

**How does ReDO[®]-10 work? Understanding the mechanisms of action of an intervention
focused on daily activities and health from the perspective of participants**

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Highlights

- **Behavioural science frameworks clarified participant perceptions of mechanisms of action in the Redesigning Daily Occupations (ReDO[®] -10) intervention**
- **Modelling and peer support between women is a facilitator of health-related behaviour change**
- **Self-analysis can empower women to learn the relationship between activities and health.**

Abstract

Evaluation of a complex healthcare intervention should include careful exploration of the mechanisms through which it brings about change. This paper describes a qualitative evaluation of the Redesigning Daily Occupations (ReDO[®] -10) programme as it was implemented for the first time with women with stress-related issues in a primary care setting in Ireland. The ReDO[®] -10 is a 10-week group intervention designed to support participants make changes to their daily activity patterns to have a more satisfying and balanced daily life. Fourteen women were interviewed after completing the programme. The aim was to explore changes that participants perceived they experienced and to understand how the content of ReDO[®] -10 was thought to bring about this change (if it did). Directed content analysis was used to analyse the qualitative data using the Behaviour Change Wheel and Theoretical Domains Framework as a coding framework. Overall, four BCW functions of ReDO[®] -10 were identified: Education, Persuasion, Modelling and Enablement. Participants described improved belief in their own capabilities, knowledge and goals around life changes. Many

behaviour changes were also described, particularly in relation to doing more restorative activities in daily life. Behaviour change techniques that were identified as important for change were practicing new, restorative occupations in group sessions and as homework and the use of self-analysis activities to understand the relationship between activities and health for these participants. Modelling, support and other effects of group dynamics were also vital in changes that occurred.

Keywords: Health Behaviour Change, Occupational Therapy, Women's Mental Health, Process Evaluation, Behaviour Change Wheel

Introduction

Approximately one in six General Practice (GP) patients in Ireland has a documented mental health condition (O'Doherty et al., 2020) and this prevalence increased to one in five during the recent COVID-19 pandemic (Kelly, 2020). Rates of unspecified psychological distress, a state of emotional suffering that may include symptoms of depression or anxiety along with somatic symptoms like lack of energy (Drapeau, Marchand, & Beaulieu-Prévost, 2012), are likely to be much higher. GPs can be reluctant to give a diagnostic label to what is seen as a reaction to stressors (Ford, Champion, Chamles, Habash-Bailey, & Cooper, 2016) often related to socio-demographic factors (such as poverty), stress-related factors (such as work or family issues) and personal resources (internal and external) (Drapeau et al., 2012). Irish GPs have raised concerns about the lack of multidisciplinary staff to offer mental health interventions in the community (Agyapong, Jabbar, & Conway, 2012) despite strategic Government plans to increase service provision in primary care (Committee on the Future of Healthcare, 2017).

Women are at greater risk of experiencing stress-related ill-health (O'Doherty et al., 2020) because many of the risk factors for poor mental health affect them disproportionately. They are more likely to parent alone, experience violence or sexual assault, be in unstable employment, provide the majority of care and work in the home and be less financially secure (World Health Organisation, 2001). Women may also be more vulnerable to stress emanating from their social roles, particularly in marriage, parenting and in their wider social network (Drapeau et al., 2012). A number of group-based programmes to address stress-related ill-health for women in primary care settings have been developed and evaluated internationally.

The heterogeneity of psychosocial group-based programmes reflect the multiple, possibly over-lapping, causative and maintaining factors for stress in this population. Cognitive-behavioural approaches to stress management are among the most widely accepted treatments in primary care (NICE, 2011). Groups for women incorporating mindfulness approaches (Burnett-Zeigler, Satyshur, Hong, Wisner, & Moskowitz, 2019), positive psychology (Chaves, Lopez-Gomez, Hervas, & Vazquez, 2017) and physical exercise (Mailey & McAuley, 2014) have also shown good outcomes albeit in small-scale studies. Direct comparison of effectiveness between programmes with diverse theoretical perspectives is difficult, but there is consensus that group support and facilitated self-help is generally helpful in managing stress and anxiety in primary care (NICE, 2011).

The aim of occupational therapy is to improve participation in the activities of daily life (World Federation of Occupational Therapists, 2016). Occupational therapists are skilled in both health promotion and the treatment of people with developmental, physical and mental health conditions (Arbesman, Bazyk, & Nochajski, 2013). However, they have not been involved routinely in the facilitation of programmes for mental health concerns in primary care in Ireland (Tinelly & Byrne, 2016). The Redesigning Daily Occupations (ReDO[®]) programme is an occupational therapy-led group programme designed in Sweden to help women on stress-related sick leave from work make changes to their occupational patterns, improve occupational balance and increase their ability to manage work and life responsibilities (Eklund & Erlandsson, 2011; Erlandsson, 2013). The theoretical background to ReDO[®] and the underlying principles are based on a number of assumptions, derived from research on the experiences of women with stress and complex daily lives, commonly used health behaviour change theories and occupational therapy theory (Figure 1). In ReDO[®], as in occupational therapy generally, the term “occupation” refers to all the everyday activities that

people do as individuals, in families and with communities to occupy time and bring meaning and purpose to life.

Figure 1: Theoretical assumptions and guiding principles of ReDO® -10

Occupational balance, complex daily lives and stress

- Imbalance in the occupations of daily life may cause stress and ill-health (Wilcock, 2006).
- The ability to manage work for women with stress may depend on the ability to adapt daily routines and manage daily life as a whole (Baumeister, Vohs, & Tice, 2007; Johansson, Eklund, & Erlandsson, 2012).
- An increase in complexity (such as constant interruptions and unexpected tasks) in daily life may increase stress (Erlandsson & Eklund, 2006).
- A high level of hassles and few uplifts has a negative impact on wellbeing and subjective health (Erlandsson, 2008).
- The social environment for a woman can constrain her ability to find balance, cause hassles and increase complexity (Erlandsson, 2004; Hammen, 2003).

Occupational value and therapeutic occupation

- It is important to have a variety of occupations that give different occupational value experiences in everyday life for wellbeing. For example: occupations provide value because something concrete is achieved or because they are important for the person's self-identity (Persson, Erlandsson, Eklund, & Iwarsson, 2001).
- The practice of occupations during therapy sessions is a vital component of occupational therapy. Occupations have therapeutic "power" in a number of ways including having restorative and pleasurable appeal, being designed to meet the person's goals and being relevant in the person's context (Pierce, 2001).

Group dynamics, empowerment and health behaviour change

- Recognition of the need for change needs to come from the person themselves for effective lifestyle change (Bandura, 1986).
- Group dynamics have therapeutic benefits for participants, increase perceived social support and improve outcomes (Yalom & Leszcz, 1995).
- Raising consciousness of how the person's own behaviour relates to health and making plans for change empowers participants and increases motivation for change (Prochaska & DiClemente, 1982).

ReDO[®] has improved return-to-work rates, quality of life and self-mastery for women on stress-related sick leave (Eklund & Erlandsson, 2011). More recently, a 10-week programme (ReDO[®]-10) was designed for primary care settings (Olsson, Erlandsson and Håkansson, 2019). This shorter programme also showed promising outcomes for 86 women with stress in terms of mastery, occupational value, occupational balance, perceived health and perceived work ability. Qualitative data from participants suggest that the programme begins an intrinsic process of analysing one's own situation and need for change, which can lead to performing daily activities differently. However, women interviewed found it difficult to move from these changes at a psychological level (improved self-understanding) to making changes in the home/work environments; "*It's a process of change*" (Wastberg, Erlandsson, & Eklund, 2013, p.123). Adapting ReDO[®] for primary care meant removing a 6-week work placement, changing the context from that of vocational rehabilitation and reducing sessions to once-weekly (Olsson et al., 2019). It is important to understand how (or if) the ReDO[®]-10 brings about change for the heterogeneous primary care population who may have a mixture of life-related stressors and mental health symptoms.

A process evaluation can test causal assumptions and evaluate, not just outcomes, but also mechanisms of change/action and the impact of context (Moore et al., 2014). Despite being theoretically-based, programmes such as ReDO[®]-10 may not work as expected, can be based on assumptions about the cause of the problem (Wells, Williams, Treweek, Coyle, & Taylor, 2012) and the treatment effect can be due to participant engagement, group dynamics, social context, therapist style or a combination of all these factors (Sheill, Hawe, & Gold, 2008). Theoretical frameworks, such as the COM-B model or the Behaviour Change Wheel (Michie, Van Stralen, & West, 2011), are often used to guide data analysis in process evaluations. Behaviour change is theorised to require the

psychological and physical capability to change, the social and physical opportunity and the automatic and reflective motivation to do so (Michie et al., 2011). The Theoretical Domains Framework (TDF) subdivides these six categories and provides more detail about the mechanisms by which reflective motivation can be changed for individuals (Michie et al., 2005). This framework provides a cross-disciplinary tool for identifying and describing the potential targets of a health behaviour change intervention.

Figure 2. The TDF domains linked to the COM-B components (Adapted from (Michie et al., 2014, p.113-114))

| COM-B | TDF |
|--------------------------|---|
| Physical capability | Physical skills |
| Psychological capability | Knowledge Cognitive and interpersonal skills Memory, attention and decisional processes Behavioural regulation |
| Automatic Motivation | Emotion Reinforcement |
| Reflective Motivation | Intentions Beliefs about Capabilities Optimism Intentions Goals Beliefs about Consequences |
| Physical Opportunity | Environmental Context and Resources |
| Social Opportunity | Social Influences |

In order to bring about change in TDF domains, an intervention may have several “functions” described in the Behaviour Change Wheel (BCW) (Michie et al., 2011). A description of these functions is given in figure 3. One example of a function of an intervention such as ReDO[®]-10, which seeks to increase participant’s knowledge (psychological capability) about daily activities and health, is Education.

Figure 3. Intervention functions according to the BCW (Michie et al., 2011)

| Intervention function | Definition |
|------------------------------|---|
| Education | Increasing knowledge and understanding |
| Persuasion | Using communication to induce positive or negative feelings or simulate action |
| Incentivisation | Creating an expectation of reward |
| Coercion | Creating an expectation of punishment or cost |
| Training | Imparting skills |
| Restriction | Using rules to reduce the opportunity to engage in the target behaviour (or to increase the target behaviour by reducing the opportunity to engage in competing behaviours) |
| Environmental restructuring | Changing the physical or social context |
| Modelling | Providing an example for people to aspire to or imitate |
| Enablement | Increasing means/reducing barriers to increase capability (beyond education or training) or opportunity (beyond environmental restructuring) |

Observable elements of an intervention that aim to change behaviour are known within the BCW as Behaviour Change Techniques (BCTs). There are 93 identified and numbered BCTs in 16 clusters that allow for programmes to be compared and/or replicated in different contexts e.g., Feedback on Behaviour (2.2) or Focusing on Past Success (15.3) (Michie et al., 2013). The BCW has been used extensively in studies of physical activity (García Bengoechea et al., 2021) or diabetes self-management (McSharry et al., 2020) where health behaviours are the target of interventions. ReDO[®]-10 supports people to make changes in their patterns of daily activity, make different activity choices for wellbeing and uses established BCTs (such as goal-setting) (Erlandsson, 2013). Therefore, the BCW was chosen as an appropriate framework to understand whether the intervention worked as intended. The purpose of this paper is to clarify the mechanisms of action of the ReDO[®]-10 programme by (1) exploring changes that participants perceived they experienced during and after the intervention using the TDF framework and (2) to understand how the content of ReDO[®]-10 (Intervention functions and BCTs) was perceived to bring about this change (if it did).

Methods

Design

This was a qualitative process evaluation of the ReDO[®]-10 programme implemented in Irish primary care (2018-2020). The qualitative methodology was influenced by guidance from the Medical Research Council on the scope of process evaluations (Moore et al., 2014), qualitative evaluation strategies (Patton, 2015) and the interpretive description approach. Interpretive description is a form of qualitative enquiry where the aim is to understand the experiences of healthcare recipients, often interpreting their narratives through an existing framework or theoretical lens, with the aim of producing clinically useful results (Thorne, Kirkham, & MacDonald-Emes, 1997).

Participants

Full ethical approval for this study was received from the Irish College of General Practitioners Research Ethics Committee in March 2017. Participants were recruited in the West of Ireland for the programme over three separate phases; in Spring 2018 (Phase 1), Spring 2019 (Phase 2) and Autumn 2019 (Phase 3). Women between 18-66 years who had attended their General Practitioner (GP) at least twice for stress-related complaints were included. Exclusion criteria were being in acute distress (such as a recent bereavement), having a cognitive impairment such that group participation would be difficult or having current drug/alcohol addiction. Women were recruited through direct GP referral and self-referral. In total, over the three phases, 37 women expressed interest or were referred and 21 began a ReDO[®]-10 programme. Written consent was obtained from all participants after they were told about the programme content, time commitment and data being collected and before they began the programme. Three dropped out before completing the full series of

groups. Reasons for declining participation or dropping out were not always known as women did not respond to further contact, but included having work commitments or starting counselling. Following the completion of the full programme (ten weekly sessions and two follow-ups), 21 participants were invited to an interview and 14 consented to participate (See Table 1 below).

Table 1. Recruitment and data collection for the ReDO[®] -10 (Phases 1-3)

| | Referred/self-referred | Declined to attend programme | Began ReDO [®] - 10 | Drop-outs after first session | Post-intervention interviews |
|-----------------------|------------------------|------------------------------|------------------------------|-------------------------------|------------------------------|
| Phase 1 (Spring 2018) | 13 | 7 | 6 | - | 5 |
| Phase 2 (Spring 2019) | 18 | 9 | 9 | 2 | 5 |
| Phase 3 (Autumn 2019) | 6 | - | 6 | 1 | 4 |

Intervention

The programmes in Phases 1 and 2 were facilitated by two occupational therapists from local primary care teams. Phase 3 was co-facilitated by a primary care occupational therapist and the first author (an academic occupational therapist). All facilitators received training, certification in the ReDO[®] method and the ReDO[®] manual. The full content of the ReDO[®] programme is described in Erlandsson (2013) and the ReDO[®] -10 version in Olsson et al. (2019) but the topics and main activities of each session are in Figure 4. The target outcomes are that participants make changes in their patterns of daily activity and choose personally satisfying activities for wellbeing.

Figure 4. Topics and activities of the ReDO[®] -10 programme

| Topics and activities of the ReDO[®] -10 programme |
|---|
| (Prior to programme) Individual meeting with the occupational therapist |
| Group sessions: |
| 1. Introduction |
| 2. Occupational history |
| 3. Occupational balance |
| 4. Patterns of daily occupations and time (Part 1) |
| 5. Patterns of daily occupations and time (Part 2) |
| 6. Hassles and uplifts in daily life |
| 7. Goal-setting |
| 8. Occupational value |
| 9. Evening seminar (for friends, family, partners or employers) |
| 10. Goals and strategies |
| 11. Concluding |
| 12. Follow-up 1 (After 1 month) |
| 13. Follow-up 2 (After 1 month) |

Data Collection

Qualitative interviews were used to collect data about how mechanisms of action were experienced by participants and how the programme content (Intervention functions and BCTs) was perceived to bring about change (if it did). Separate informed consent was obtained to record and use qualitative data. To explore mechanisms of action, the women were encouraged to think about key moments where change happened or particular “stand-out” aspects of the intervention. Follow-up questions were used to probe for more detail, where appropriate (See Additional file. Interview topic guide). Retrospective interviews exploring mechanisms in this way have been used successfully in other evaluations of complex interventions (Connell, McMahon, Tyson, Watkins, & Eng, 2016). The interviews were completed by the first author in 2018 and 2019 and by a final year occupational therapy student in 2020. They lasted 30-90 minutes, were audio-recorded and transcribed verbatim.

Data Analysis

Directed content analysis was used to analyse the data. The researcher begins with a theoretical framework that provides some existing codes and relationships between codes (in some cases) (Hsieh & Shannon, 2005). The BCW has been used as a qualitative coding framework for a number of studies exploring mechanisms of action of interventions, including occupational therapy-based programmes (Connell et al., 2016; Fancourt, Wee, & Lorencatto, 2020). The analysis involved a number of stages:

Stage 1: Excerpts of the transcripts were extracted by the first author and broadly coded to (1) an intervention function such as Education or Modelling (2) a change to a TDF domain or (3) codes not fitting the framework. The latter data included references to participants' personal circumstances or data that were related to the research project itself e.g., how they heard about the study. A sample of the transcripts were separately analysed by a second author (*author*) to ensure that there was consistency of the data coded to the different domains of the framework.

Figure 5: Data analysis stage 1

| Transcript extract | Code |
|--|-------------|
| "Yeah we had a very good exercise in the group. The ladies gave us fruits and we needed to just think...just mindfulness...just sit down with the fruit and just eat. And no talking, justyou know? That was great. That was great. <u>And I'm doing something like that at home now.</u> Just you know.....just be in the same time just for myself and with the things what I'm doing. Just the one thing and that was great. That is great (with emphasis). I'm doing that, like twice a week or something" (Participant 4572) | Enablement |

Stage 2: The researcher used the 93 BCTs in the Behaviour Change Technique Taxonomy (V1) (Michie et al., 2013) as potential codes to identify specific moments,

sessions, activities or group processes occurring within ReDO[®]-10 and how they related to changes for participants. For example, “behavioural practice/rehearsal” (BCT 8.1) was one BCT. In this example, practicing an activity in a new way (without interruptions) in the group led to the participant continuing this new pattern at home. These BCTs were determined based on participant perceptions of the experience and required a degree of interpretation.

Figure 6: Data analysis stage 2

| Transcript extract | Code |
|---|--|
| <p>"Yeah we had a very good exercise in the group. The ladies gave us fruits and we needed to just think...just mindfulness...just sit down with the fruit and just eat. And no talking, just ...you know? That was great. That was great. <u>And I'm doing something like that at home now.</u> Just you know.....just be in the same time just for myself and with the things what I'm doing. Just the one thing and that was great. That is great (with emphasis). <u>I'm doing that, like twice a week or something</u>" (Participant 4572)</p> | <p>Enablement</p> <p><i>Behavioural practice/rehearsal (BCT 8.1)</i></p> |

Stage 3: The researcher explored mechanisms of action through examples in the transcripts where participants linked specific BCTs and changes that occurred for them. Interpretation was also necessary in this stage, as participants did not use this terminology. The TDF components were used as pre-determined codes here to categorise changes (Michie et al., 2005). In the example below, the experience of practicing a new behaviour (BCT 8.1) led the participant to develop a regular pattern (behavioural regulation) that she continued after the group.

Figure 7: Data analysis stage 3

| Transcript extract | Code |
|---|---|
| <p>"Yeah we had a very good exercise in the group. The ladies gave us fruits and we needed to just think...just mindfulness...just sit down with the fruit and just eat. And no talking, just ...you know? <u>That was great. That was great. And I'm doing something like that at home now.</u> Just you know.....just be in the same time just for myself and with the things what I'm doing. Just the one thing and that was great. That is great (with emphasis). <u>I'm doing that, like twice a week or something</u>" (Participant 4572)</p> | <p>Enablement</p> <p><i>Behavioural practice/rehearsal (BCT 8.1)</i> <i>– link – Psychological Capability (behavioural regulation)</i></p> |

Stage 4: In this final phase, the researcher noted specific times where BCTs did not seem to work as intended or where a participant did not feel a benefit. An example is a participant describing how feeling that the group session was rushed meant she couldn't work on her goals. In this phase, individual differences such as where the same activity evoked different emotional responses for various participants were also explored.

Results

Participants perceived ReDO[®]-10 to effect behaviour change by improving many TDF domains (Figure 8). A large number of behaviour change techniques (BCTs) were experienced including those facilitated by the occupational therapists as set out in the manual (e.g., goal-setting (BCT 1.1)) or occurring more naturally during group discussions (e.g., social comparison (BCT 6.2)). Overall, four BCW functions of ReDO[®]-10 were identified: Education, Persuasion, Modelling and Enablement. Mechanisms of action (how ReDO[®]-10 influenced change) are explored under these four headings with BCT clusters (Michie et al., 2013) as subheadings (Figure 8).

Figure 8. Results of the qualitative analysis

| Perceived Intervention Functions of the ReDO® - 10 | Education | | Persuasion | | Modelling | | | Enablement | | | |
|--|--|---|--|--|--|--------------------------|--|---|---|--------------------------|----------------------|
| Behaviour Change Techniques Experienced | Feedback and monitoring 2.2 Feedback on behaviour 2.3 Self-monitoring of behaviour 2.7 Feedback on outcomes of behaviour Natural consequences 5.1 Information about health consequences 5.6 Information about emotional consequences | | Feedback and monitoring 2.2 Feedback on behaviour Comparison of behaviour 6.2 Social comparison 6.3 Information about others' approval Identity 13.2 Framing/reframing Comparison of outcomes 9.1 Credible source Self-belief 15.1 Verbal persuasion about capability | | Comparison of behaviour 6.2 Social comparison Covert learning 16.3 Vicarious consequences | | | Goals and Planning 1.2 Problem-solving 1.3 Goal-setting 1.5 Review behaviour goals 1.9 Commitment Social support 3.3 Social support (emotional) Associations 7.1 Prompts/cues Repetition and substitution 8.1 Behavioural practice/rehearsal Antecedents 12.2 Restructuring the social environment Self-belief 15.4 Self-talk | | | |
| COM-B domains | Psychological Capability | Reflective Motivation | Automatic Motivation | Reflective Motivation | Psychological Capability | Automatic Motivation | Reflective Motivation | Psychological Capability | Reflective Motivation | Automatic Motivation | Social Opportunity |
| TDF domains where change was identified | Knowledge Memory, Attention and Decision Processes Cognitive and Interpersonal Skills Behavioural regulation | Beliefs about Capabilities Beliefs about consequences Intentions Social Role and Identity | Emotion Reinforcement | Beliefs about capabilities Intentions Beliefs about consequences | Cognitive and interpersonal skills Behavioural regulation | Emotion Reinforcement | Beliefs about capabilities Beliefs about consequences | Knowledge Memory, attention and decisional processes Behavioural regulation Cognitive and interpersonal skills | Intentions Beliefs about capabilities Goals | Emotion Reinforcement | Social influences |

Education

ReDO[®]-10 incorporates both formal “education” about occupation (via presentations) and self-analysis activities that facilitate participants learning about their own patterns of occupations. This intervention function was identified as important to changes that occurred for participants. Changes occurred in psychological capability and in reflective motivation. A number of personal and contextual factors were reported to act as barriers to this.

Natural consequences

The opening sessions explored the link between occupational time-use and stress (BCT 5.6) via self-analysis activities and exploring the women’s current occupational balance and daily patterns. Participants described changes both in knowledge (“*the course made me aware of everyday and taking time and being mindful and slowing down*” (6686)) and for some, this progressed to having the intention to change (“*the most beneficial was identifying the issues...I think that once that was done, I straight away started to address them*” (7712)). However, making changes based on new knowledge requires agreement with that knowledge and one participant in particular disagreed with the perspectives presented; “*There is a risk, that to individualise a problem that’s social, it’s like placing the social aspect to those problems in my own psychology. Like if I was self-aware enough and attuned enough and did enough physical exercise...I was going to solve everything*” (8114).

There was also discussion about how occupational balance can affect physical health (BCT 5.1). For women working outside the home, the importance of rest, breaks and recognising risk of burnout was developed via occupational self-analysis activities. One woman described better behavioural regulation of her working day; “*That is direct from that*

series of looking at things. I do take better breaks in my working time” (7712). For another, prioritising rest required a change in her confidence to approach her boss; “I need two days off next week. (My boss) said, ‘you would have just kept going...but you’ve learned to read your body’ and I said, ‘Yeah’. So, it’s all helped” (6686).

Feedback and monitoring

Following the self-analysis activities, participants discuss their occupational patterns and make plans to change these. This process was a strong influencer of change for the women. There was a greater belief in capabilities to make changes; *“I found that one brilliant....you had to timetable the day. That was crazy for me. Because I was saying, ‘Oh my God – the amount of stuff I’m doing in a day!’ And I’m thinking I’m doing nothing?” (6797), “I didn’t realise that I wasn’t actually doing things for myself” (1558), “The little separate tasks where you sit down and think about yourself and your own day....it makes you think about what you could change and what you could do for yourself” (5505). For some women with children, this feedback on their own time-use (BCT 2.2) sometimes led to uncomfortable realisations about their social role: “It was the timetable. Everything that was on the timetable was for other people” (6797).*

Getting this feedback was not always comfortable, particularly for one woman with depression; *“I knew it in my head, but to see it on paper.... I felt terrible after it. ...Something had to change. I thought, ‘you’re wasting your life going back to bed.... I’m wasting all these opportunities” (1262). Feedback on occupational patterns led to some women doing their occupations in a new way, either through reducing interruptions to occupation, or through focusing on one occupation at a time; “It was writing down...the activity what you’re doing.*

So, when I'm cooking now.... I'm just more relaxed. I just focus on the activity what I'm doing. Before, I was doing the laundry, this one, this one, the dog, this one" (4572). The participant with depression noted that this analysis had the opposite effect for her – she increased the amount of activity in her day; *"Another week was, you write down everything you do for one day. "Now I can write down in my diary – I did this, did this, did this and I can check off a few things that I did during the day. I've accomplished something in the day"* (1262).

The programme also drew attention to the feelings experienced when trying a new way of doing things (BCT 2.7). For some women, this led to a sustained change in behavioural regulation: *"Just do it and the results will follow.... going out for a walk or reading a book. I enjoy it. It takes no length for the task or the interest to become enjoyable* (1262), *"I prioritise my walk first. And then I feel better. Mentally I feel good"* (2612). For other women, this change remained at the level of awareness (knowledge) and self-understanding, rather than behaviour change; *"to acknowledge when I manage something badly"* (7901), *"to understand what's happening"* (9078). However, these women's beliefs in their capabilities to make changes in the future was strengthened by this improved self-knowledge; *"it's within my control, it's my responsibility"* (9078) and one or two participants continued to self-monitor their occupational patterns after the programme (BCT 2.3); *"I'm overwhelmed at the minute.... I've realised, that's actually too much. I'm only one person"* (6686).

Persuasion

ReDO[®]-10 had a persuasion function in that it “used communication to induce positive or negative feelings or stimulate action” (Michie et al., 2014, p.111). This communication came both from facilitators and group participants, formally (in seminars) and informally. Communication in the group influenced reflective and automatic motivation via a number of BCTs and was a strong influencer of changes that occurred.

Comparison of behaviour/outcomes

Participants compared their own actions and situations to the other women in the group (BCT 6.2). This was an internal process and not directly facilitated by the therapists. Social comparison led many women to have improved beliefs in their own capabilities; “*If they can do it, I can do as well*” (4572) “*realising that I’m not the only person that lives with guilt*” (3656). Social comparison triggered emotions, which could be positive “*letting myself off the hook*” (6797) or negative “*I would be uncomfortable...in the beginning.... sharing*” (3656). Trust and social approval (BCT 6.3) led to a positive emotional response for those who shared personal information; “*When I set it out, it was like, it’s ok. Even saying it took the guilt.... took the shame of saying it out*” (1262). Trust was established by seeing that others had similar issues (BCT 9.1); “*you’re getting it from people who also have their own issues. I just found it more affirming*” (1558).

Self-belief/Feedback and Monitoring

As the group became more established, group members persuaded peers that changes they wanted to make were possible (BCT 15.1) and in some cases this led directly to a

woman acting on this advice; *“I started to book stuff for myself. Because they were saying, ‘do you ever do anything just for yourself?’”* (3656). Group members noticed and provided feedback on occupational patterns that the person may not have previously noticed (BCT 2.2). This was particularly evident in contributions from older women to younger women; *“They were saying, ‘you could get your children to do a few bits. Have you ever thought of that?’”* (3656).

Identity

A number of participants reframed their stressors (BCT 13.2) through hearing different perspectives in the groups, *“Because they’re coming at it from a different angle. And then you think – God! I never thought about it like that before”* (3656). Many mothers in the group spoke about occupational imbalance in the household, but were persuaded that change would actually benefit the family; *“somebody in the course said to me, ‘you’re not doing them (children) any favours because they need to know how to do these things.’”* (4678). This reframing brought an emotional boost for those who experienced it (*“I came away better than I went in”* (1558)). Finally, one woman identified no change in her occupational time-use but had reframed her experience of these occupations; *“I did feel a massive shift in myself from the start to the end in.... the way you enjoy doing things”* (3656).

Modelling

While women described making some changes as a result of direct communication (Persuasion), other changes took place by an internal process of observing others and what worked for them (Modelling). Changes were at the level of psychological capabilities, automatic and reflective motivation and again were highly dependent on group dynamics.

Comparison of behaviour/covert learning

Being in a group setting involved an almost constant experience of self-comparison (BCT 6.2) to other women, their coping strategies, experiences and decisions. Finding a peer evoked positive emotion; *“I loved listening to her share because I was like ‘she doesn’t have it all together, she’s like me’”* (1262), but members felt they learned from the whole group; *“on different weeks, depending on who was talking, you would find something in that person”* (3656). In general, social comparison was a positive influence on reflective motivation to make changes – particularly for mothers who learned from other mothers; *“I was saying, God – if she can do it and she’s a single mom ...I can try it”* (3656). Seeing how new approaches worked for other group members (BCT 16.3) helped overcome initial reluctance to try the suggested strategies; *“You might be apprehensive and like, ‘Oh that won’t work for me’. But then in the group and listening to how it’s worked for other people...I don’t think I would have grasped it as well if it was just a single person that had told me”* (1262).

Social comparison requires commonality and two older participants felt this was missing for them; *“I was retired.... if there was a group of us in the same situation as me, we would have been able to feed off one another more”* (6797), creating a barrier to making behaviour changes. However, unfavourable social comparison actually strengthened this participant’s belief in her own capabilities; *“One girl came in one day and she had stopped for coffee even though she was over half an hour late.... I thought to myself, ‘Is this the way I was all my life? Accepting behaviour like this from people? ...That was huge learning for me”* (6797).

Enablement

An intervention has an enablement function when it “increases means/reduces barriers to increasing capability or opportunity” (Michie et al., 2014, p.112). It is a way of “enhancing a patient’s ability to control their health and life” (Hudon et al., 2010, p.1301). Enablement was evident in structured programme activities such as goal-setting (BCT 1.3) and occurred through group engagement (BCT 3.3). There was a wide variety of experiences in how enablement was perceived and some barriers to the success of programme activities were discussed.

Repetition and substitution

ReDO[®]-10 uses relaxing occupations in some sessions and for homework (BCT 8.1) to encourage participants to make different occupational choices for their health. When these occupations were introduced (e.g. doing a craft activity) there was an emotional response for participants. For some, this led to a change in their beliefs about their capabilities, even if their initial emotional response was a negative one; *“The day we were doing the crafting...I went, my God, I don’t want to do this! I am not creative at all. But after that.... I did more of (it). Look how much you can enjoy something if you take away the “I’m no good at this”* (3656). In general, these sessions created a different emotional response than the discussion-based ones; *“I loved when we had stuff to do.... we did collective stuff with our hands which was brilliant”* (8114) *“It brings you back to the child inside I think.... that little piece of you that likes to do”* (2612).

The practice of occupations (BCT 8.1) was clearly linked to new health-related occupational choices for some participants; *“We had a very good exercise.... just sit down*

with the fruit and eat. No talking, you know? That was great. I'm doing something like that at home now. Just be in the same time just for myself and with the thing I'm doing. I'm doing that like twice a week now" (4572). The homework reconnected people to occupations they had previously enjoyed; *"I went out on the horse. I made a conscious effort of being aware of my surroundings and being present in the moment. It was really, really enjoyable"* (1262) and participants individualised the homework to choose their own valued activities; *"I didn't do the going for walk things... but the gardening is a kind of break for myself. My mind kind of goes blank. I just concentrate on what I'm doing"* (1558). Not everyone felt they had the autonomy to choose such occupations in their busy lives however; *"it's being Mum, you know? I constantly have to be there"* (4678), minimising the potential for this BCT to bring about change; *"(The activities are) helpful to make you realise, but I don't know that they change anything. I don't know if I've sat down since"* (4678).

Goals and Planning/Self-belief

Both the structure and expectations of the programme were enablers. Members committed to clear group rules (BCT 1.9), which were important in the development of trust: *"I think it was the establishment of self-imposed guidelines of being respectful to one another, of not interrupting one another...I think that this set us up for a very successful group"* (9078). For some, commitment to attendance was an empowering choice; *"I felt that it was my thing. That was my time"* (2612) *"I loved it.... I'm doing my course today. I liked to be able to say this is my time"* (3656). This more empowered self-talk (BCT 15.4) led some to women making more time for themselves; *"You realise it's actually good for you and your partner...and your kids because you're happier. It's ok to put yourself first..... for me, it was to cut off the guilt"* (3656).

Goal-setting (BCT 1.3) occurs throughout the programme. Basing goals on a thorough exploration of individual issues was valued by participants, particularly when it included problem-solving (BCT 1.2); *“I found it helpful and beneficial...exploring how I spent my time and what caused me stress...what I enjoyed doing and arriving at the goals for change. That particular part, I really, really enjoyed doing”* (7712). Using visual aids to depict the balance between different life domains was particularly helpful for goal-setting; *“We had to draw one of what we would like to see for ourselves. That was like, “yeah, that has to improve”. And now, I’ve tried to keep that as much as possible”* (1558), as was the process of breaking down a long-term goal into shorter-term actions; *“I ...sit down and say, “hey, is this realistic? No, it’s not. Make a smaller goal””* (5505). However, some participants identified that not enough time was spent on this process for them to make changes; *“I couldn’t take action on my goals the way I would have liked to have been doing – I felt that maybe it was a little bit rushed that section”* (7712).

Reviewing goals and homework from week to week (BCT 1.5) was an enabler of behaviour change, as participant 1262 states clearly; *“I did what I was asked because I didn’t want to go to group not having it done”*. Having homework meant that changes were prioritised; *“We need to have homework...otherwise we doing everything else all the time. If you have homework, you just need to focus on the homework”* (4572). Not everyone felt this influence however; *“if you got it done, you got it done and if you didn’t, you didn’t. You didn’t feel in any way pressurised”* (7901).

Antecedents

ReDO[®]-10 aimed to restructure the social environment (BCT 12.2) to be supportive of women trying to make lifestyle changes by holding an evening seminar to educate families, partners or others on the programme topics. However, married participants (who were in the majority in each group), asked for this seminar to be cancelled, feeling that it would disrupt group dynamics; *“It makes you vulnerable”* (3656) *“I wouldn’t have been comfortable with that”* (1558). These women preferred to tell their spouses a limited amount about the programme, seeing their self-development as their personal concern; *“I didn’t want him to ruin my idea of my course. I didn’t want to.... drag him along. ...It’s best if I just do it myself”* (1558) *“This is my thing. It’s not to do with him”* (2612). Restructuring the social environment was more successful with children, particularly regarding delegating chores; *“That would never have been heard of in my house. They wouldn’t even bring their plate from the table to the sink. But they know now...that’s the way it goes”* (3656).

In general, the woman’s social environment was a very influential enabler (*“He bought an egg swing chair for the garden...and he’s saying, ‘sure go out there now and read your book. Have 20 minutes. Nobody’ll bother you’”* (3656)) or barrier (*“That kind of autonomy about leisure time activities...that was a big challenge for me to go for a walk on my own, because if I’m going out the door its’ ‘Where are you going? I’ll go with you”* (4678)) to changes occurring. This may have reflected individual differences in beliefs in one’s capability to make assertive choices, say no or let go of guilt, often understood retrospectively by the older participants; *“It’s always that guilt with women.... I thought that was from our generation. I’d love to shoot them and say, stop it! It doesn’t matter”* (3656).

Social support/Associations

Although ReDO[®]-10 did not change social opportunities outside the programme directly, the group sessions provided a social opportunity within which emotional social support (BCT 3.3) was very evident. This social support was instrumental in changes in capabilities and motivation, particularly as only women were present; *“I liked that it was just women...I do think women have a tougher time...and it’s easier to share feelings with just women”* (3656). This supportive environment facilitated sharing, leading to emotional relief; *“I felt a lot of relief, just saying what was going on”* (1558) *“It turned out to be an emotional support as well”* (6686). Because the social support was a strong reinforcer of change, ending the group was disruptive for some participants who valued the two follow-up groups; *“the session after we went back (follow-up)... was the most important session of the whole course. After the 10 weeks.... I thought “I’m back to square one again”. And we had the follow-up and just felt good after it. The thing about the ten weeks is you feel like you’re propped up...and then you’re just left”* (1558). For three women, doing ReDO[®]-10 directly led to them seeking further support from counselling services; *“When you talk openly and honestly, you know you can share it then with somebody else. I was ready to really talk more deeply”* (6797).

Overall, the creation of this supportive social environment relied on sensitive group facilitation. Where poor group dynamics were perceived, participants’ progress was stalled; *“if somebody has something bad going off and somebody else.... cuts in and says ‘there’s something worse wrong with me’. I found a lot of that went on”* (6797). However, other participants in the same group sessions perceived this differently, perhaps reflecting the benefits they received from being able to share their feelings; *“If something came up, there*

was room to facilitate that” (7901). Following ReDO[®]-10, there were differences in how much participants used the written materials (BCT 7.1) provided by the programme to reinforce change; *“I don’t think I’m going to keep using all of them”* (8114), *“I have the book, the notes still. I do go through it every so often”* (6797). Self-monitoring was, for most participants, a process of “noticing” and focusing of attention during a stressful period. For some, this remained at the level of awareness: *“I haven’t managed to react as I would like to”* (7901) that would require *“revisiting.... everybody needs to be reminded”* (6686) in order to continue to be effective.

Discussion

The BCW, TDF and BCT frameworks provided a useful structure within which to analyse perceived changes that participants experienced during and after ReDO[®]-10. Linking intervention functions/BCTs to these perceived changes highlighted possible mechanisms by which ReDO[®]-10 worked in this new context. As seen in the narratives, making changes in daily occupations was a highly individualised process, with the ReDO[®]-10 perceived as helpful or occasionally unhelpful in that process, even for women in the same group sessions. The analysis also identified some lessons learned for future optimisation and implementation of this programme for women with stress-related issues.

Occupational participation and analysis as mechanisms of action

A theoretical assumption of ReDO[®]-10 (Figure 1) is that self-identification of a need for change is important for effective behaviour change (Bandura, 1986). In this study, participants found the self-analysis tools such as time-use diaries were an important first step in understanding the relationship between their activities and their perceived health. Some

participants started to make changes immediately based on this new information, but others needed more time to reflect. Occupational self-analysis may have moved some women who were already quite self-aware from the contemplation stage to the action stage of change as set out in the transtheoretical model of health behaviour change (Prochaska & Velicer, 1997). For other women, this information was new, so they may have begun ReDO[®]-10 at an earlier, precontemplation stage of change. Orban, Edberg and Erlandsson (2012) describe using a similar “time geography” method where participants reflected on their activities, but included reflection on where they were, who they were with and how they felt. These diaries were complemented by a “simulated recall interview”. Orban et al. (2012) found that this method allowed participants to articulate deeper issues such as level of choice, relationship to tradition or roles and “enfolded” occupations where multiple activities are completed at once. The longer programme, ReDO[®]-16, allows time for a follow-up exercise exploring patterns of occupations more deeply using these diaries (Erlandsson, 2013). The shorter ReDO[®]-10 programme may have meant that not all participants were guided to reflect on their diaries to this extent, perhaps not influencing other TDF domains sufficiently for behaviour change in those facing bigger challenges (Michie et al., 2014).

Including occupational experiences, such as craft, within group sessions and as homework is another important underlying principle (Figure 1). The participants had strong emotional responses to these experiences, demonstrating how occupations may be perceived by different people depending on the meaning and significance they ascribe to them (Roberts & Bannigan, 2018). This emotional response showed that the occupations had a restorative function, providing stress relief, enjoyment and helping the person feel connected to the present moment (Roberts & Bannigan, 2018). However, for some women, they remained as stand-alone, pleasant experiences, rather than influencing ongoing behaviour change.

Individualising the homework and finding their own meaningful, restorative occupations appeared to be most effective. Again, the shorter duration of the ReDO[®]-10 programme may have meant there was not sufficient practice of new, restorative occupations or sufficient time to individualise and problem-solve barriers to bring about sustained change for some participants.

Social opportunity and social influences

Social determinants of health such as income, living circumstances and childhood experiences are important influencers of health-related behaviour (Alcántara et al., 2020). The living circumstances of these participants were not explored, but social opportunities were identified as important enablers and barriers for them. For women with partners, choices about occupations were not made in isolation. The activities and preferences of other family members also needed to be considered. Choices were also dependent on the perception of autonomy (Powell, 2015) and managing feelings of guilt when choosing occupations for one's own pleasure and health. Changing behaviour to include more self-replenishing occupations, such as gardening or going for a walk was a struggle for the mothers in this study and reflects the experiences of other mothers in Western societies, *“the women...all recognised their need for self-replenishment if they were to adequately meet the endless demands of motherhood. However, the cost of electing to focus on their own needs, even for a few minutes to take a bath or read a magazine, often left them feeling guilty”* (Seagram & Daniluk, 2002, p77). Changes to feelings of guilt, where they occurred, happened via two mechanisms in ReDO[®]-10: persuasion and modelling. Older women who had “been there” acted as persuasive credible experts (BCT 9.1) pointing out the importance of delegating

responsibilities in the household. Other mothers, doing things differently, were also role models (BCT 6.2).

Recognising that it is difficult for a woman to make lifestyle changes in isolation, the programme includes an evening seminar to encourage those around her to be supportive and to make family or workplace-level changes for wellbeing (Erlandsson, 2013). Swedish ReDO[®]-16 participants welcomed these seminars, invited their workplace managers and suggested holding two such seminars (Wastberg et al., 2013). However, the women in this Irish study, in particular the married women with small children, asked for the seminar to be cancelled. It is possible that this was due to contextual differences. ReDO[®]-16 was evaluated in a vocational rehabilitation context, with a specific emphasis on return-to-work (Eklund & Erlandsson, 2011), whereas the current study had a mental health focus (albeit in primary care). It is likely that Swedish women felt less stigmatised by sharing the topics of a “vocational course” with their families and employers than the Irish women who were attending what might have been perceived as a mental health support group.

Using the BCW to understand mechanisms

A small number of studies have used the BCW in their analysis of mechanisms in interventions involving occupational therapists. For example, “Breathe Magic” uses magic tricks in a group setting to help children with unilateral spastic cerebral palsy develop motor and bimanual skills, independence and self-confidence (Fancourt et al., 2020). The BCW-based analysis of qualitative interviews with parents and children showed that “automatic motivation” (fun and enjoyment) in the magic activities was an important mechanism supporting engagement and outcomes (Fancourt et al., 2020). The use of the BCW to analyse

mechanisms in interventions retrospectively is not without its critics (Teixeira, 2016). This kind of analysis could underestimate the complexity of change and may not account for the “messiness” of real practice and human personalities, where change may occur (or be hindered) by multiple factors simultaneously. It may not account for the “art” of therapy, where skilled clinicians move between many therapeutic approaches (or BCTs) smoothly and invisibly within sessions, with different service users and in different contexts (Ogden, 2016).

The language used in ReDO[®] and by occupational therapy clinicians and researchers generally, is different to that used by behaviour change researchers in frameworks like the TDF or BCW. One example is the concept of “occupation”. In ReDO[®], as in many occupational therapy interventions, “participating in occupation” is both the treatment and the intended outcome. The analysis in this study is not an attempt to be reductionistic or to diminish the discipline-specific nature of ReDO[®]. However, there were participant accounts that highlighted how occupational experiences can be turning-points for behaviour change. For example, a craft activity provided a hands-on example of a new activity or reconnected the person to a previously valued activity. To do, to be occupied is, according to occupational therapy theory, the way humans develop and adapt to new circumstances (Kielhofner, 2008). Including occupational experiences that are relevant and introduce topics in a new way within group sessions are not just opportunities to do a new “behaviour”. They also offer a taste of what one could be or become in the future (Wilcock, 1998). The use of the BCW analysis in this study adds another perspective on why or how occupations have therapeutic potential in healthcare interventions.

Lessons Learned

Although the ReDO[®]-10 is a manualised intervention, the experiences of participants are vital to consider in future optimisation, refinement and implementation of the programme, particularly in new contexts. From the analysis and discussion above, there are a number of lessons learned from this study.

Firstly, commonality of experience is recognised as an important therapeutic group factor (Yalom & Leszcz, 2005). Younger, unmarried participants and retirees were in the minority in the current study and identified that a group with more participants like themselves would have been more useful. Interestingly, although the older participants did not find commonality with younger women, their presence was a mechanism of action for participants who saw them as role models (BCT 9.1 Credible source). Given the common experiences faced by mothers in the current study, future ReDO[®]-10 programmes could focus on different life stages; students, working mothers, retirees etc. The single-gender aspect was valued, again particularly by those who were in relationships. There is a research gap exploring both the ReDO[®]-16 and ReDO[®]-10 with men (possibly with male facilitators) and with other groups in primary care where different kinds of occupational balance issues have been identified (Jonsson, Borell, & Sadlo, 2000; Wilson & Wilcock, 2005).

Secondly, as described above, the self-analysis of occupational patterns at the start of the programme raised awareness of the link between occupations and health for participants, but did not always result in a change in time-use. Both internal (guilt) and external (family pressures) were cited as reasons for this. The use of time-use diaries on several occasions across the 10 weeks could facilitate participants in reflection on repeating patterns, ongoing

barriers or small positive changes as the programme progresses. The ReDO[®]-10 manual asks that a journal/note-book be provided to the participants, but does not specify how this is to be used. No participant described using any reflection or self-monitoring in between sessions. Self-directed reflective diaries have shown to have very low uptake in other feasibility studies of healthcare interventions for women (Hennelly, Perman-Howe, Foxcroft, & Smith, 2020). Because the women in the current study showed strong commitment to their group peers and facilitators, it is likely that structured self-reflective homework in between sessions such as asking women to reflect on how they felt after completing uplifting occupations or making a change to their occupational pattern would have been completed. This could allow for additional BCTs such as monitoring of emotional consequences (BCT 5.4) on a regular basis to be incorporated. This reinforcement could also encourage more practice of restorative occupations outside of the group sessions (BCT 8.1). Furthermore, visual tools, such as portraying time-use as a colour-coded pie chart, in the programme, was helpful in developing self-understanding for these participants and could provide an alternative to writing for participants with e.g., poor literacy.

Finally, because of the reaction of the married participants in this study, care should be given in how the ReDO[®]-10 evening seminar is described to groups where trust and confidentiality are important. It is recognised that “the close connection of men and women in dyadic relationships may lead partners to hinder, promote or control each other’s thoughts, behaviour and emotions” (Kenny et al., 2006. As cited in Symoens & Bracke, 2015, p. 51). This interconnectivity shows itself in work-life conflict for both men and women, albeit in different ways. Because the occupational patterns of family members are mutually dependent, it could be useful for future ReDO[®] programmes to take a more family-system perspective for people in all sorts of relationships and none. Again, recognising that homework was

valued by participants, a task for the opening sessions of the programme could be for the participant to have a talk with the others in the home to discuss how the entire household could become more occupationally balanced. Resources to share the ReDO[®] information with families could be developed e.g., a video or workbook. Marital satisfaction is greater when both individuals in a partnership have satisfactory role balance (Chen & Li, 2012). Therefore, taking a more ecological approach to occupational balance could take the pressure off the individual participant to make all the behaviour changes required (Kantartzis, 2016).

Limitations

A limitation of this study is that two different researchers completed the qualitative interviews over the study period. However, the use of a semi-structured interview tool for all interviews ensured that the same topics were covered and that similar probes and prompts were used. Another limitation is that one of the programmes was co-facilitated by the first author who analysed the data for this paper. However, an occupational therapy student who was not involved in running the groups interviewed the participants of that group series. Those interviews were transcribed and anonymised by the student before they were analysed by the authors. The use of a co-analyst, otherwise unconnected with the delivery or evaluation of the programme, also helped to reduce potential bias arising from this. There is a risk that in using the BCW framework to analyse the qualitative data, participant responses were over-interpreted to fit this framework. Finding codes/themes consistent with existing theories is a known issue in qualitative analysis, even among studies that use purely inductive/emergent coding (Schonfeld & Mazzola, 2013). However, as the BCW and TDF frameworks are a distillation of multiple health-related theories and models, it can be

assumed that that they cover the most important factors in behaviour change (Michie et al., 2005).

A limitation of this form of qualitative evaluation is that it is reliant upon the way in which the participants perceived change, which may not always be accurate. In qualitative evaluation, there is a risk that people may attribute changes that occur to the intervention, or only remember change when their attention is drawn to it (Lilienfeld, Ritschel, Lynn, Cautin, & Latzman, 2014). Finally, it is acknowledged that this kind of analysis requires some interpretation by the researcher e.g., in coding participant's narratives to BCT or TDF categories. Sometimes the impact of a ReDO[®]-10 activity was very apparent. In other cases, discussion of the personal changes occurring and discussion of the programme was separated in the transcript and the researcher had to probe more deeply to understand whether/how this change was related to ReDO[®]-10 participation (Orford et al., 2009).

Conclusion

This paper provides important insights for healthcare professionals and researchers developing and delivering group-based psychosocial interventions. Some of the mechanisms identified in this paper, such as the influence of peer persuasion, modelling and self-reflection are likely to be important considerations in other self-management programmes. The paper also provides insights for the future optimisation and refinement of ReDO[®] programmes and for ongoing research evaluating their effectiveness. Following participation in the ReDO[®]-10 programme, the participants described changes to their psychological capability, automatic and reflective motivation and, to a lesser extent, their social opportunity to make changes to their occupational patterns and balance for better health. The proposed theoretical

mechanisms of ReDO[®]-10 appear to be relevant for participants in this new context, but group dynamics and the social context had the potential to be strong barriers or enablers of change for participants. The transdisciplinary BCW and TDF frameworks (Michie et al., 2005; Michie et al., 2011) provided a new way of understanding this occupational therapy intervention, illuminating some mechanisms by which knowledge about and participation in restorative occupations could be increased for women with stress.

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