

**Resistance or appropriation?: uptake of exercise after a nurse led intervention to promote self-management for osteoarthritis**

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Keywords:	Patient-physician relationship, Primary care, Chronic illness and disability, Illness behaviour
Abstract:	<p>The philosophical underpinning of trials of complex interventions are critiqued for not taking into account causal mechanisms that influence potential outcomes. In this paper we draw from in-depth interviews (with practice nurses and patients) and observations of practice meetings and consultations to investigate the outcomes of a complex intervention to promote self-management (in particular exercise) for osteoarthritis in Primary Care settings. We argue that Nurses interpreted the intervention as underpinned by the need to educate rather than work with patients, and, drawing from Habermasian theory, we argue that expert medicalised knowledge (system) clashed with lay 'lifeworld' prerogatives in an uneven communicative arena (the consultation). In turn the advice and instructions given to patients was not always commensurate with their 'lifeworld'. Consequently patients struggled to embed exercise routines into their daily lives for reasons of unsuitable locality, sense making that 'home' was an inappropriate places to exercise, and using embodied knowledge to test the efficacy of exercise on pain. We conclude by arguing that using Habermasian theory helped to understand reasons why the trial failed to increase exercise levels. Our findings suggest that communication styles influence the outcomes of self-management interventions, reinforce the utility of theoretically informed qualitative research embedded within trials to improve conduct and outcomes, and indicate incorporating perspectives from human geography can enhance Habermas informed research and theorising.</p>

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3 Providing self-management support as a way of meeting the challenge of the predicted rise in  
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5 long term conditions (LTCs) has been a UK policy agenda for over a decade (Ong et al. 2014b)  
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7 and continues to underpin person centred NHS supported patient led care for those with LTCs  
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9 (NHS England 2014). Osteoarthritis (OA) is one such LTC which is reported to lead to discomfort  
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11 and disruption to individuals as well as costing state and society in terms of lost productivity and  
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13 healthcare costs (Arthritis Care 2012, Dziedzic et al. 2018). Supported self-management is  
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15 recommended as a way of ameliorating these problems and helping patients live with OA (NICE  
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17 2014). In response a trial intervention featuring primarily nurse-led supported self-management  
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19 in general practice settings was devised and implemented (Dziedzic et al. 2018), which we detail  
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21 further below.  
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28 The efficacy of primary care self-management interventions has been questioned due to clinical  
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30 trials demonstrating little to no effect (Sun & Guyatt 2013). A longstanding hierarchy of  
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32 evidence positions trial findings as the 'gold standard' (Barton 2000) and, in part, underpins this  
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34 debate. The philosophical standpoint of trial methodology emphasises identifying linear  
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36 causality within a closed system between intervention and outcome (Marchal et al. 2013). It is  
37  
38 recognised that embedding self-management support in everyday practice is not  
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40 straightforward because it requires change at different levels and places additional pressures on  
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42 practitioners and patients. For professionals it can conflict with external drivers, the existing  
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44 organization of care, and individual ways of working (Kennedy et al 2013, Ong et al 2014a).  
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46 Practitioners often experience difficulties reconciling their professional identities and  
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48 relinquishing responsibilities for patients (Blakeman et al. 2006, McDonald et al. 2008).  
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50 Accordingly, practitioners may worry about disrupting professional patient-relationships by  
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3 altering the ceremonial order of clinical interactions (Blakeman et al. 2010). For patients,  
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5 managing chronic illness involves managing disruptions to social relationships as well as the  
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7 demands of medical regimens (May et al 2014). Thus, a number of factors (or mechanisms) can  
8  
9 influence the delivery of supported self-management in routine practice.  
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13 Embedded qualitative studies offer the opportunity to explore the processes and mechanisms  
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15 which can explain trial intervention outcomes and efficacy (Marchal et al. 2013, Blackwood et al.  
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17 2010, Ong et al. 2014a). In this paper we report on a nested qualitative study embedded within  
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19 a trial to implement the National Institute of Health and Care Excellence (NICE) Osteoarthritis  
20  
21 (OA) guidelines in general practice. We detail factors that influenced the outcome of the trial  
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23 and use Habermasian theory to explain the findings. We now turn to discussing our use of  
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25 Habermasian thought which we later draw on to situate the findings.  
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### 32 33 **Habermas, consultations and health**

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35 Jurgen Habermas's work has been widely used to explore the dynamic of consultations and how  
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37 people engage with medical advice. Scambler has usefully highlighted the potential for using  
38  
39 Habermasian theory to critically explicate tensions and negotiations between broader societal  
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41 systems, structures, power relations, and individual integrity of action, particularly in  
42  
43 consultations and beyond consultations (Scambler 2002). Our iterative analytical approach (see  
44  
45 methods section for more detail) featured consideration of our findings and comparison to  
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47 existing literature and theories. It became apparent that Habermasian thought offered a  
48  
49 powerful explanatory nexus to account for the different domains of knowledge, interaction and  
50  
51 experience evident within a complex multi-source dataset, which in turn influenced the  
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53 outcome of the trial. First, it facilitates understanding of interactions and of issues of  
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55 compliance within consultations, second it allows incorporation of phenomenological and  
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57 interactionist elements of patient experience and knowledge, and finally it affords to situate

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3 how different logics and agendas are negotiated by actors with different social positions (and  
4 therefore power) within consultations and beyond (i.e. in life away from the consolation). We  
5 now turn to outlining previous work in this tradition.  
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10 Habermas drew on a wide range of disciplinary perspectives, and sociological theories such as  
11 Mead's theory about the interactional constitution of mind and self (Mead 1934), and Parsons'  
12 action theory (1970) that focused on those societal functions that are necessary for stable social  
13 life. Habermas' project sought to explicate the 'colonizing' consequences of modern  
14 instrumental rationality, economic imperatives and state bureaucracy (or the 'system'). He  
15 argued that the 'system' undermines ethics, personal preferences and people's everyday  
16 concerns (the 'lifeworld') because of its focus on a goal oriented form of reasoning. He was  
17 concerned with the potential for individuals to retain freedom and integrity of action via the use  
18 of 'practical' reason (which is grounded in life world values, ethics and locally situated  
19 relationships) to counteract the system's goal oriented instrumental reason. In particular,  
20 Habermas focused on the potential of 'communicative action', or the ability for agents to  
21 communicate and negotiate in order to reach understanding and agreement free of 'distorted'  
22 coercive communication shaped by 'system' goal orientated reasoning (Habermas 1984).  
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42 Habermasian theory has been used to analyse how, in some instances, health care (biomedical  
43 technical expertise constituting a 'system') can 'colonize' people's values, modes of existence,  
44 sovereignty and preferences for action [or 'lifeworld'] (Edwards 2012). This arises when  
45 healthcare professionals (HCPs) and patients fail to engage in open communication and HCPs  
46 implicitly or explicitly deploy instrumental goal oriented communication which seeks to *direct*  
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3 patients to a particular outcome (Barry et al. 2001, Mishler 1984, Scambler 2002, Greenhalgh et  
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5 al. 2006; Edwards et al. 2012).

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9 Barry and colleagues highlighted four ways in which communication was enacted in doctor-  
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11 patient consultations; 'strictly medicine' in which both patient and doctor used medicalised  
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13 language; 'lifeworld ignored', where doctors avoided or disengaged discussion of patients  
14  
15 concerns; 'lifeworld blocked' where doctors channelled efforts into framing consultations in  
16  
17 biomedical terms; and 'mutual lifeworld', or a when both parties situated the discussion within  
18  
19 the patient's agenda; (Barry et al. 2001). Similarly, Greenhalgh and colleagues (2006) noted that  
20  
21 consultations mediated by an interpreter were conducted with an implicit or explicit solution  
22  
23 focused approach promoting a medical agenda. They too have argued that open communication  
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25 would lead to better outcomes (Greenhalgh et al. 2006).

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31 Outside of the consultation room 'resistance' to the voice of biomedicine and its intrusion into  
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33 the lifeworld occurs when patients draw on experiential lay knowledge which challenges or  
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35 diverges from medical thinking (Williams & Popay 2001; Edwards 2012; Jackson & Scambler  
36  
37 2007) Germond and Cochrane contend the lifeworld (or 'healthworld' in their reformulation) is  
38  
39 embodied, experiential and socially situated, extending Habermas' focus on cognitions and  
40  
41 meanings which underpin the individual and collective values and preferences which constitute  
42  
43 the 'lifeworld' (Germond & Cochrane 2010). Finally, Bissell and colleagues (2018) consider the  
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45 democratising potential of Habermas' theory of communicative action based on open dialogue  
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47 and weighing up the validity of arguments to support egalitarian decision making.  
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## Methods

### The MOSAICS (Managing OsteoArthritis In ConsultationS) Study.

As indicated in the introduction, self-management support is a core recommendation for treatment of OA in National Institute for Health and Clinical Excellence (NICE) guidelines (National Institute for Health and Clinical Excellence 2008 (subsequently updated 2014)). OA (the most common type of arthritis) is a leading cause of disability worldwide and affects approximately 8 million people in the UK (Arthritis Care, 2012). The MOSAICS trial was devised in the wake of research which indicated that people with OA were not self-managing their condition in accordance with clinical recommendations (Jinks et al 2007), clinicians may not be advising patients on self-management in accordance with guidelines (Jinks et al. 2007, Porcheret et al. 2007), and patients desire more information and self-management support from practitioners (Mann & Goberman-Hill 2011). Full details of the trial intervention can be obtained from the study protocol (Dziedzic et al, 2014), but for context we provide a brief overview below.

The trial intervention aimed to enhance the supported self-management provided to patients and promote the uptake of the core treatments recommended in the NICE OA guidance (NICE 2008). The intervention consisted of a semi-structured GP consultation, use of an OA Guidebook and referral to a nurse-led OA clinic once the GP had diagnosed OA. The intervention centered heavily on Practice Nurses because of their potentially key role in offering supported self-management for OA (Dziedzic et al. 2014).

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3 Extensive training was delivered to intervention practices as a whole, and the GPs and practice  
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5 nurses as professional groups to implement the intervention. Nurse training focused on the  
6  
7 anatomy and disease process of OA, the core treatments for OA (information and advice,  
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9 exercise and weight loss) and discussing use of pain medications. Behaviour change theories  
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11 also underpinned the intervention and were reflected within practitioners training, with an  
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13 emphasis placed on incorporating patients concerns, existing strategies and knowledge into a  
14  
15 holistic approach (Rollnick et al. 2005, Main et al. 2010) to encourage and motivate participants  
16  
17 to undertake self-management based on their situation and needs, including muscle  
18  
19 strengthening exercises or increased levels of aerobic activity. To emphasise the importance of  
20  
21 patient experiences and perspectives, training sessions utilising incremental case studies  
22  
23 drawing from the findings of preceding qualitative research (Grime et al 2010; Morden et al  
24  
25 2011) were incorporated into the training. This was supplemented by the use of the Guidebook  
26  
27 that was developed to incorporate lay and medical knowledge, and be used as an aid for  
28  
29 practitioners and patients (Grime & Dudley 2014). This was in line with the WISE (Whole System  
30  
31 Informing Self-Management Engagement) approach which underpinned the intervention design  
32  
33 (Kennedy et al. 2007). Key to utilising the WISE approach was an emphasis on being flexible in  
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35 consultations to engage with patient concerns and agendas to appropriately utilise behaviour  
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37 change methods incorporated in the trial design. Whilst an emphasis on understanding patient's  
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39 lived experience was incorporated into the intervention and training, Habermasian theory was  
40  
41 not drawn from. Integration of theory into the study findings is discussed further in the analysis  
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43 section. Eight practices in the West Midlands and North West of England were recruited to take  
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45 part in the study: four control practices and four intervention practices. The trial did not  
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3 demonstrate any statistically significant changes in physical functioning between the control  
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5 and intervention arms. However, it did show improvements in patient enablement and uptake  
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7 in core OA treatments (Dziedzic et al. 2018) and possible reasons will be explored below.  
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### 10 11 12 13 14 ***Qualitative study design and methods*** 15

16  
17 The MOSAICS study features a collage of sub-studies using different methodological approaches  
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19 to evaluate the outcome of the trial (Dziedzic et al. 2014). Qualitative methodology was utilised  
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21 in this sub-study. In order to be able to obtain a variety of perspectives of the same phenomena  
22  
23 (Mays & Pope 2000) two types of data collection strategies were used. First, we used  
24  
25 observation methods. Observation as a qualitative research method involves the researcher  
26  
27 'going into the field' and describing and analysing what has been seen, what people do, and  
28  
29 what people say, therefore illuminating behaviour and interactions in natural settings (Walshe  
30  
31 et al 2011) and aims to identify meaning to people in that setting (Sharkey & Aggergaard Larson  
32  
33 2005). We used observation methods in two ways. First, by observing nurse-led clinics delivered  
34  
35 as part of the intervention. Second, we observed nurses' discussions of their experiences and  
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37 impressions of the intervention by attending post study feedback meetings at practices. We  
38  
39 also interviewed nurses and patients who participated in the trial. We used in-depth interviews  
40  
41 because they can yield rich sources of data on people's experiences, opinions, aspirations and  
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43 feelings (May 2002). They enable the respondent to tell their own stories in their own words  
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45 and the meaning that people attach to events can be revealed (Bowling 2001).  
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### ***Sample selection, recruitment and data collection.***

Research ethics approval for all sub-studies (including qualitative studies) comprising the trial was obtained from the local research ethics committee (ref:10/H1017/76). Data collection occurred in four stages. First, we approached all of the nurses from the intervention practices (n = 7) and asked for permission to observe and audio record their clinics. All nurses agreed to be observed, but 2 declined to have their consultation audio recorded. A suitable date to attend a whole morning or afternoon of clinics was agreed. Written consent to participate was gained from the nurse. Researchers asked patients who attended clinics if they minded having their consultation observed and audio recorded. Written consent was obtained before and after each appointment. A total of 27 patient consultations were observed by (AM and BNO). We were not able to match patient interviews with clinics because observed patients declined to be interviewed or could not be contacted.

Second, we used a convenience sample and recruited patients who had consulted at intervention practices. Consulting patients were issued baseline and 3 month 'consultation questionnaires' as part of the broader study evaluation. From questionnaires we identified patients who indicated they had seen the GP and nurse. Potential participants were sent an invitation letter and information sheet offering them the opportunity to take part in the qualitative study. A total of twenty-nine patients volunteered to take part in interviews. All patient interviews were undertaken in participants' homes by (AM). Participants provided informed written consent prior to interviews commencing and they were undertaken between May 2012 and May 2013. Patients were asked about their expectations of attending the nurse consultation(s); how they thought the visits went; what they discussed with the nurse (including

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2  
3 exploration of exercise advice); and invited to reflect on what they thought was helpful and  
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5 what they would have changed (if anything). Patients were also asked to reflect on their  
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7 response and subsequent actions in relation to the consultation advice (particularly in relation  
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9 to exercise).

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13 Third, all nurses from intervention practices (n = 7) were invited to take part in semi-structured  
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15 interviews once the intervention had been completed. At the time of the interviews there was  
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17 an increased amount of organizational pressure on primary care services and only 4 Nurses  
18  
19 participated because others could not spare the time. The Nurse interview schedule featured  
20  
21 topics such as: how they found delivering the new consultation; invited to compare the  
22  
23 intervention to routine practice; how they thought patients responded to consultations  
24  
25 (including to exercise advice); what they thought worked well in consultations; their thoughts  
26  
27 on what worked less well or could be improved (if anything). Finally, (AM and BNO) attended  
28  
29 and observed post intervention feedback meetings (n = 4) at intervention practices where  
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31 participating HCPs (GPs and nurses) experiences of and thoughts about the intervention were  
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33 discussed.  
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### 41 **Data analysis**

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44 All interviews and 21 of the 27 clinical observations were audio recorded and professionally  
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46 transcribed verbatim (two nurses did not give consent for audio recording of their  
47  
48 consultations). Field notes from clinical observations and study meetings were typed up into a  
49  
50 standard format. Thematic analysis was undertaken using some of the principles laid out by  
51  
52 Grounded Theory, in particular focusing on identifying emergent codes, developing themes and  
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3 constantly comparing data and coding (Charmaz 2006). Data analysis took place in several  
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5 stages. First, members of the research team independently read and closely coded transcripts  
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7 and field notes. Independent coding was compared and broader themes agreed. Memos were  
8  
9 used during analysis to record developments in coding and make connections between themes  
10  
11 as well as supporting comparisons with existing literature (Charmaz 2006). During analysis  
12  
13 'deviant cases' in the data were searched for to act as 'disconfirming' checks and balances  
14  
15 (Green & Thorogood 2004). As analysis progressed the utility of Habermasian thought to situate  
16  
17 findings was increasingly considered. As a final step the data was deductively recoded using the  
18  
19 Habermasian concepts to allow clear comparison to the open coding and ensure that there was  
20  
21 strong conceptual and data 'fit' (Macfarlane and O'Reilly-de Brun, 2012) or alternatively, enough  
22  
23 scope to credibly extend or expand theory (for example, we discuss space and place in the  
24  
25 context of the lifeworld). Another example of where Habermasian thought does not directly  
26  
27 explain findings relates to the Nurses' interpretation of the intervention's purpose and 'fit' with  
28  
29 existing work (Normalisation Process theory is more relevant), however, their interpretation  
30  
31 informs how they enacted and engaged with patients in the consultation (see also results  
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33 section).  
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## 46 **Results**

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49 We begin by presenting data from observations of study meetings and post-intervention  
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51 interviews which reveal nurses' interpretations of the intervention, their role within it and how  
52  
53 well they thought it went. We then turn to observational data from consultations and describe  
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3 how nurses enacted discussions about exercise. Finally, we report data from patient interviews  
4  
5 regarding their responses to exercise advice and attempts to fit exercise into their 'lifeworld'.  
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## 11 **Nurse interviews and post study meeting observations**

### 12 **'Fit' with existing practice**

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18 Our analysis revealed that the practice nurses involved in delivering the trial interpreted the  
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20 intervention purpose, aligned it within their existing frame of reference, their usual working  
21  
22 practices, and rationalised what the core deliverables would be, indicating that nurses were  
23  
24 attempting to 'normalise' the intervention within their immediate working context (Macfarlane  
25  
26 & O'Reilly-de Brun, 2012). Within this framework participants considered that the intervention  
27  
28 significantly focused on promoting lifestyle management to patients in order to help them  
29  
30 manage pain:  
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36 *It really does make you think about promoting lifestyle, it does, and a positive effect that pain*  
37  
38 *control have (Nurse 3)*  
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42 Importantly, an emphasis on discussing lifestyle and imparting the correct information to  
43  
44 patients was seen to 'fit' well with normal routine practice. In particular, it was interpreted as  
45  
46 an 'extension' of what nurses did in other chronic condition clinics:  
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50 *The practice nurse linked what she was taught in the MOSAICS training to what she has to*  
51  
52 *deliver in other chronic disease clinics, just with more of an OA specific focus (**Practice 4 meeting***  
53  
54 *observation 13/11/13).*  
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3 Thus, nurses' interpretation of the intervention was about promoting lifestyle management  
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5 which was deemed to be easily situated alongside their usual practice. Accordingly, nurses saw  
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7 their role as being one to "motivate" or "educate" patients:  
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11 *One lady had stopped going swimming because she thought it was making the joints worse, and*  
12  
13 *as soon as I, sort of, explained, 'No,' you know, 'that exercise is actually helping'... They were a*  
14  
15 *bit fearful that they were causing harm, you know, and exercise was the one thing, I suppose, I*  
16  
17 *did concentrate on a lot with them, you know (Nurse 1)*  
18  
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20  
21 As this interview extract demonstrates, challenging patient perceptions of harm and correcting  
22  
23 patients' fears and worries was seen as central to the nurse's role in the intervention and  
24  
25 important in encouraging people to maintain or take up exercise. Seemingly little attempt was  
26  
27 made to understand the social construction of patients' perceptions. Even though nurses  
28  
29 received training to take this into account the structure of the consultation was shaped by the  
30  
31 OA guidelines. Thus, for those nurses whose consultation style was more didactic they could  
32  
33 more easily stay within their preferred style. The nurses who were more open to change, and/or  
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35 patient-centred would adopt a dialogue-based style using the OA guidelines as guidelines rather  
36  
37 than as rules.  
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48 **'Good' patients versus 'bad' non-motivated patients**  
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3 A key theme that emerged from interviews and observations with Nurses centred on the  
4 depiction of patients who were either compliant and a 'success story' or deemed recalcitrant,  
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7  
8 uncooperative or beyond assistance. The latter patients were subsequently disowned.  
9

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11 First, nurses "good patients", or their "best patients", who had been receptive to the messages  
12  
13 that were conveyed. These patients were perceived to have made changes and benefited from  
14  
15  
16 the intervention:  
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18  
19 *So, he was my best patient, because he came with his wife, and they were both encouraged by*  
20  
21 *knowing if he lost weight, increased his exercise, then the benefits would help him (Nurse 4).*  
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24  
25 Notably nurses took 'ownership' of such patients and emphasized how they were 'their' patient  
26  
27 who reflected successful practice. The above example additionally illustrated that involving  
28  
29 partners helped to reinforce the health messages.  
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33 Conversely Nurses described patients who were not 'success' stories. Observations revealed  
34  
35 that they described characters who were problematic and non-adherent to advice:  
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39 *...but they appear to have forgotten most of what the PN had told them, and when they felt*  
40  
41 *'well' have 'relapsed' into putting on weight or not doing exercise. The nurse sounded somewhat*  
42  
43 *judgemental about patients not 'adhering' (Practice 1 meeting observation 09/10/2013).*  
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47 Accordingly, nurses framed such patients as needing additional 'education' and as difficult to  
48  
49 'motivate' or take ownership of:  
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53 *But patients can have the same attitude whether they're diabetic or whether they've got OA. It's*  
54  
55 *to try and, you know, motivate them rather than tell them, 'Yes, you will do this, because this*  
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3 *and this will happen,' because it doesn't always work with some patients. You have to motivate*  
4 *them that it was their idea and for them to work with you. That's the thing, you know. They have*  
5 *to work with us and we work with them (Nurse 3)*  
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11 Nurses depicted themselves as patient-centered and with the intention to collaborate with  
12 patients, demonstrating some appreciation of the lifeworld by stating that patients needed to  
13 feel that it 'was their idea'. However, this was not carried through in their overall perceptions  
14 where they positioned 'failure' as the responsibility of the patient who had not 'worked' with  
15 them. Nurses distanced themselves from such patients and critiqued them because they  
16 consulted "only because they wanted an operation and they were blinkered and wouldn't  
17 listen". Thus, 'success' and 'failure' were defined as the fault of individual patients' intrinsic  
18 motivations and dispositions (Kennedy et al. 2013). We now detail how discussions about  
19 exercise were enacted in consultations.  
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### 41 ***Structuring the consultation around exercise***

42 Our analysis developed a theme which describes the process of the consultation. This theme  
43 centres on the tendency for practice nurses to a) utilise a particular structure during the  
44 consultation and b) focus discussions on exercise and lifestyle.  
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48 Observations revealed that nurses heavily focused on promoting exercise during clinics, in  
49 tandem with explaining why exercise was beneficial. This was particularly evident during first  
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3 encounters with patients. Nurses followed a set format which arguably restricted mutual  
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5 discussion and recognition of the patient's agenda:  
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9 *The nurse appeared to use a fairly rigid structure in the consultation... the approach she used*  
10  
11 *shifted between quite a didactic one to being open to the patient's concerns. However, she*  
12  
13 *always focused upon the core NICE guidelines and promoting weight loss and exercise with the*  
14  
15 *patient. Very little exploration of the patient's context was engaged in (**notes from clinical***  
16  
17 ***observation 18/06/2012**)*  
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22 This note points to the inherent tension in the intervention between asking the nurses to follow  
23  
24 NICE guidelines (system world) while at the same time being sensitive to patients' perspectives  
25  
26 (life world). In the training emphasis was placed on flexibility in being responsive to the patient  
27  
28 which is unusual in a trial where interventions tend to be tightly protocolised. In other words,  
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30 the nurses had a degree of autonomy as to how they engaged with patients and thus they could  
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32 either experiment with a patient-centred consultation or revert to their own preferred style.  
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37 Nurses usually asked patients whether the GP had discussed their understanding of and  
38  
39 concerns about pain. They offered an explanation about the disease process of OA before  
40  
41 explaining why patients needed to exercise, discussing how an osteoarthritic joint needs  
42  
43 strengthening via exercise in order to 'repair' itself:  
44  
45

46  
47  
48 *The nurse then brings in the importance of exercise and strengthening the ligaments and*  
49  
50 *muscles to the patient. I.e. the muscles and ligaments support the knee joint, taking the strain*  
51  
52 *which helps it repair itself. The patient has been generally agreeing with this explanation, saying*  
53  
54 *'Okay'. (**Clinical observation notes 18/06/2012**)*  
55  
56

57  
58 15  
59



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5  
6 Consultations were often guided further towards the topic of exercise by the nurse asking the  
7  
8 patient how active they are, or if they engage in a particular form of activity:  
9

10  
11  
12 *Nurse: Yes and what about activity, how active do you...how mobile are you, what you do in a*  
13  
14 *day?*  
15

16  
17  
18 *Patient: Well I have a dog that I take out twice, two or three miles I walk him. The thing is I have*  
19  
20 *to watch myself when I take 'im through the woods obviously, the prospect of some of the*  
21  
22 *ground being damp and slipping, you know you could give yourself a right...*  
23

24  
25  
26 *Nurse: Tripping up as well?*  
27

28  
29 *Patient: And then there's the...basically he's quite good [whistles] and then he'll come [laughing].*  
30

31  
32  
33 *Nurse: So he's quite well behaved?*  
34

35  
36 *Patient: Yeah.*  
37

38  
39 *Nurse: Do you do the garden or anything like that? Do you do anything else?*  
40

41  
42 *Patient: Only a little bit of digging, that's all. My wife does the gardening, she's the gardener.*  
43  
44

45  
46 This was a common approach by the nurses, delving into the patient's 'lifeworld' with the  
47  
48 purpose of framing the discussion around exercise and activity. Of note, the patient raised  
49  
50 concerns about safety (slipping) which were not addressed; instead the nurse directed the  
51  
52 conversation back to exercise and activity.  
53  
54

### ***Maintaining the exercise agenda***

In tandem with the previous theme, analysis revealed that as well as consultations containing a particular structure and initial emphasis, content was habitually steered towards a continual focus on an 'exercise agenda'. Exploring patients' existing activity was an entry route from which the nurses could begin to promote the benefits of exercise. They either promulgated the advantage of exercise for joint pain, or would reiterate previous explanations, frequently not engaging with patients' concerns that were seemingly considered tangential to the purpose of the consultation:

*The patient attempts to initiate another discussion about eating fruit and OA pain. The patient leads on this conversation and the nurse listens smiling, but does not deal with the patient's queries. Instead she changes to topic of the consultation to exercise again, reiterating that doing exercise does not necessarily make joint pain worse (notes from clinical observation 01/08/2012)*

Often patients would respond by either 'proving' they were active people, outlining that they struggled because of pain, or highlighting 'real world' reasons (finances, time issues) as to why they could not engage with exercise. Nurses responded by offering encouragement to 'good patients' who were thought to agree with their agenda. If patients questioned the rationale for doing exercise or described difficulties, the nurses would often reiterate the reasons for doing exercise or try to 'problem solve':

1  
2  
3 *Nurse: Do you do anything like swimming or anything like that?*  
4  
5

6 *Patient: I would love to do swimming but I've got warts all over my torso and I've been to the*  
7 *nurse several times over the years to have them sort of removed round the back where a*  
8 *swimming costume would be, I just feel very self conscious about it...*  
9  
10  
11  
12

13  
14 *Nurse: You know you can get...the Australian surfers use them and I must admit I do when it's*  
15 *really hot, it's got like a little polo neck there and it's like a t-shirt and it's pretty close fitting and*  
16 *it's all stretchy lycra type stuff and you can get them all different colours. They were selling*  
17 *them in TK Max at one time, if you look in the kids' section, the bigger kids, they're really*  
18 *stretchy, it's like a t-shirt so that would cover up quite a bit and that sort of help like that...and*  
19 *they're specifically for going in water.*  
20  
21  
22  
23  
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33 The example highlights how the nurse engaged with the patient's worries about finding a  
34 suitable swimming costume, but did not discuss what alternative activities may be enjoyed or  
35 what may suit the patient. Thus, nurses tended to prioritize or repeat the OA guideline agenda,  
36 or try to solve patients' problems rather than enter into a dialogue about the patient's thinking  
37 and what might be an acceptable course of action.  
38  
39  
40  
41  
42  
43  
44  
45

46 Follow-up consultations featured a pattern of nurses checking up on what patients had been  
47 doing and exploring any problems that they had encountered. The agenda of promoting  
48 exercise and its benefits remained at the forefront of these consultations. Patients who  
49 demonstrated that they wanted to engage with exercise were praised for doing the 'correct  
50  
51  
52  
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1  
2  
3 things'. Where patients reported problems, nurses reminded them why it was important to  
4  
5 exercise and their concerns were not discussed explicitly or negotiated, with nurses returning to  
6  
7 a didactic or problem solving approach.  
8  
9

10  
11 In summary, nurses led consultations, focused on exercise, and tried to ensure that patients  
12  
13 were compliant with the treatments emphasised by the NICE OA guidelines, which was  
14  
15 ultimately what they were trained to do. Consequently, nurses were more pre-disposed to  
16  
17 following a model of communication which limited engagement in patients' 'lifeworld' in a  
18  
19 mutually beneficial way. Thus, whilst nurses may have operated a mode of communication that  
20  
21 did not necessarily 'block' or 'ignore' the lifeworld (Barry et al. 2001), interactions were  
22  
23 conducted with an underlying agenda which arguably did not serve to fully access the person's  
24  
25 agenda and facilitate open communication (Greenhalgh et al. 2006). This communication style  
26  
27 did not necessarily prevent patients from engaging with the advice provided. We turn to patient  
28  
29 interview data to explore what happened after receiving the intervention.  
30  
31  
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### 36 **Reactions to being advised to exercise: situating advice against interests, concerns, and needs**

37  
38  
39  
40 Analysis of patient interviews unearthed a theme which indicated that patients responded to  
41  
42 exercise and lifestyle advice in a number of ways, but which were underpinned by a common  
43  
44 theme, namely how they related it to their existing lifestyle, experiences, concerns or personal  
45  
46 agenda (or the 'lifeworld').  
47  
48  
49

50  
51 In the interviews a number of participants (n = 4) explained that being given exercise was not  
52  
53 uncharted territory because "a lot of it, I already knew", especially if they were recreational  
54  
55 walkers or cyclists. Thus, they interpreted the advice as useful because it reinforced existing  
56  
57

1  
2  
3 knowledge, but not novel. In the main, participants were receptive to the rationale for doing  
4  
5 exercises, because they integrated well with a broader concern or priority in terms of  
6  
7 maintenance of health and ability to avoid the disruptive qualities of ill health, well exemplified  
8  
9  
10 by this quote:

11  
12  
13 *“And I do think that the explanation about keeping the certain muscles, you know, above the*  
14  
15 *knee and behind the knee, and keeping those strong, actually helps, you know, the knee, and*  
16  
17 *keeps that mobility. And, obviously, from my point of view, I want to keep my mobility for as*  
18  
19 *long as possible. I’ve had both knees cleaned out – one twice and one once – and I’d prefer not*  
20  
21 *to have an operation on them for, you know, the foreseeable future. So it was helpful to have*  
22  
23 *that information from the nurse (Participant 15)”.*

24  
25  
26  
27  
28  
29 In short, patients appreciated being given a technical explanation which underpinned the  
30  
31 reason for undertaking exercise and allayed future fears of disability. This participant, in  
32  
33 common with others, compared the actions of the nurse favourably to previous experiences of  
34  
35 visiting physiotherapists for musculoskeletal complaints:  
36  
37

38  
39  
40 *“I think that the, you know, the fact that she doesn’t just give you the piece of paper with it on*  
41  
42 *saying do these. She explained them properly and the benefits of doing them. That’s what I get*  
43  
44 *out of them so you know I thought that was pretty good (Participant 4)”.*

45  
46  
47  
48 Participants valued that the nurse actively demonstrated the exercises because it helped to  
49  
50 clarify what they needed to do and how, coupled with explanations about their current and  
51  
52 future benefit. In other words, nurse consultations influenced how patients *thought* about knee  
53  
54 OA and offered some reassurance about future prospects.  
55  
56

1  
2  
3 For some participants the series of visits to see the nurse acted as a motivator and without the  
4 nurse's engagement they would not always have continued using strengthening exercises  
5  
6 beyond the first week. As a result participants suggested they should routinely use exercises, or  
7  
8 as another person put it, used them *"religiously three times a day, just like she said"*. Whilst  
9  
10 participants were cognizant about the reasons for exercising, they did not always maintain  
11  
12 exercise as part of their daily lives and routines. Patients who had difficulties (discussed below)  
13  
14 suggested that nurses had a particular agenda, intimating that they felt little room was offered  
15  
16 for discussion or exploration of alternatives that represented a better fit with their own views:  
17  
18 *"she wasn't talking off a script, but it wasn't too much of an interactive discussion"* and *"she just*  
19  
20 *kept on about these exercises"* (Participant 23).  
21  
22  
23  
24  
25  
26  
27

28 Continuation with muscle strengthening or aerobic exercise was influenced by either contextual  
29  
30 embodied knowledge or availability of appropriate 'places' within which to exercise. We now  
31  
32 discuss this in more detail.  
33  
34  
35  
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39

### 40 ***Effectiveness of exercise: embodied experiential knowledge***

41  
42  
43 Analysis revealed an important factor in determining the effectiveness of exercise(s) was  
44  
45 whether some form of 'proof' existed in terms of feeling less pain or other perceived benefit.  
46  
47 Closely related was the ease of being able to take up exercise, often situated against living with  
48  
49 the symptoms of other health conditions.  
50  
51  
52  
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2  
3 For some participants doing muscle strengthening exercise rested upon whether they were  
4  
5 found to be beneficial after a period of testing and observation:  
6  
7

8  
9 *“The first few times I said it was very, very painful, and was really uncomfortable, but the pain in*  
10  
11 *my knee, I can get comfortable again now, so I'm hoping that that's because of the exercises. So*  
12  
13 *I keep doing them. And keep trying them (Participant 14)”.*  
14  
15

16  
17 The above participant demonstrates that decisions about effectiveness were informed by a  
18  
19 period of observation whether muscle strengthening exercises had reduced pain. Other ‘visible’  
20  
21 evidence of success included reduction in swelling or inflammation or improvement in function.  
22  
23

24  
25 Conversely, some participants contested the utility of doing exercise by suggesting it increased  
26  
27 pain, again drawing on experiential evidence to make the case:  
28  
29

30  
31 *“I tried riding a push bike and I can't, I mean obviously I can ride it but once I come to getting up*  
32  
33 *a hill and that I can't put the pressure on me knees. And any distance walking I can walk for so*  
34  
35 *long but after that I can't, I've got to stop, I've got to rest me knees (Participant 6)”.*  
36  
37

38  
39 For this man, the level of pain experienced when cycling or walking made him feel like stopping  
40  
41 and resting, thus, he decided that subjecting himself to self-inflicted suffering was not worth  
42  
43 persevering.  
44  
45

46  
47 This next person subtly suggested that the prescribed exercise was ineffectual as it had not  
48  
49 made any *immediate* noticeable improvements to her condition:  
50  
51  
52  
53  
54  
55  
56  
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1  
2  
3 *“Well I am doing it, I can’t say that I’ve noticed a difference yet, but then again, we’re just shy of*  
4 *two weeks of seeing her so, maybe it’s not had time to work yet. It hasn’t made it worse, but I*  
5 *can say that it’s made it better either (Participant 12)”.*  
6  
7  
8  
9

10  
11 The lack of definitive experiential evidence indicating ‘difference’ in pain or function levels left  
12  
13 her unconvinced that she could derive any benefits from the exercises.  
14  
15

16  
17 A number of participants (n = 5) who suggested that aerobic exercises might be difficult and  
18  
19 unpleasant were influenced by the presence of co-existing health conditions. This man suffered  
20  
21 from respiratory problems and said that walking could, at times, be problematic:  
22  
23

24  
25 *“I have to stop and get my breath as well because it seems like I get out of breath as well and it’s*  
26 *ever so awkward, I can’t really explain it. I’ve got my walking stick, I’m getting out of breath and*  
27 *I’m thinking I’m only 48, it’s ridiculous (Participant 13)”.*  
28  
29  
30  
31

32  
33 Because of difficulties arising from his chest complaint, he did not prioritize doing additional  
34  
35 exercise for knee pain because of the additional complications and discomfort. Again, embodied  
36  
37 knowledge played a role in exercise uptake. This was further influenced by previous advice  
38  
39 received from HCPS that had been incorporated into the life-world and in turn shaped the  
40  
41 meaning and relative importance of other morbidities (Cheraghi-Sohi et al. 2013).  
42  
43  
44  
45

46  
47 In summary, aerobic and muscle strengthening exercises which participants thought were  
48  
49 difficult (often pain conferring), hard to do, or yielded little tangible effect were off-putting and  
50  
51 discontinued. In our study, a combination of ‘lifeworld’ embodied experiential knowledge  
52  
53 (Germond & Cochrane, 2010) and advice from clinicians shaped participants’ engagement with  
54  
55  
56  
57



1  
2  
3 exercise. In some instances OA was balanced against their experiences and sense making about  
4  
5 other health problems, so patients restricted aerobic exercises to what they felt was  
6  
7 manageable and would not 'threaten' their overall health.  
8  
9

### 10 11 **Incorporating exercises into the 'places' of the lifeworld** 12

13  
14 A co-existing theme emerged during analysis of patient interviews which details how the social  
15  
16 and geographical position of individuals was a central factor whether and how they could  
17  
18 embed exercise into their 'lifeworld'. This was partly an issue of resource, but more strikingly an  
19  
20 issue of the meaning of spaces and place.  
21  
22

23  
24 One example is how participants' engagement with exercise was influenced by their  
25  
26 interpretation as to how it could fit into existing routines and whether appropriate places could  
27  
28 be found to exercise:  
29  
30

31  
32  
33 *"I work on the third floor of the building, I don't like lifts so I am always up and down the stairs;*  
34  
35 *been catching the bus recently so it's a 10, 12 minute walk into the village and back and then it's*  
36  
37 *just really, housework and gardening (Participant 7)".*  
38  
39

40  
41 This woman considered herself active due to the nature of where she worked and her existing  
42  
43 pursuits. Furthermore, she also assessed her existing routine and modified it by incorporating  
44  
45 additional activity into it by catching the bus to work. Thus, she did not experience a  
46  
47 contradiction between her life world and medical advice and as a result she could adapt her  
48  
49 everyday routine without too much difficulty and embed the prescribed advice.  
50  
51  
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2  
3 Exercise as an isolated and individual experience, on the surface, could be interpreted to not  
4  
5 'motivate' people. Notably, participants discussed the role of appropriate venues for doing  
6  
7 exercise. As the following excerpt highlights, participants did not position the 'home' (a part of  
8  
9 the lifeworld often seen as a place of leisure, relaxation, safety and retreat (Imrie 2004)) as an  
10  
11 appropriate place to undertake exercise:  
12  
13

14  
15  
16 *Why I don't do the exercises? I don't know. It's just – I think you've got to get into a routine of*  
17  
18 *doing exercise, haven't you? I go to a health spa; a few of us go to a health spa every so often.*  
19  
20 *So I always do exercises there. It's just doing them on your own in the house, which I know*  
21  
22 *sounds silly, but it's just a bit boring (Participant 9).*  
23  
24  
25

26  
27 Being able to access an appropriate 'place' or venue that had meaning as an arena within which  
28  
29 to exercise and socialize was important and this meaning giving as either appropriate or  
30  
31 inappropriate for exercise or activity in turn influenced the activities engaged in and health  
32  
33 benefits obtained (Krenichyn 2006, Doughty 2013, Milligan et al. 2013).  
34  
35  
36

37  
38 A lack of facilities to exercise (including group classes which would provide an appropriate social  
39  
40 space) was highlighted. Finding group classes was not necessarily easy, with participants citing  
41  
42 the high cost of using gyms or stating that they would not belong because *"it's hard to find*  
43  
44 *something where there's other people of a similar age"*. Other participants felt that they would  
45  
46 feel awkward due to their weight and not meeting a 'fit and healthy' body image they  
47  
48 associated with gyms:  
49  
50

51  
52  
53 *"I think they'd laugh at me if I went to a gym now, too embarrassed... I used to go to gyms; it's*  
54  
55 *probably 'cause I was looking at people who were overweight when I wasn't and my comments*  
56  
57

1  
2  
3 *around that, which were not very nice. And I could imagine the same thing being said about me*  
4  
5 *(Participant 17)."*  
6  
7

8  
9 The presence or absence of venues or 'places' that were meaningful, comfortable and  
10  
11 appropriate for exercise was an important facilitator or inhibitory factor for participants when  
12  
13 trying to undertake more exercise(s). In Habermasian terms participants resisted the  
14  
15 encroachment of medical 'system' imperatives (exercise) into certain places of the 'lifeworld'  
16  
17 (the home) and embedded the advice by using 'suitable' places where possible.  
18  
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## 25 **Discussion**

26  
27  
28 We have described a nested qualitative study within a trial that examined if, how and why  
29  
30 patients engaged with an intervention to test a method of increasing patient self-management  
31  
32 of osteoarthritis in line with the relevant NICE guidelines (Dziedzic et al. 2018). The findings  
33  
34 draw from data gathered via a combination of observations and interviews with practice nurses  
35  
36 and patients.  
37  
38  
39  
40

41 Data analysis revealed that Nurses thought that the intervention fitted with existing ways of  
42  
43 working and the interpretation of their role (Macfarlane & O'Reilly Bruin, 2012) which was to  
44  
45 educate and motivate in a patient centered manner. They depicted 'success' and 'failure' to be  
46  
47 related to patients' willingness or motivation to work with them and their agenda, thus blame  
48  
49 was attached to patients for lacking the necessary intrinsic dispositions or personal qualities  
50  
51 (Kennedy et al. 2013). Observations of clinical consultations revealed a pattern where nurses  
52  
53  
54  
55  
56  
57

1  
2  
3 discussed exercise in a way which situated a biomedicalised 'system' (Barry et al. 2001,  
4 Greenhalgh et al. 2006) agenda, often drawing from the 'lifeworld' (or patient experiences) to  
5 ensure that a means-ends goal was achieved via problem solving or turning the focus of the  
6 clinics back to exercise, thus ensuring compliance to a biomedicalised model (Zola 1972). The  
7 intervention was unusual for a trial in that there was a degree of flexibility in consultations to  
8 ensure patient centeredness. This may have caused some tensions which the nurses had to  
9 decide how best to resolve. This arguably reflects previous findings that nurses attempt to  
10 remain 'in charge' in order to maintain their professional role and purpose and not feel  
11 undermined (McDonald et al. 2008).

12  
13 Interviews with patients indicated that attending nurse clinics had ameliorated some commonly  
14 reported perceptions that exercise would further damage the joint (Holden et al. 2012, Hendry  
15 et al. 2006) and encouraged people to try to exercise. In other words, the explanation and  
16 potential of exercise made sense to patients. Whilst patients understood the benefits and logic  
17 behind exercise(s) and said that they had engaged with them, they did not necessarily continue  
18 with them, consistent with preceding research that patient compliance is influenced by  
19 experience and meaning making and 'reasoned' (Conrad 1985, Donovan & Blake 1992; Zola  
20 1982). Patients made short term assessments of the efficacy of exercise(s) in terms of pain  
21 reduction and improvements in function. This was aided by the perceived ease in which they  
22 could do exercises (both strengthening and aerobic), but patients reported that they found it  
23 difficult to discuss with the nurses if they encountered any problems. Conversely other patients  
24 cited experiential evidence of no improvements to pain or function, said that exercises caused  
25 more pain (Holden et al. 2012), or that exercises were physically difficult to complete. Thus, lay

1  
2  
3 experiential knowledge played a role in if and how patients felt willing or able to incorporate  
4  
5 exercise into their lives, similar to previous findings that embodied knowledge is an important  
6  
7 resource which influences self-management activities (Pickard & Rogers 2012). This was  
8  
9 sometimes further compounded by the presence of complex multi-morbidities which can be the  
10  
11 focus of patients' attention dependent upon (temporally shifting) fluctuations of symptoms and  
12  
13 their impact (Cheraghi-Sohi et al. 2013). Notably, engaging in exercise was influenced by the  
14  
15 meanings that people placed upon particular environments in relation to their appropriateness  
16  
17 as a 'place' to exercise (Krenichyn 2006, Doughty 2013,, Milligan et al. 2013), which contrasted  
18  
19 with meanings associated with the 'home' (Imrie 2004), arguably a place not connected to  
20  
21 exercise because it relates to refuge, safety and relaxation. Participants preferred participating  
22  
23 in group exercise classes or using venues which provided an element of social interaction, which  
24  
25 was beneficial because it matched their personal priorities or dispositions (Milligan et al. 2013).  
26  
27 Conversely, participation could be inhibited by the lack of affordable and welcoming places to  
28  
29 exercise where people felt they 'fitted in' (Morden et al. 2011, Ali et al. 2012).  
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38 To recapitulate, the trial demonstrated no changes in physical functioning between control and  
39  
40 intervention whilst making improvements in patient enablement and uptake in core OA  
41  
42 treatments (Dziedzic et al. 2018). The findings from the qualitative study offer insights into why,  
43  
44 despite the trial demonstrating an initial uptake in core treatments, no broader change in  
45  
46 physical function because, notwithstanding those who reported benefits, of the range of  
47  
48 challenges in adopting maintaining or exercise long term within the patient's sense making  
49  
50 domain. Other factors may have played a role, not least the length of the intervention which  
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3 may not have provided patients with ongoing support or motivation. However, a longer  
4  
5 intervention dose would also benefit from taking account of this study's findings.  
6  
7

8  
9 Previous research suggests that failing to openly engage with the 'lifeworld' can be detrimental  
10  
11 to consultation outcomes (Greenhalgh et al. 2006, Barry et al. 2001, Mishler 2005). Our findings  
12  
13 indicate this was not necessarily the case. One way of explaining this dissonance is that the  
14  
15 Habermasian perspective of society depicts that negative things stem from the 'system' and  
16  
17 good things arise from the 'lifeworld' (How 2003). In contrast, Edwards (2012) notes 'that  
18  
19 'system' and 'lifeworld' are intermeshed in ways more complex than Habermas suggests' (p43)  
20  
21 because patients seek to make gains from medicine, which could for example, be receiving a  
22  
23 diagnosis or treating complaints (Ballard & Elston 2005). Therefore, patients arguably attended  
24  
25 nurse clinics because they were seeking a way to ameliorate the impact of pain (discussed as  
26  
27 the reason for consulting in interviews, but not reported above) and they followed the nurses'  
28  
29 advice because they obtained a clear sense of the potential benefits of exercise.  
30  
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36 Habermasian literature argues that when patients encounter the 'system' voice of medicine, in  
37  
38 some cases, they engage in forms of 'resistance' when it encroaches into the 'lifeworld' and fails  
39  
40 to resonate with values, preferences and existing ways of living and knowing (Williams & Popay  
41  
42 2001, Jackson & Scambler 2007). Our findings simultaneously differ from and corroborate this  
43  
44 corpus of work. Some patients *appropriated* medicalised exercise regimes into their existing  
45  
46 lives, be that by incorporating exercise into daily routines, by ensuring it was effective and  
47  
48 therefore worthwhile, or by finding appropriate places and spaces to exercise. Other patients  
49  
50 *resisted* the voice of medicine: first, because they had no experiential evidence of effectiveness  
51  
52 or were worried about the interaction with co-morbidities; second, because they lacked access  
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3 to venues that felt meaningful and comfortable as places to exercise. In other words they placed  
4  
5 a boundary around the meaning of places central to their 'lifeworld' and lived experiential  
6  
7 knowledge and meanings attached to 'place' influence if, how and why people take up exercise  
8  
9 with joint pain. Our findings suggest that incorporating aspects of human geography by how  
10  
11 people engage with the phenomenological embodied spatial elements of the life world can  
12  
13 enhance Habermasian theorising, something not always explicitly incorporated into this lineage  
14  
15 of thought and analysis. Patients' accounts suggest that they did (initially at least) try exercise(s)  
16  
17 despite closed consultations, which contradicts Habermasian literature (Greenhalgh et al. 2006,  
18  
19 Barry et al. 2001, Mishler 2005) for reasons outlined above. Patients may have benefitted from  
20  
21 a more open communication style, especially in follow up consultations (which focused on  
22  
23 reiterating messages about exercise). For example, research has found that it is possible to help  
24  
25 patients transcend fears of pain relating to exercise (Hurley et al. 2010) and we suggest that  
26  
27 *how* topics are discussed over a series of consultations plays an important role. Positioning  
28  
29 patients as motivated or unmotivated as a result of intrinsic personal dispositions can be  
30  
31 problematic, because focusing on individual behaviours often omits the contextual factors  
32  
33 which underpin 'motivation' (Ong et al. 2014b). A more open and detailed discussion is  
34  
35 arguably beneficial for patients (Barry et al. 2001), because it can uncover the complexities of  
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37 their embodied experiences and sense making (Germond & Cochrane 2010), what constitutes  
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39 appropriate healthful actions, and when and where they are deemed acceptable. Such an  
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41 approach would arguably support continued uptake of exercise and support continued  
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43 enablement as per the trial findings (Dziedzic et al. 2018). Recent debate considers the  
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45 importance of whether incorporating lay experiential (or 'lifeworld') knowledge can improve the  
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3 development and conduct of complex interventions and clinical practice (Greenhalgh 2014;  
4 Percival et al. 2017). The findings from this study, particularly relating to the challenges and  
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6 tensions inherent in communication and negotiation of different agendas, reiterate that paying  
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8 greater attention to how patient experience is responded to during an intervention as well as  
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10 during its design stage could influence positive outcomes (or otherwise).  
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## 19 **Conclusion**

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22 This article demonstrates the importance of nesting qualitative studies within trials and drawing  
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24 on social theory to contextualise and explain findings. Further, the study also elucidates the  
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26 importance of paying attention to communication styles and patient agendas in consultations.  
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28 In this case trial outcomes may have been improved by greater emphasis on consultation style  
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30 and being responsive to patient needs (beyond what was already incorporated). Finally the  
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32 study also offers potential for developing the scope of Habermasian theory applied to health by  
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34 more explicitly incorporating phenomenological approaches human geography (space and  
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36 place) into analysis.  
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