some animation" (Colin). Frank described how he manipulated his chosen images, and music, to create an animation that would "make people laugh and everything because it's pretty funny" and the technical instructor recounted the impact of this statement within the sessions: "...whatever ends up on screen, we've messed around with numerous amounts of times before and we've rolled around the room laughing. All sorts of humor and fun goes on within the sessions."

**Theme two: "*You can just completely lose yourself*"**

Although the participants initially found the computer software "hard" and "frustrating", these feelings rapidly subsided. The participants experienced relaxation, escapism and absorption, which counteracted the adverse effects of a restrictive environment: "It's like a relaxing session, somewhere you can relax...It's like you don't think about what's happened around the ward, or what's happened around the hospital, you're just cracking on with what projects you do. It's taking your mind off it." (Colin)

The sensory quality of some of the materials, the quiet space and the slow pace of animation generated feelings of relaxation through absorption: "You're not struggling trying to get things done; you're just taking your time. You're always thinking what it's going to look like and how you're going to build it up, making it into a like a whole. You can just completely lose yourself." (Colin) The participants all reported feeling "good" and refreshed after their sessions: "I come back (to the ward) with a good attitude basically" (Frank)

The feeling of escapism was significant for the participants, particularly Dominic who often felt “claustrophobic”. He found the sessions provided relief from the realities of his environment: “When I go I can escape from the ward, to have some fun basically, doing some animation. It gets me away so I can unwind.”

**Theme three: “*The skills I’ve learnt have opened a new door*”**

The acquisition and development of skills within the session brought about unique opportunities for the participants to shape their journey. Experiencing trouble articulating thoughts and feelings verbally, Dominic was working on an animated piece to present within a multi-disciplinary team meeting to express issues he had previously struggled to communicate: “It actually makes me feel excited about it actually cos they’re going to be able to know stuff about me, probably some stuff that they didn’t even know.”

Colin had also been using his animation skills to approach a problem, incorporating role-play within his sessions to explore appropriate interactions within social situations. The sessions were a safe place to try out different responses to situations, and reflect on his communication.

Developing a real enthusiasm for the media technology, an extra weekly session had been offered to Frank, to become involved in a variety of media production for the service. He described this as “opening a new door”. Frank, who previously had little hope for his future, developed aspirations: “It’s good because if I can learn new skills here and I stick by it, eventually I can go to college and start doing it at college and go to uni and start doing it at uni. Because this is the sort of thing that I would really like to do with my life.” The computer skills gained through the sessions were valued highly by all of the participants: “using a computer goes a very long way” (Colin).

#### **Theme four: “*You feel very supported by everything*”**

The participants felt supported within the sessions, listing the therapeutic relationship, level of challenge, resources and one-to-one format as the facilitating factors.

The therapeutic relationship was grounded by a teamwork ethos, with the participants shaping the content of the sessions and the technical instructor using the Re-Animation Approach training to support them: “They’ve always got responsibility all the way. All I’m doing is showing them the techniques of how they can animate, and troubleshooting.”

Frank described the sessions as “an achievable challenge”, and the technical instructor regarded the stages of the Re-Animation Approach as vital to create this: “Using the Re-Animation Approach, going right from the beginning, the really simple stuff, is really quite good and important to see peoples’ skills and abilities (in order) to grade further sessions and develop skills.”

Dominic had disengaged from generic animation sessions while located on a different unit. He depicted the support of the technical instructor and the resources available within the Re-Animation Approach sessions as factors sustaining his interest: “I’ve got access to more things now so I can do it a lot better. They’ve got everything there to do what you want.” Additionally, the nature of the technological resources was viewed positively by both Colin and Frank who felt free from time restrictions and pressure: “If you do not like it, you can do something else to it. If you draw something and you do something wrong, you have to rub it out and it would be smudged, but if you’re on the computer, you can rub it out and it won’t be smudged.” (Frank)

The one-to-one format was seen as beneficial by the participants and the technical instructor. The participants described finding it easier to relax, focus and be more productive without distractions from other service users, while the technical instructor discussed how the

format facilitated the therapeutic relationship, allowing for him to “focus on someone’s world”.

Contending issues outside of the sessions were raised by the participants. Security levels and staff shortages on the wards meant that participants were occasionally late or missed sessions, adversely affecting the participants’ well-being: “Sometimes when I get told I can’t attend it, I get a bit down” (Dominic). Although the participants were able to use a workbook throughout the week, the secure environment inhibited the storage of animation materials on the wards, limiting involvement outside of the set sessions.

## ***DISCUSSION***

The dearth of occupational therapy literature focusing on forensic mental health settings primarily presents the link between secure environments and occupational deprivation (Farnworth & Munoz, 2009), with time use predominantly characterized by engagement in rest occupations, personal care and passive leisure (Stewart & Craik, 2007). Mirroring the results from Craik et al. (2010), the participants of this study valued opportunities to keep busy, yet struggled to maintain interest and commitment. In an occupational perspective of secure institutional practice, Farnworth and Munoz (2009) highlighted the view that the provision of activities is never enough by itself; the activities must be meaningful to sustain engagement, and to maintain and promote health. Characterized by the presence of satisfaction, clear goals, choice and control, a supportive environment, and a sense of mastery (Law, 2002), animation was experienced by the participants as a meaningful occupation. The intervention positively influenced health and well-being, and addressed a broad range of occupational needs, many specific to a secure hospital environment.



The GAS t-scores demonstrated that all three participants, very similarly, achieved more than their original goals after just three months of engaging in the Re-Animation Approach, equally exceeding expectations in goals related to performance skills, well-being, and time use. Although the GAS t-scores should be interpreted with caution because of the small sample, the qualitative data substantiates the quantitative results. A mixed methods approach proved pragmatic, establishing the intervention's effectiveness with an outcome measure, as recommended by United Kingdom Occupational Therapy Research Foundation (2011), and subsequently examining the internal processes of creativity and healing through perceptions and experiences (Perruzza & Kinsella, 2010).

Reflecting that satisfaction, pleasure and enjoyment are key components of successful engagement in creative activities (Perruzza & Kinsella, 2010), the findings of this study additionally identified the potential for play and humor to increase volition (Kielhofner, 2008). Assisting adults to approach situations with an open mind, problem solve and better face difficulties (Guitard, Ferland & Duti, 2005), play was encountered as a fun yet practical means for Colin to explore appropriate social interactions. Humor assisted with the alleviation of anxiety and stress (Leber & Vanoli, 2001), facilitating feelings of escapism; a significant factor for the participants. The concept of "losing yourself", reflects the findings of Griffith (2008) whose participants described "disappearing" within creative activity sessions. Additionally, the therapy room location of the animation workshop met the need to experience a different physical environment. Paradoxically, this also presented barriers to participation, as echoed in the wider literature, whereby daily disruptions to planned occupations compounded a sense of powerlessness and frustration (Craik et al., 2010).

Akin to previous studies of creative activity interventions, flow also proved an essential element of engagement (Perruzza & Kinsella, 2010), facilitating the development of specific

occupational gains and generic task performance skills (Griffith, 2008). By matching performance capacity to task level, optimal occupational engagement was facilitated, promoting health and well-being (Law, 2002). The attainment of goals, described as an “achievable challenge”, suggest that the mastery of specific animation techniques can occur over a short period of time, and the versatility of animation offers many opportunities for grading. The utilization of the Re-Animation Approach framework was perceived as crucial for the technical instructor to identify the ability and potential of the participants, grading and adapting the future sessions accordingly, suggesting that the multitude of possibilities presented by animation are best realized through the Re-Animation Approach.

The versatility of animation additionally enabled the participants to take full advantage of the intervention to meet their own unique needs, placing the Re-Animation Approach as holistic and client-centered. Colin found the session to allow him to safely explore situations through play while Dominic used the sessions for the purpose of self-expression, echoing the view that art can provide an alternative vehicle for self-expression (Perruzza & Kinsella, 2010). Frank’s journey highlighted creative activity can restore the balance between work and leisure (Griffith, 2008), with the intervention leading to productive roles within the secure service. The intervention provided Frank with aspirations and instilled hope for his future, reflecting the aims of occupational therapy within a recovery approach (College of Occupational Therapists, 2006) and the power of creative activity interventions to foster a sense of purpose (Lloyd et al., 2007).

Social opportunities afforded by collective engagement in creative activity interventions are described as highly valuable in previous research (Perruzza & Kinsella, 2010), but the one-to-one delivery of the Re-Animation Approach was perceived to be greatly beneficial. This finding supports a case for the increased provision of one-to-one sessions within a secure hospital environment (Farnworth & Munoz, 2009).

While some of the materials used within the sessions had a sensory quality, the technological equipment was found to suspend time and encouraged the participants to take risks without fear of mistakes. The acquisition of technical skills was highly valued by all participants, reflecting Gooch and Living's (2004) suggestion that within forensic mental health settings, computer dexterity can build self-esteem and confidence because of the high value placed on technological mastery in contemporary society. Verdonck and Ryan (2008) also highlight the importance of the provision of everyday and culturally appropriate occupations, such as mainstream technology, to preserve the meaningfulness of therapeutic activities. This resonates within the findings of this research; the incorporation of technology within the Re-Animation Approach has made the therapeutic qualities of traditional creative activities both accessible and culturally appropriate for a sample of male service users in a forensic mental health unit, presenting the influence of modern day arts and crafts (Chard, 2007) on occupational engagement.

### ***Study Limitations and Recommendations for Future Research***

Despite the supportive evidence base for the use of Goal Attainment Scaling, it is emphasized by Steenbeek, Ketelaar, Galama & Gorter (2008) that there are no specified guidelines for scoring, and that little is known about the test–retest reliability and concurrent validity of the content of the scales. Although this poses questions about the reliability of the findings, several occupational therapists were involved in the GAS process, and very similar t-scores were established. The utility of an alternative standardized measure within future research would provide support. Additionally, the recruitment of a larger participant sample would allow for the calculation of statistical significance, while also providing an opportunity for the saturation of qualitative data, increasing the overall credibility and trustworthiness of the findings (Teddlie & Tashakkori, 2009). Although most of the participants' goals related

directly to the intervention, goals surrounding generic performance skills, such as “to improve concentration”, were also set within other therapy sessions therefore the Re-Animation Approach cannot be perceived as solely accountable for their attainment.

The comparison of standard animation sessions and the Re-Animation Approach is presented on a superficial level, yet to fully comprehend the impact of the intervention, a controlled trial comparing the Re-Animation Approach with standard animation sessions is recommended. It would also be beneficial to explore the professional’s perspective about using the intervention in more detail.

It is recognised that during the second stage of data collection the participants were half way through creating their individual animated projects. Thus the period of three months did not provide sufficient time for the participants to reach completion, a vital stage of engagement in creative activities which allows for reflection (Griffith, 2008). Follow-up is therefore required to fully explore the participant’s experience, from start to finish. The participants’ accounts of their experience may have been influenced by the lack of opportunity for the researcher to establish rapport with the participants, the presence of the occupational therapists during data collection and the complexity of the participants’ diagnoses.

### ***CONCLUSION***

The corroboration of the quantitative and qualitative findings suggests the Re-Animation Approach positively influenced the occupational performance and well-being of three male patients within a forensic mental health setting, following three months of engagement. The results demonstrate that occupational enrichment can contribute to mitigating the effects of occupational deprivation in forensic mental health settings, despite enduring environmental barriers to positive occupational engagement (Stewart & Craik, 2007). Although the small sample does not allow for generalizability, this study has offered a

pilot study of the Re-Animation Approach, and the use of animation within occupational therapy.

The results suggest that animation is suitably versatile for grading, and when used in conjunction with the Re-Animation Approach framework, the appropriate balance of performance capacity and task level was facilitated. The versatility additionally enabled the participants to use the intervention to meet diverse and unique occupational needs. Expected outcomes, set and evaluated through the GAS tool, were over-achieved by each participant, across unique goals related to performance skills, well-being, and time use. Furthermore, the interviews indicated that animation was experienced as a meaningful occupation and the intervention as enjoyable, restoring, client-centered and achievable.

The findings support the evidence base for creative activity interventions and additionally highlight the power of modern technology to create culturally appropriate and accessible opportunities (Verdonck & Ryan, 2008) to experience the therapeutic qualities of creative activity. Further research studying occupations located in modern day arts and crafts is required to fully reveal implications for practice. The richness of the data within this study affords a degree of transferability, yet further research is required to build upon these preliminary findings using the Re-Animation Approach.

### ***Conflict of interest***

The first author received a complementary place on the Re-Animation Approach Level 1 course by Animation Therapy Limited, to aid understanding of the intervention.

### ***Acknowledgements***

The researcher would like to thank the staff and service users involved in this study at St. Andrews Health Care, and also to Helen Mason at Animation Therapy Limited.

## REFERENCES

- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. doi: 10.1191/1478088706qp063oa
- Chard, G. (2007). Computer games and karate: The arts and crafts of today. *British Journal of Occupational Therapy*, 70(8), 329.
- College of Occupational Therapists. (2006). *Recovering ordinary lives: The strategy for occupational therapy in mental health services 2007–2017, a vision for the next ten years*. Available at: <http://www.cot.co.uk/sites/default/files/publications/public/ROL-Vision-2010.pdf> Accessed on 06/14/12.
- Cooper, P. (2013). Writing for depression in health care. *British Journal of Occupational Therapy* 76(4), 186-193.
- Craik, C., Bryant, W., Ryan, A., Barclay, S., Brooke, N., Mason, A., & Russell, P. (2010). A qualitative study of service user experiences of occupation in forensic mental health. *Australian Occupational Therapy Journal*, 57(5), 339-44. doi: 10.1111/j.1440-1630.2010.00857.x.
- Craik, C. Chackfield, J. & Richards, G. (1998). A survey of occupational therapy practitioners in mental health. *British Journal of occupational therapy*, 61(5), 227-233.
- Creek, J. (2008). Creative leisure opportunities. *NeuroRehabilitation*, 23(4), 299-304.

Creswell, J. (2012). *Qualitative inquiry and research design*. London, England: Sage.

Creswell, J., & Plano Clark, V. (2010). *Designing and conducting mixed methods research*. London, England: Sage.

De Witt, P. (1997). Creative ability: A model for psychiatric occupational therapy. In R. Crouch, & V. Alers (Eds). *Occupational therapy in psychiatry and mental health*. 3rd ed. Cape Town, South Africa: Maskew Miller Longman.

Farnworth, L., & Munoz, J. (2009). An occupational and rehabilitation perspective for institutional practice. *Psychiatric Rehabilitation Journal*, 32(3), 192-198. doi: 10.2975/32.3.2009.192.198.

Froggett, L., & Little, R. (2012). Dance as a complex intervention in an acute mental health setting: A place 'in-between'. *British Journal of Occupational Therapy*, 75(2), 93-99. doi: 10.4276/030802212X13286281651153

Gooch, P., & Living, R. (2004). The therapeutic use of videogames within secure forensic settings: A review of the literature and application to practice. *British Journal of Occupational Therapy*, 67(8), 332 – 341.

Griffith, S. (2008). The experience of creative activity as a treatment medium. *Journal of Mental Health*, 17(1), 49-63. doi: 10.1080/09638230701506242

Griffith, S. & Corr, S. (2007). The use of creative activities with people with mental health

problems: A survey of occupational therapists. *British Journal of Occupational Therapy*, 70(3), 107-114.

Guitard, P., Ferland, F., & Duti, E. (2005). Toward a better understanding of playfulness in adults. *OTJR: Occupation, Participation and Health*, 25(1), 9-22.

Hilse, G., Griffith, S., & Corr, S. (2007). The impact of participating in a poetry workshop. *British Journal of Occupational Therapy*, 70(1), 431-438.

Kielhofner, G. (2008). *Model of human occupation: Theory & application*. 4th ed. Baltimore, MD, United States: Lippincott Williams & Wilkins.

Law, M. (2002). Participation in the occupations of everyday life. *American Journal of Occupational Therapy*, 56, 640-649. doi:10.5014/ajot.56.6.640

Leber, D., & Vanoli, E. (2001). Therapeutic use of humor: Occupational therapy clinicians' perceptions and practices. *American Journal of Occupational Therapy*, 55, 221 – 226.

Lloyd, C., Wong, S., & Petchkovsky, L. (2007). Art and recovery in mental health: A qualitative investigation. *British Journal of Occupational therapy*, 70(5), 207-214.

Marson, S., Wei, G., & Wasserman, D. (2009). A reliability analysis of goal attainment scaling (GAS) weights. *American Journal of Evaluation*, 30(2), 203-216.  
doi: 10.1177/1098214009334676



- Mason, H. (2009). Dare to dream: The use of animation in occupational therapy. *Mental Health Occupational Therapy, 14*(3), 111- 115.
- Mason, H. (2011). Bringing health care to life through animation: The re-animation approach. *Nursing in Practice, 63* (November/December), 32-33.
- Paterson, C.F. (2014). A short history of occupational therapy in mental health. In: Bryant, W. Fieldhouse, J and Bannigan, K. (Eds). *Creek's occupational therapy in mental health*. 5<sup>th</sup> ed. Edinburgh, Scotland: Churchill Livingstone.
- Perruzza, N., & Kinsella, E. (2010). Creative arts occupations in therapeutic practice: A review of the literature. *British Journal of Occupational Therapy, 73*(6), 261-268. doi: 10.4276/030802210X12759925468943
- Schmid, T. (2004). Meanings of creativity within occupational therapy practice. *Australian Journal of Occupational Therapy, 51*(2), 80-85. doi: 10.1111/j.1440-1630.2004.00434.x
- Steenbeek, D., Ketelaar, M., Galama, K., & Gorter, J. (2008). Goal Attainment Scaling in paediatric rehabilitation: A report on the clinical training of an interdisciplinary team. *Child: Care, Health and Development, 34*(4), 521–529. doi: 10.1111/j.1365-2214.2008.00841.x.
- Stewart, P., & Craik, C. (2007). Occupation, mental illness and medium security: Exploring time-use in forensic regional secure units. *British Journal of Occupational Therapy, 70*(10), 416-424.

Teddlie, C., & Tashakkori, A. (2009). *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioural sciences*. Los Angeles, CA, United States: Sage.

Timmons, A., & MacDonald, E. (2008). 'Alchemy and Magic': The experience of using clay for people with chronic illness and disability. *British Journal of Occupational Therapy*, 71(3), 86 – 94.

Turner-Stokes, L. (2009). Goal Attainment Scaling (GAS) in rehabilitation: A practical guide. *Clinical Rehabilitation*, 23, 362-370. doi:10.1177/0269215508101742

United Kingdom Occupational Therapy Research Foundation. (2011). *Building the evidence for occupational therapy: Research policies*. Available at: <http://www.cot.co.uk/uk-ot-research-foundation-ukotr/ukotr-research-priorities> Accessed 09.06.13

Verdonck, M., & Ryan, S. (2008). Mainstream technology as an occupational therapy tool: Technophobe or technogeek? *British Journal of Occupational Therapy*, 71(6), 253- 255.

**TABLE 1 Re-Animation Approach intervention levels**

<b>Level</b>	<b>Description</b>	<b>Training</b>
<b>Level 1</b> <b>Just for fun</b> <b>Sensory</b>	Sensory exploration of the materials used in animation, such as modelling clay and textured paper.	Therapists, technical instructors and community artists trained to Level 2 and with training in sensory approaches.
<b>Level 1</b> <b>Just for fun</b> <b>Cause and effect</b>	Play opportunities to explore the media and discover “what happens if...”	Technical instructors and community artists trained to Level 2 with supervision by a registered occupational therapist or other registered therapist trained to Level 1.
<b>Level 1</b> <b>Just for fun</b> <b>Free play or simple product</b>	Task demands are increased and animation skills are acquired through parallel play	Technical instructors and community artists trained to Level 2 with supervision by a registered occupational therapist or other registered therapist trained to Level 1.
<b>Level 2</b> <b>Therapeutic exploration work</b>	Striving towards specific therapy goals which can include life story work, story re-authoring and the use of metaphor.	Technical instructors and community artists trained to Level 2 with supervision by a registered occupational therapist or other registered therapist trained to Level 2.
<b>Level 3</b> <b>Performance animation</b>	Further skill acquisition to aid self-expression. The creation of a product for the public domain. Opportunities to learn new skills, acquire a new interest or leisure occupation and progress into employment	Technical instructors and community artists trained to Level 2 with supervision by a registered occupational therapist or other registered therapist trained to Level 2.

via the Vocational  
Rehabilitation route.

**TABLE 2 Participants details**




<b>Name</b>	<b>Age</b>	<b>Diagnosis</b>	<b>Length of stay</b>
Colin*	34	Mild learning disabilities Other impairments of behavior	2 years
Dominic*	31	Emotionally unstable personality disorder Histrionic personality disorder Recurrent depressive disorder Mild learning disabilities	3 years
Frank*	20	Bipolar affective disorder Mild learning disabilities Unsocialized conduct disorder	3 years

\*Pseudonyms

**TABLE 3 Participant GAS scores**

<b>Participant</b>	<b>Patient stated goal</b>	<b>Importance</b>	<b>Difficulty</b>	<b>Weight</b>	<b>Baseline score</b>	<b>Outcome score</b>	<b>t-score</b>
<b>Colin</b>	To learn new skills, step by step, without rushing ahead	2	2	4	-1	1	<b>66.6</b>
	To fill unstructured time with a new hobby	2	2	6	-1	1	
	To have fun	2	1	3	-1	2	
	To be more confident	2	1	1	-1	1	
<b>Dominic</b>	To use animation for self-expression	1	1	1	-1	0	<b>64.8</b>
	To keep busy through finding a new interest	2	1	2	-1	1	
	To experience a different environment to the ward	2	2	4	-1	2	
<b>Frank</b>	To improve drawing and learn new ways to draw	2	1	2	-1	1	<b>64.2</b>
	To improve concentration	2	1	2	-1	0	
	To feel a sense of achievement and make family proud	2	2	4	-1	1	
	To stick to it, adding a new session to weekly timetable	2	1	1	-1	2	

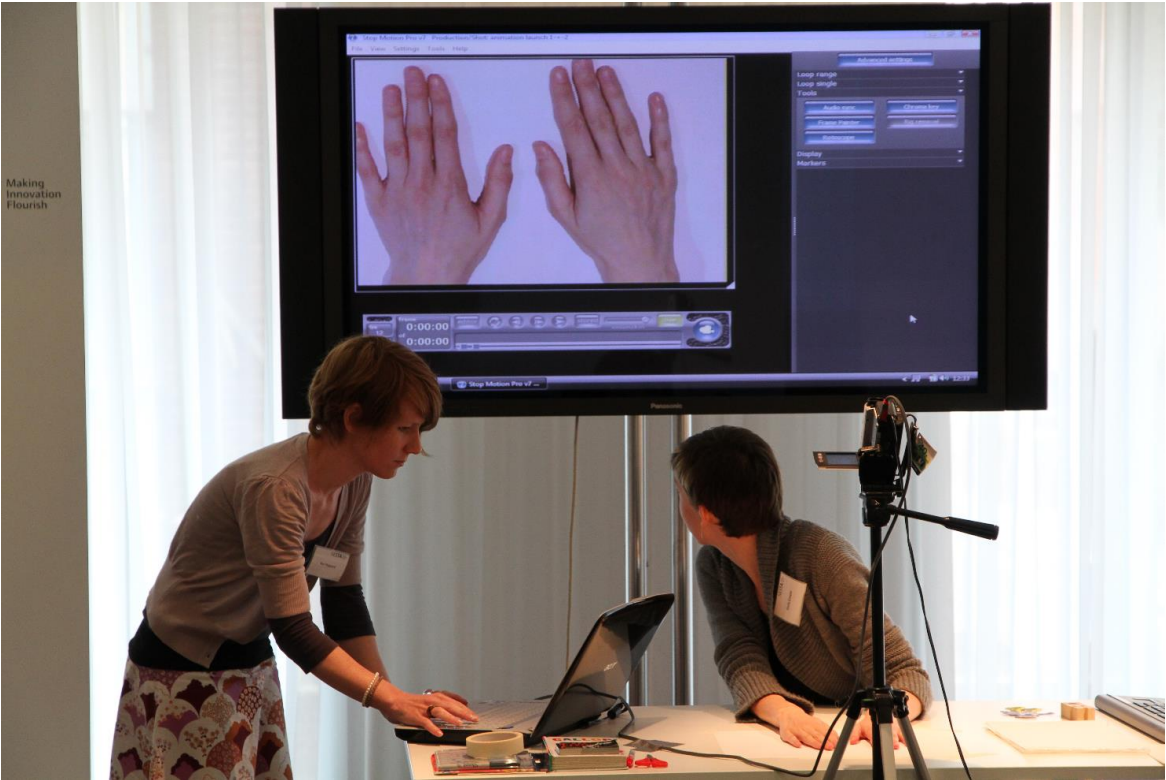
Key:

-  Improving performance skills
-  Improving wellbeing
-  Improving time use

**FIGURE 1. Objects being positioned to be photographed**



**FIGURE 2. People being positioned to be photographed**



**FIGURE 3. Comparison of Expected and Actual T-scores when Goals are Categorized**

