Using Normalization Process Theory as a practical tool across the life course of a qualitative research project

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Abstract:

Drawing on work which aimed to understand factors influencing experience of and engagement with the NHS Health Check Program this article discusses how Normalization Process Theory was used throughout the life course of a research project. As a relatively new theory, Normalization Process Theory is still being refined and much work undertaken to develop interactive tools and 'test' the utility of it. There is little published critique of the theory, however, two main issues have arisen in the literature 1) difficulties ensuring interpretation of constructs are congruent to the original theory and 2) the intensity of translation work to contextualize the theory to individual settings. These issues are explored in this article by examining the processes undertaken to translate Normalization Process Theory so that it was usable to shape a qualitative research project from design to analysis and interpretation.

Introduction:

This article adds to the growing body of work regarding the utilization of Normalization Process Theory (NPT) as a theoretical tool to sensitize researchers to issues concerning how practices become routinized (normalized) in real world settings (May et al., 2018; May & Finch, 2009). This article draws from previous work which aimed to understand factors influencing the experience and engagement of people identified through the NHS Health Check Program in England (Department of Health, 2008a, 2008b, 2009) as being at high risk of cardiovascular disease. Findings from the main NHS Health Checks work can be found in McNaughton (2018), McNaughton and Shucksmith (2015), and McNaughton, Oswald, Shucksmith, Heywood, and Watson (2011). This article does not aim to present findings from the study, but provides details and discussion of NPT and how it was used throughout the life course of the research. We hope that other researchers will find the detail of our experiences useful if trying to identify and utilize NPT as a tool or study framework.

Theoretical Background

What is NPT?

The concept of what is 'normal' and how 'normalization' occurs has been considered, discussed and defined from a multitude of perspectives, disciples, and locales. For example Deatrick, Knafl, and Murphy-Moore (1999) developed a set of attributes that describe the processes of achieving normality for those living with chronic condition. Morse, Wilson, and Penrod (2000) confirm and refine the attributes in their work with mothers and their disabled children. In this definition of normalization the perception of what it is to be 'normal' and how 'normal' is presented is fluid and evolves depending on context. Parker (2005) and Shildrick (2002) explore the concept and components of normalization in the context of drug taking behaviors of young people. However, NPT offers a tool that delineates normalization

in a different way by defining the processes of normalizing a discrete set of practices. Normalization Process Theory encourages researchers to engage with and think through issues around *implementation* (the way in which practices are actioned through social organization), *embedding* (the process of practices becoming routinised), and *integration* (the process of sustaining) of practices (May & Finch, 2009). This process of implementation, embedding and integration of practices, it is argued, results in the *normalization* of a practice (May, 2010). The primary concern of NPT is understanding the processes involved in what people 'do' and the way they construct what they 'do' both as individuals and collectively as part of a socially organized group to work towards a specific outcome (May & Finch, 2009; May et al., 2009).

Developed between 2000 and 2009 by Carl May and colleagues, NPT has been defined as a 'middle range theory' (May & Finch, 2009). Middle range theories are described as frameworks for understanding problems and for guiding the development of interventions in a practical sense (Boudon, 1991; Davidoff, Dixon-Woods, Leviton, & Michie, 2015). Drawing its roots from sociological theory in the main, NPT can be used to understand the fluid, dynamic, and interactive processes that are at play between contexts, people, and objects (McEvoy et al., 2014). It offers a method or framework to conceptualize and provide a rational, systematic description, and explanation of the work of both individuals and groups.

Rather than acting as a 'conceptual straight jacket', NPT can be utilized as a heuristic (problem solving) device (McEvoy et al., 2014). Normalization Process Theory focusses on the work that people undertake to engage with social contexts and objects to implement, embed, integrate a new practice or way of working – it is then, according to the theory, that a practice has become *'normalized'* (May & Finch, 2009; May et al., 2003; May et al., 2009).

Normalization Process Theory has in recent years grown in popularity – as seen by increasing numbers of publications utilizing it as a theoretical framework. NPT is widely used to illuminate issues concerning implementing health interventions such as complex interventions for osteoarthritis (Morden et al., 2015), care for chronic conditions (French et al., 2016; Harris et al., 2017) and digital health interventions (Band et al., 2017; Wade, Eliott, & Hiller, 2014). However, there is a small body of evidence emerging that has used NPT to explore processes of routinising practices outside of a formal organizational setting such as the work of Gallacher, May, Montori, and Mair (2011) exploring the issue of treatment burden in a population that has chronic heart failure and Burridge et al. (2016) used NPT to explore diabetic patient's views of their care.

As a relatively new theory, NPT is still being refined with much work being undertaken to develop an interactive 'toolkit' freely available online (May et al., 2015). The toolkit provides a resource for academics and practitioners to explore the utility and applicability of NPT to their own contexts.

However, there is little published critique of NPT or reporting of any limitations encountered in its use. Finch, Mair, O'Donnell, Murray, and May (2012) do highlight that whilst NPT provides a framework to explore the processes of implementation, it cannot provide a definition of what 'normalization' looks like in a given context. This is a judgement to be made by those exploring an intervention or practice. Other critiques relate to the interpretation of the constructs and mechanisms of NPT and for example difficulties in ensuring that interpretations are congruent with the original theory (Atkins, Lewin, Ringsberg, & Thorson, 2011; Franx, Oud, De Lange, Wensing, & Grol, 2012; Gunn et al.,

2010; Macfarlane & O'Reilly-de Brun, 2012). Finch et al. (2012) also discuss the intensity of the translation work necessary to ensure NPT constructs are interpreted in a way which is relevant to the context in question. The issues identified also emerge as a major consideration in this article, as much interpretation work was needed to provide context to the theory's constructs to make it usable and relevant to the study situation.

The research that this article is derived from focused on how individuals, outside formal organizational structures, interact with a primary prevention intervention and work through the processes of understanding what the intervention is offering them, what their participation is or could be, doing (or not) what is asked of them, and participating in ongoing monitoring and surveillance. To our knowledge this is the first time that NPT has been utilized in this way.

Therefore, the aims of this article are twofold. 1) to contribute to the growing body of evidence that explores how usable NPT is to examine the processes that people go through to participate in health interventions outside of organizational networks, such as work assessing treatment burden in people with chronic heart disease (Gallacher et al., 2011), stroke (Gallacher, May, Langhorne, & Mair, 2018), and diabetes (Burridge et al., 2016). 2) to address the limitations raised about difficulties interpreting the constructs to make them usable.

What are the core constructs of NPT and how can they be translated and contextualized?

As noted previously this initial translation work is an essential starting point and is often intensive (Finch et al., 2012). In order to address that limitation and utilize NPT across the life course of the study, translation work was necessary to interpret the core components of

the theory and render them applicable to the specific context of interest. The following paragraphs describe the work undertaken to translate the core components of NPT and ensure their relevance in the context of this study.

Normalization Process Theory seeks to surface factors that can promote, or inhibit, the normalization of a set of practices and does so by identifying four core components (termed constructs) needed for normalization; *coherence, cognitive participation, collective action, and reflexive monitoring* (May & Finch, 2009; May et al., 2015). A working definition of each core construct can be found in Table 1.

As part of the process of engaging with NPT and interpreting the theory so that it could be applied in a practical, relevant way, an early decision was made by the authors to undertake some re-labelling of the components into more accessible language. Thus each of the constructs was relabeled for ease of understanding (Table 1). The construct coherence was relabeled as “making sense of it”, cognitive participation was relabeled as “working out participation”, collective action was relabeled as “doing it”, and finally reflexive monitoring was relabeled as “reflecting on it”.

The tables presented in this article illustrates both the original label for each construct and later the working mechanisms of the theory and the interpretations generated for the purposes of this study. For consistency the interpretations are presented first in bold and the original labels are in brackets.

Table 1: Definition of Normalization Process Theory constructs[i]

Making sense of it (Coherence - planning phase)	**Working out participation** (Cognitive Participation - planning phase)
The process of sense making and understanding that individuals have to go through in order to promote or inhibit the routine embedding of a practice to its users. These processes are energised by investments of meaning made by participants (Finch et al., 2012, p. 3). *How people understand and make sense of a practice with an emphasis on understanding and conceptualisation of interventions and their work* (McEvoy et al., 2014, p. 2).	*The process that individuals and organisations go through in order to enrol individuals to engage with a new practice. These processes are energised by investments of commitment made by participants* (Finch et al., 2012, p. 3). *How people engage and participate with a practice with an emphasis on notions of legitimation and buy in, both in terms of the individuals involved and involving others* (McEvoy et al., 2014, p. 2).
Doing it (Collective Action - doing phase)	**Reflecting on it** (Reflexive Monitoring - appraisal phase)
The work that individuals and organisations have to do to enact the new practice. These processes are energised by investments of effort made by participants (Finch et al., 2012, p. 3). *The distribution of work required among stakeholders and the resources to support that with an emphasis on; organisational resources, training, divisions of labour, confidence and expertise as well as the workability of the intervention* (McEvoy et al., 2014, p. 2).	*The informal and informal appraisal of a new practice once it is in use, in order to assess its advantages or disadvantages and which develops user's comprehension of the effects of a practice. These processes are energised by investments in appraisal made by participants* (Finch et al., 2012, p. 3). *How people reflect and appraise its (practice) effects. With an emphasis on appraising and monitoring implementation work* (McEvoy et al., 2014, p. 2).

When engaging with NPT we found that the four constructs can be broadly divided into two categories. The first category was a planning phase of work that individuals, working as 'actors' within a socially organized group, undertake to make sense of and organize themselves around the ideas and requirements of a new practice. This involves processes of understanding, organizing, and planning (coherence and cognitive participation). The second category is a 'doing' phase, where individuals and collectives carry out the practices, then appraise and evaluate the appropriateness and effectiveness of what they are doing and take action to change practices once they have been appraised (collective action and reflexive

monitoring). Interpreting the four core constructs as such, though a simplification of the theory, was helpful in facilitating the thinking through of aspects of the 'work' individuals had to do to engage with, or not, a health screening Program and implement lifestyle changes and prescribed medications arising as a result of their identification as at-risk of a cardiovascular event in the next 10 years.

Application of NPT: design and analysis

Normalization Process Theory is promoted as a tool that can be utilized at any stage of a research project's lifecycle; from informing study design through to analysis and interpretation (May et al., 2015). In their systematic review, McEvoy et al. (2014) found researchers had used, and found useful, the constructs of NPT across the life course of projects: to inform study design, data analysis, and interpretation. The same systematic review reported that NPT constructs had been operationalized and interpreted consistently, with two notable exceptions (Gunn et al., 2010; Sanders, Foster, & Ong, 2011). Regardless of these slight variations in interpretation, it was concluded that NPT constructs were beneficial to researchers because they provided a framework to highlight important issues relating to routinisation. Similarly, May et al. (2018) demonstrated, in their systematic review that NPT had been used across a variety of feasibility studies and process evaluations and concluded that a) NPT constructs were stable and consistent across studies, b) the theory has explanatory power, and c) is flexible and understandable across contexts.

How NPT was used in the 'design' stage

NPT was used at the design stage of the study to generate questions for an interview schedule. Each core construct; making sense of it (coherence), working out participation (cognitive participation), doing it (collective action), and reflecting on it (reflexive

monitoring) is composed of four underlying working mechanisms (or processes) (May et al., 2009). Before constructing the interview schedule a second process of interpretation was undertaken to translate and contextualize each construct and its subordinate working mechanisms to the study. Brainstorming was then used to identify a variety of issues and questions that the theory raised, thus generating potential content for the interview schedules which was then sorted, structured and agreed between authors. The following sections present each main construct with a brief overview, followed by the interpretation and examples of the questions generated.

Making sense of it (coherence)

The *making sense of it* (coherence) construct is a planning phase that is concerned with identifying and unpacking what people actually do when trying to understand a new practice. Making sense of this new practice is achieved at both individual level and in partnership with others. This construct is comprised of four discrete working processes; differentiation, communal specification, individual specification, and internalization (May & Finch, 2009; May et al., 2009).

Table 2: Making sense of it (Coherence) - working mechanisms

Understanding the uniqueness of it (Differentiation)	**Collectively interpreting it** (Communal Specification)
An important element of sense-making work is to understand how a set of practices and their objects are different from each other.	*Sense making relies on people working together to build a shared understanding of the aims, objectives and expected benefits of a set of practices.*
Individually interpreting it (Individual Specification)	**Coming to a conclusion** (Internalization)
Sense making has an individual component too. Here participants in coherence work need to do things that will help them understand their specific tasks and responsibilities around a set of practices.	*Finally, sense-making involves people in work that is about understanding the value, benefits and importance of a set of practices.*

Definition of working mechanisms is taken from May et al. (2015).

How working mechanisms were interpreted for contextualization: Table 2 shows how each working process has been defined in the literature. Essentially, the process that people go through to make sense of a practice – or a thing – can be broken down into four interrelated processes. The first mechanism – differentiation – can be interpreted as how people understand the new practice to be unique or different from other ways of working (*understanding the uniqueness of it*). The second mechanism – communal specification – can be understood as the work people do, together, to interpret the new practice in order to come to a collective understanding of it (*collectively interpreting it*). The third mechanism – individual specification – can be understood as the work people do, individually, to interpret the new practice in order to come to an individual understanding of it (*individually interpreting it*). The fourth mechanism – internalization – can be interpreted as the work people do to come to a conclusion about a practice and deciding to either engage with it, or not (*coming to a conclusion*). Table 3 shows the key questions raised by the construct of coherence, in relation to the study.

Table 3: Making sense of it (Coherence) - application

Making sense of it (Coherence)	
Mechanism	***Key areas to explore***
Understanding the uniqueness of it (Differentiation)	1. How does this differ from other routine checks I have been offered? 2. How does this differ from other interventions that have been aimed at me a. That I have sought out b. That have been offered to me c. General health promotion activity 3. Do I recognize the NHSHC brand? 4. What is unique about the invitation/ offer? 5. What were my expectations/ why did I attend?
Collectively interpreting it (Communal Specification)	1. Am I clear about everyone's role in the NHSHC process? 2. Am I able to work with others (health professionals/ family/ friends) to access information about the assessment and intervention? 3. How is risk communicated to me? 4. How is treatment/ intervention communicated to me? 5. Do my friends and family have an opinion about the assessment and subsequent intervention?
Individually interpreting it (Individual Specification)	1. Do I understand the purpose of having a CVD risk assessment? 2. What is my own role in the assessment and subsequent intervention?
Coming to a conclusion (Internalization)	1. How do my previous experiences help me to make sense of a. The NHSHC b. CVD risk c. Intervention and treatment pathways 2. Do I think there is added value from the assessment/intervention? 3. What are the specific benefits to me from the assessment/ intervention?

Working out participation (cognitive participation)

The *working out participation* (cognitive participation) construct is a planning phase concerned with identifying and unpacking the work that people do when trying to think through and organize themselves and other people to undertake a new practice. It is about the relational work undertaken by people to build a group with shared agreement and engagement around the new practice. The four working mechanisms of cognitive

participation are; initiation, enrolment, legitimation, and activation (May & Finch, 2009; May et al., 2009). Each working mechanism is described, in turn, in Table 4.

Table 4: Working out participation (Cognitive Participation) - working mechanisms

Having the skills to engage (Initiation)	**Organizing people** (Enrolment)
When a set of practices is new or modified, a core problem is whether or not key participants are working to drive them forward.	Participants may need to organize or reorganize themselves and others to collectively contribute to the work that may involve rethinking group relationships between people and things.
Believing practice is valid (Legitimation)	**Defining actions** (Activation)
An important component of relational work around participation is the work of ensuring that other participants believe it is right for them to be involved, and they can make a valid contribution to it.	Once it is underway, participants need to collectively define the actions and procedures needed to sustain a practice and stay involved.

Definition of working mechanisms is taken from May et al. (2015).

How working mechanisms were interpreted for contextualization: Table 4 shows how each working mechanism was defined. Essentially, the process that people go through to think through and organize themselves and others around a practice – or a thing – can be broken down into four interrelated mechanisms. The first mechanism – initiation – can be interpreted as how people identify that they have the right skills set to drive forward the new practice (*having the skills to engage*). The second mechanism – enrolment – can be understood as the work people do to organize themselves and other people so that they can carry out the new practice (*organizing people*). This organization work is the process of making sure that the right people, with the right skills are ready to carry out the work. The third mechanism – legitimation – can be understood as the work people do to come to an understanding that a new practice is a valid thing for them to do, a legitimate part of their role (*believing practice*

is valid). The fourth mechanism – activation – can be interpreted as identifying what actions need to be undertaken to carry out the new practice (*defining actions*). Table 5 shows the key questions raised by the core construct cognitive participation, in relation to this study.

Table 5: Working out participation (Cognitive Participation) - application

Working out participation (Cognitive Participation)	
Mechanism	***Key areas to explore***
Having the skills to engage (Initiation)	1. Do I have the right skills to a. Engage with the NHSHC b. Engage with the intervention(s) 2. Do I know *how* to a. Eat better b. Take more (appropriate) physical activity c. Take lipid lowering medications correctly
Organizing people (Enrolment)	1. How do I engage with and organize other people in the NHSHC process? a. Health professionals b. Family c. Friends
Believing practice is valid (Legitimation)	1. Have I sought reassurance from others about a. Having the assessment? b. Treatment options? 2. Is risk reduction and prevention a legitimate part of my role?
Defining actions (Activation)	1. How can I arrange to carry out the requirements of the NHSHC a. Logistical issues (getting to appointments, shopping, physical activity) b. Administrative (ordering prescriptions etc…) c. Accessing services 2. Are 'doors opened' for me? (have I been given access to services?) 3. What are the actions I need to do to comply with the NHSHC? 4. What actions do I need to sustain to stay involved in the NHSHC?

Doing it (collective action)

The *doing it* (collective action) is a doing phase concerned with identifying and unpacking what people actually do when enacting a practice. This action work can, of course, relate to the work undertaken to comply, or resist and subvert the therapeutic intervention (in the case

of this study, statin and lifestyle changes) and the self-monitoring work undertaken by the individuals (May & Finch, 2009). This construct is made up of four working mechanisms; interactional workability, relational integration, skill set workability, contextual integration (see table 6) (May & Finch, 2009; May et al., 2009).

Table 6: Doing it (Collective Action) - working mechanisms

Performing the actions (Interactional Workability)	**Working with and trusting the work of others** (Relational Integration)
The interactional work that people do with each other, with artefacts, and with other elements of a set of practices, when they seek to operationalize them in everyday settings.	The knowledge work that people do to build accountability and maintain confidence in a set of practices and in each other as they use them.
Appropriate division of tasks (Skill Set Workability)	**Allocating resources** (Contextual Integration)
The allocation work that underpins the division of labour that is built up around a set of practices as they are operationalized in the real world.	The resource work - managing a set of practices through the allocation of different kinds of resources and the execution of protocols, policies and procedures.

Definition of working mechanisms is taken from May et al. (2015).

How working mechanisms were interpreted for contextualization: Table 6 shows how each working mechanism was defined. The actions that people perform to carry out the work of a practice – or a thing – can be broken down into four interrelated mechanisms. The first mechanism – interactional workability – can be understood as the physical action taken to perform the task (*performing the actions*). The second mechanism – relational integration – can be interpreted as the work that is done to work with others and trust their work (*working with and trusting the work of others*). The third mechanism – skill set workability - can be understood as the work that is undertaken to make sure that the tasks are divided appropriately according to people's skill, knowledge and expertise (*appropriate division of tasks*). The fourth mechanism – contextual integration – can be understood as the assigning of

resources to undertake the task (*allocating resources*). Table 7 shows the key questions raised by the construct of collective action, in relation to this study.

Table 7: Doing it (Collective Action) - application

Doing it (Collective Action)	
Mechanism	***Key areas to explore***
Performing the actions (Interactional Workability)	1. Do I perform the task of taking the tablets prescribed to me? a. Do I actively refuse to take tablets? b. How do I deal with side effects, practically? 2. Do I make changes to my lifestyle? a. If so, to what extent? 3. Do I attend appointments? 4. Do I actively refuse to 'comply' or resist an illness identity?
Working with others and trusting the work of others (Relational Integration)	1. Have I developed relationships with others involved in the NHSHC process? 2. Am I confident in the work that's being carried out by the health professionals? 3. Do I have confidence in the actions of the people involved in the NHSHC? 4. Do I trust the actions of the people involved in the NHSHC?
Appropriate division of tasks (Skill Set Workability)	1. How are the tasks divided between actors? 2. Have I set up routines to carry out the tasks required? 3. Is the required 'work' appropriate for the skills that I have?
Allocating resources (Contextual Integration)	1. Do I integrate the notion of risk into my social life? 2. Do I integrate medications and lifestyle changes into my social life? 3. Do I have the financial resources to take medications and engage in lifestyle advice?

Reflecting on it (reflexive monitoring)

The *reflecting on it* (reflexive monitoring) construct is an appraisal phase concerned with the formal and informal processes that are involved in monitoring and evaluating the work that has been carried out during the collective action phase. This reflexive stage of the normalizing process is undertaken, again, both individually and with others involved in the process. Reflexive monitoring is made up of four working mechanisms (see table 8);

systematization, communal appraisal, individual appraisal, reconfiguration (May & Finch, 2009; May et al., 2009).

Table 8: Reflecting on it (Reflexive Monitoring) - working mechanisms

Collecting feedback information (Systematization)	**Collectively evaluating it** (Communal Appraisal)
Participants in any set of practices may seek to determine how effective and useful it is for them and for others, and this involves the work of collecting information in a variety of ways.	Participants work together - sometimes in formal collaboratives, sometimes in informal groups to evaluate the worth of a set of practices. They may use many different means to do this drawing on a variety of experiential and systematized information.
Individually evaluating it (Individual Appraisal)	**Changing the way things are done** (Reconfiguration)
Participants in a new set of practices also work experientially as individuals to appraise its effects on them and the contexts in which they are set. From this work stem actions through which individuals express their personal relationships to new technologies or complex interventions.	Appraisal work by individuals or groups may lead to attempts to redefine procedures or modify practices - and even to change the shape of a new technology itself.

Definition of working mechanisms is taken from May et al. (2015).

How working mechanisms were interpreted for contextualization: Table 8 shows how each working mechanism has been defined. The process of gathering feedback on the actions performed in the *doing it* (collective action) phase of work and evaluating them can be broken down into four interrelated mechanisms. The first mechanism – systematization – can be understood as collecting information and feedback about how performing the task worked, in practice (*collecting feedback information*). The second mechanism – communal appraisal – can be interpreted as the work that is done to with others to evaluate the practice (*collectively evaluating it*). The third mechanism – individual appraisal - can be understood as the work that is undertaken individually to evaluate the practice (*individually evaluating it*). The fourth mechanism – Reconfiguration – can be understood as the process that people go through to

take the information and feedback gained from the other three working mechanisms, synthesize this and make changes to the way they enact the practice in the future (*changing the way things are done*). Table 9 shows how the four working mechanisms of the reflexive monitoring construct was interpreted in relation to the current study.

Table 9: Reflecting on it (Reflexive Monitoring) - application

Reflecting on it (Reflexive monitoring)	
Mechanism	***Key areas to explore***
Collecting feedback information (Systemization)	1. How do I collect/ gather information about: a. Progress? b. Side effects? c. Usefulness of interventions? d. Effectiveness of interventions?
Collectively evaluating it (Communal Appraisal)	1. How do I work with other people (health professionals, family, and friends) to evaluate: a. If being involved in the program is worthwhile? b. Medications are appropriate and effective? c. Lifestyle changes are appropriate and effective? d. Make a decision to continue or modify engagement?
Individually evaluating it (Individual Appraisal)	1. How do I use feedback from my experiences of the NHSHC process to: a. Evaluate appropriateness of interventions? b. Evaluate effectiveness of interventions? c. Make a decision to continue or modify engagement?
Changing the way things are done (Reconfiguration)	1. How do I use the information (from the first 3 mechanisms) to: a. Alter/ subvert/ modify my actions, moving forward

The questions raised in tables 3, 5, 7, and 9 were used to construct an interview schedule that was employed to guide conversations with participants. This approach allowed the constructs of NPT to flexibly guide the research and provide a theoretical basis to data collection, but attention was paid to not overly imposing the constructs or constraining.

In the initial planning stages, NPT provided a valuable framework for sensitization to issues around the implementation, embedding, and integration of knowledge and practices. NPT proved helpful to think through what, in a best-case scenario, would need to be in place within the NHSHC process to facilitate an individual's journey and adherence to the principles of the program. With this in mind, the interview schedules were constructed in such a way that they would elicit information about the process of normalization through 'making sense' of the NHSHC and CVR (coherence), 'working out participation' the NHSHC and suggested intervention (cognitive participation), 'doing the work' of being at high CVR (collective action), and 'reflecting on it' (reflexive monitoring).

How NPT was used at the analysis and interpretation stage

During analysis, NPT was utilized to make sense of the themes emerging through the inductive coding stage. Initially, the constructs and working mechanisms were used as the basis for a Framework Analysis (Ritchie, Lewis, McNaughton Nicholls, & Ormston, 2014; Ritchie & Spencer, 1994). However, this process proved unhelpful and raised concerns about using a deductive approach to data analysis at odds with the study methodology. Thus, Framework Analysis was abandoned in favor of a more inductive analysis process, a blended approach drawing on principles from Interpretative Phenomenological Analysis (Smith, Flowers, & Larkin, 2009) and Braun and Clark's six-stage thematic analysis (Braun & Clarke, 2006, 2013).

Once the inductive coding was complete, the constructs of NPT were considered in relation to the findings to see if they could help illuminate emerging issues and help make sense of the findings. In essence, NPT was used as a theoretical lens with which to interrogate the findings. Three constructs; making sense of it, doing it, and reflecting on it were especially

informative when making sense of the data; the construct 'working out participation' less so. However, this could be a reflection on how the constructs were interpreted initially and therefore the way in which the interview schedule was constructed, rather than the usefulness of the construct per se. The theory was beneficial, however, in highlighting the strengths and weaknesses of the NHSHC program, at the time of the study, and allowed the emergence of meaningful implications for policy, practice, and further research (McNaughton, 2018).

Conclusion:

The aims of this article were to add to the growing body of work that utilizes NPT to explore the processes of routinizing practices outside of formal organizational settings and to address some of the limitations raised in the literature, which may act as a barrier to engaging with NPT, about interpreting the constructs to make them useful. There were many lessons to be drawn from utilizing NPT across the life course of this particular study. The theory is presented as a universal tool that can be applied to any context. Whilst this is helpful to demonstrate its utility in a variety of contexts, it means that the constructs and underlying working mechanisms need to be interpreted on a case-by-case basis to be relevant and useful. A great deal of work was undertaken in the initial stages of the project to contextualize the core constructs of the theory. This led to the relabelling of the constructs and working mechanisms of the theory as the language used in NPT felt like a barrier to engaging with it fully. This process of interpretation was time consuming and should not be underestimated, or avoided as early deep engagement with the theory has multiple benefits.

Normalization Process Theory was useful at all stages of the research project. In the planning phases it acted as a sensitization tool to consider aspects of peoples' possible engagement

across the lifecycle of the NHSHC program from receiving the invitation, attending the check, considering making changes to their lifestyle, and engagement in monitoring activity. It was worthwhile when constructing the interview schedules as it provided a framework from which to derive questions and was a tool to consider aspects of 'actor' engagement that may have otherwise been overlooked. Utilizing NPT in planning stages of research or evaluation could be useful to others interested in exploring how people undertake the work of - considering engagement with health interventions, organizing resources, engaging with health intervention activity, and reflecting on the benefits or disadvantages of such health services and interventions.

However the use of NPT constructs via a framework analysis approach (Ritchie et al., 2014; Ritchie & Spencer, 1994) was found to constrain and shift the research towards top-down deduction. Therefore, in keeping with the philosophical basis of the study, analysis was firstly undertaken in an inductive manner following which the constructs of NPT were applied to the themes derived from the analysis in order to interrogate, challenge, confirm or refine the themes. The constructs were valuable at this stage to abstract the themes into 'higher order' concepts. Other researchers may find NPT a helpful tool to frame emergent themes and consider their implications, but depending on the research philosophy we would caution against deductive imposition.

Originally, NPT was developed to explore the ways in which innovative practices were routinised in organizations. However, individuals who are engaging in health interventions are part of social organization/ networks calling on the input of other people to undertake the work of engaging with intervention. In our experience NPT has proven valuable as a tool to

explore engagement with practices outside of the context for which it was intended, in this instance in relation to the engagement of people who were identified as at-risk of cardiovascular disease with the NHS Health Checks Program. This demonstrates that NPT is a beneficial tool to explore the 'normalization' of practices outside of a formal 'organizational' context.

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[i] UK English spellings have been maintained in verbatim quotations.