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Link to published version (if available):
10.1177/1049732314529663

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### Older People's Perceptions of Remaining Physically Active While Living With Chronic Pain

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<th>Qualitative Health Research</th>
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<td>Manuscript ID:</td>
<td>QHR-2012-0547.R3</td>
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<tr>
<td>Manuscript Type:</td>
<td>Research Article</td>
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<tr>
<td>Keywords:</td>
<td>pain, chronic, aging, arthritis, exercise / physical activity, older people, musculoskeletal disorders, qualitative analysis</td>
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Older People’s Perceptions of Remaining Physically Active and Living With Chronic Pain

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Abstract

Active aging, using the conventional sense of activity, might be difficult to achieve for people with chronic musculoskeletal pain (CMP). Given that a large number of older people will develop CMP, it is important to consider a broader conceptualization of activity and how this might fit into discourses of aging. We report findings from a study of the experiences of chronic pain in the daily life of 60 older people. In this article we focus on the role and meanings of physical activity for those older people. We develop a typology of styles—deliberate, strategic and natural—to show how people approached physical activity and how its meaning differed for individuals in different contexts and across their life course. We suggest a more balanced perspective of aging in which “slowing down” might also be a desirable outcome for some older people with CMP, but is not incompatible with well-being.

Keywords: aging; arthritis; exercise / physical activity, older people; musculoskeletal disorders; pain, chronic; qualitative analysis
There has been a broad shift in institutional, organizational, and media discourses around aging in recent years. Aging is no longer seen as a process of “disengagement” (Cumming & Henry, 1961) from society, but as a much more complex, lifelong, and multifaceted process based on the roles or activities in which we engage. In “activity theory” (Havighurst, Neugarten, & Tobin, 1968) for example, the inseparability of the physical and social was established from its inception (Lemon, Bengtson, & Peterson, 1972; Longino & Kart, 1982). There was also a greater recognition that people in old age persist with accustomed roles and activities because they continue to have the same needs and values (Moody, 2010). Being physically active in later life potentially bestows the kinds of social benefits associated with team sports and leisure activities, and more recent theories of aging (for example, “healthy aging,” “successful aging,” and “active aging”) have also tended to emphasize physical activity.

By contrast, studies on pain and physical activity have tended to focus on younger and healthier populations, and generalization of their findings to older populations is inappropriate (Schutzer & Graves, 2004). Research in this area has also tended to focus more on the social elements and benefits of activity and formal exercise, rather than on subjective aspects (e.g., what people consider is exercise for them) and on mental rather than physical well-being. To an extent, this results in less consideration of how older people with pain, such as chronic musculoskeletal pain (CMP), fit into discourses of aging, because the meaning of activity changes across the life course.

For example, Rowe and Kahn’s (1997, p. 433) notion of “successful aging” is predominantly concerned with “a low probability of disease and disease-related disability, high cognitive and physical functional capacity, and active engagement with life.” This model of success suggests that any other kind of aging is by default unsuccessful. It makes no concessions
for subjective perceptions of what defines “success” on a personal level, or of what kind of “interpersonal relations,” “activity,” and “productivity” is of value to the individual whose functional capacity declines. The model is criticized for being unrealistic, because a disease-free older age is unlikely for most people and its assertions fail to account for lay perceptions of successful aging that incorporate more varied aspects such as learning, humor, spirituality, a sense of purpose, and social relationships (Bowling & Dieppe, 2005).

Older adults who wish to remain physically active despite changes in their functional ability utilize self-management processes to help them to adapt. Selective Optimization and Compensation Theory (SOC: Baltes & Baltes, 1990) provides one way to understand this. SOC suggests that individuals select goals and activities in an attempt to maintain or improve function in response to lost capacity. Optimization occurs when individuals maximize their participation in activities through spending more time practicing skills, for example, and compensation occurs when individuals adapt and modify activities to counteract losses in functional ability or resources.

Research in which the SOC theory is utilized directly in relation to arthritis and activity shows that older people adapt at least one activity to self-manage their arthritis (Gignac, Cott, & Badley, 2002); that engagement in social and physical activities helps people to feel better and to forget their arthritis (Stevens-Ratchford & Lookingbill, 2004); and that individuals who use SOC strategies have more positive health outcomes (Janke, Son, & Payne, 2009). However, there are some differences in how individuals use these strategies in relation to whether they live in resource-rich or resource-poor environments (Janke, Jones, Payne, & Son, 2011).

We know that CMP impacts on older people’s health and well-being, that it is associated with increased use of health and social care services, and that it is the most common reason for
recurrent general practitioner (GP) consultations by older people (McCormick, Fleming, & Charlton, 1995). Chronic pain is also the main cause of disability in later life (World Health Organization, 2003). Its contribution to long-term disability is likely to increase relative to that of other chronic conditions in the next twenty years (Jagger et al., 2006). Preventing the disabling effects of chronic, painful conditions as people age is consequently a major public health priority.

The prevalence and incidence of pain severe enough to interfere with normal daily activities appear to increase with age (Gibson & Helme, 2001; Helme & Gibson, 2001; Sternbach, 1986; Thomas, Mottram, Peat, Wilkie, & Croft, 2007; Urwin et al., 1998). It has been shown, for example, that one fifth of older people will develop interfering pain over the course of a 3-year period (Jordan, Thomas, Peat, Wilkie, & Croft, 2008). However, there are significant groups within the older (50+ years) community-dwelling population that either remain free from pain or report no interference from pain (Shi, Hooten, Roberts, & Warner, 2010; Thomas, Peat, Harris, Wilkie, & Croft, 2004).

In addition, little is known about the differences between people who report non-interfering pain and those who report interfering pain. For example, we do not know if they share similar characteristics that can be associated with the onset of interference (e.g., depression, obesity) or whether the differences are because of the severity or widespread nature of the pain. Presently there is little evidence to answer questions on whether pain status is a changing state (moving from no pain, to pain without interference to interfering pain) or whether it can be a long-term unchanging state and if so, what factors are associated with remaining free from interference from pain. Accordingly, in this study we seek to explore older people’s perceptions of what helped them to remain free from the interfering effects of chronic pain.
Methods

In phase one of this mixed-methods study we reanalyzed data from a previous self-report survey from the North Staffordshire Osteoarthritis Project (NorStOP) longitudinal cohort study conducted at the Arthritis Research UK Primary Care Centre at Keele University (Thomas, Wilkie, et al., 2004). We found that pain without interference can be a long-term state (Jordan, Sim, Moore, Bernard, & Richardson, 2012), with individuals in this group reporting high intensity pain in at least one body region, a third reporting widespread pain, and 90% having used pain medication in the previous four weeks. The physical and mental self-reported health of this group was generally stable over six years.

In phase two—which this article is based on—we used qualitative methods with the aim of examining how older people could best be helped to age well in the presence of musculoskeletal pain. The main objectives included an exploration of why some older people remain free from pain, others experience interference from pain, and others have pain but report no interference. We were also interested in which aspects of older people’s lives are linked with reduced interference from pain. In this article we explore these objectives further by focusing on physical activity. In particular we explore aspects of physical activity and movement, and the meanings given to these by older people in the context of their “painful bodies” and their own aging. Our aim is to better understand how people manage chronic musculoskeletal pain in the everyday, how life course factors influence these meanings, and how these shift and change with age. Ethical approval for this project was granted by the South Staffordshire Research Ethics Committee in 2009.
Sample

The methods for phase one of the study are detailed elsewhere (Jordan et al., 2012). Briefly, the North Staffordshire Osteoarthritis Project (NorStOP) is a UK-based general population cohort study of joint pain and general health in older people (Thomas, Wilkie, et al., 2004). At baseline all patients aged 50 and above who were registered with six general practices were sent a questionnaire containing general health, sociodemographic, and pain questions. In the UK approximately 98% of people are registered with a general practice for their health care, and hence the registered population is representative of the general population in the North Staffordshire area.

Questionnaires were sent at baseline and at 3-year and 6-year follow-up. In the first phase of this study data from these questionnaires were used to formulate three pain groups: group (a) reported no pain (np); group (b) reported pain without interference (pni); and group (c) reported pain with interference (pi) at all three time points (Jordan et al., 2012). The presence of pain was based on a pain manikin on which patients were asked to shade in the location(s) of pain that had lasted for one day or more in the past four weeks (Lacey, Lewis, Jordan, Jinks, & Sim, 2005). The presence of interfering pain was then assessed in those reporting at least one area of pain.

Interference was based on one item from the general health status measure, the SF-36: “During the past 4 weeks, how much did pain interfere with your normal work (including both work outside the home and housework)?” (Ware & Sherbourne, 1992). Respondents answering “moderately,” “quite a bit,” or “extremely” on the five-category response scale were defined as having pain that interfered with their lives (Blyth et al., 2001; Jordan et al., 2008; Thomas, Peat, et al., 2004; Thomas et al., 2007). This item is not site-specific and might relate to any type of pain. The validity and reliability of this item in the older population has been established (Jordan...
et al., 2008). Of 4,756 respondents at six years, 899 (19%) reported pain that interfered with their lives at all three time points, 560 (12%) reported pain that did not interfere with their lives at all three time points, and 421 (9%) reported no pain at all three time points (Jordan et al., 2012).

Respondents were asked for consent to take part in additional studies and to allow review of their medical records. For the second qualitative phase we randomly sampled from those who consented to further follow-up, stratified by pain group and by age. We aimed to interview 60 people in this second phase. The sample was distributed as evenly as possible across the pain groups and across the three age bands to reflect the maximum diversity of life experience (see Table 1): preretirement (56–64 years); postretirement (65–79 years); and the oldest old (80+ years). This last group was particularly distinctive in that it included, for example, people aged 80+ who had never experienced chronic pain. All participants in our study were aged 56 or above. Those who were taking part in other studies at the same time were excluded on the basis of recruitment fatigue and the possibility of adverse effects from participating in simultaneous studies.

When sampling for the “pain with no interference” group, those who reported in the 6-year questionnaire a pain intensity score of 5 or more on a 0 (no pain) to 10 (pain as bad as could be) numerical rating scale were regarded as having high intensity of pain for that location, based on von Korff, Ormel, Keefe, and Dworkin (1992). Those with a pain intensity score below 5 were excluded. This was to account for the possibility that some people suffered no interference because they perceived their pain as not severe enough to cause a problem. This ensured that our focus was on individuals whose pain had the potential to interfere.
Data Collection and Analysis

In-depth interviews. For the main qualitative phase reported on here, we used in-depth semistructured lifegrid interviews: a recognized tool for investigating the life course of individuals (Berney & Blane, 1997; Blane, Berney, Smith, Gunnell, & Holland, 1999). The interviews were also informed by the use of individuals’ demographic and questionnaire data gathered from their original questionnaire and GP consultation data. We were granted access to these data with consent from the participants and the GPs. We developed a semistructured lifegrid interview schedule and carried out six pilot interviews to explore the suitability of the schedule. Working with a lay member of the project’s advisory panel we then amended the interview schedule. The lifegrid provided an initial structure to the interview, focusing on experiences across the life course within a social context and taking into account individuals' perceptions of relevant experiences.

Depending on whether patients had pain that interfered or did not interfere, later questions focused on their experiences and beliefs about the nature of pain. The main interviews took place between September 2010 and April 2011. With participants’ consent we recorded all interviews using a digital voice recorder. Interviews typically lasted between 60 and 90 minutes. All interviews were professionally transcribed and subsequently checked and anonymized by the interviewer. A large amount of data was generated by this study: sixty interview transcripts and recordings, lifegrids, and health events sheets. We used NVivo qualitative data analysis software, version 8 (QSR International, 2008) to manage the data set and to enable between- and within-case comparisons during analysis.

GP consultation and prescription information. GP consultation and prescription data provided a context for individual interviews and alerted the interviewer to anomalous or unexpected
characteristics (e.g., no record of pain medication despite chronic pain) or events that might be significant to the participant, such as surgical interventions or prescription changes. This prepared the interviewer to discuss such anomalies during the interview, where appropriate. This information also provided a further aide-mémoire, helping participants to recall more exact dates of injuries or significant consultations, such as the first time they presented to the GP for chronic pain, because this often proved difficult to recall.

Analysis. Data were analyzed using thematic content analysis. An initial iterative case-by-case analysis helped to identify themes within an individual’s account. Subsequent cross-case analysis revealed the extent to which the themes recurred across individual accounts. The analysis was carried out across all individual accounts independent of which pain category they fell into, until a broad set of themes had been developed. This was done to reduce the likelihood of any initial bias based on assumptions and expectations about each pain group.

We then reanalyzed individual cases with account taken of which pain group they belonged to and their individual characteristics. The interviewer (Moore) conducted the analysis. Other members of the team independently analyzed selections of transcripts at regular intervals to maintain internal consistency and validity. For this article we present findings that focus on physical activity and its role and meaning in the context of managing or avoiding chronic pain and interference. We focus on the spectrum of daily activities that people use as a way to maintain movement and/or improve physical function and health, and on the manner in which they did this.

Findings

Here we present data that illustrate what participants said that they did in response to pain or to avoid increasing interference from pain, and their beliefs and understandings about the role of
physical activity in managing pain as they age. In the quotations presented below we indicate individual participants’ gender, age group, and pain group: pi indicates “pain with interference,” pni indicates “pain with no interference,” and np indicates “no pain.” From participants’ data we developed a threefold typology of the style in which people act out physical activity in their everyday lives—deliberately, strategically, and naturally. Running through each of these are two cross-cutting themes—“striving toward maintaining physical activity” and “slowing down”—that illustrate the complex interaction between psychological motivation and physical ability. In the following sections we describe and illustrate this typology.

In searching for meanings around activity we did not adhere to any a priori definition of activity or exercise, but based our analysis on what participants said about these concepts as meaningful to them in the context of their lives. Participants in all three groups recognized that physical activity was important to their health and well-being and contributed to a better quality of life. Regardless of which pain group they belonged to, participants talked about physical activity as important in avoiding or reducing interference from pain. There were a number of ways in which people tried to remain active in the context of their own lives.

Deliberate engagement with physical activity

Those who engaged deliberately with physical activity were consciously aware of being active to increase or maintain a level of physical and mental well-being, either in response to pain or to protect against pain:

I’m a believer [that] if you can keep on going and you keep active that’s the way, you know. That’s why with the knitting, I mean, sometimes I put it down and I think, “I don’t know whether it’s done ’em any good or not because they hurt.” But in my mind I feel
that the more I keep them moving that, you know, they won’t fasten up on me. (Female, 55–64, pni)

I mean I will exercise to try and make sure that my knee keeps moving all the time, etcetera, etcetera, because I don’t want to be in a position where I am going to be, it’s going to restrict me from being able to do the things I want to do. (Male, 55–64, pni)

Participant (P): While I can walk and I’m able to walk, I’m going to keep doing it. While I can dance, I shall keep doing it. Until I can’t do it, or not able to do it, is that what you mean? (Female, 65–79, np)

Interviewer: Yeah, I’m trying to get to the motivations behind doing it.

P: It’s really mainly keeping fit, keeping myself fit, you know.

In the quotations above, the first participant was a retired hairdresser who still dressed her friends’ hair and knitted, despite the pain in her hands. She was conscious of the effect on her joints, but persisted in the belief that if she kept moving them she would retain her mobility. The second participant was also conscious of the importance of keeping his knee mobile after a knee operation for osteoarthritis, and he deliberately exercised to maintain his functional ability and to carry on doing the things that he enjoyed, which included his work and sports. This style was not specific to those with pain. Despite having no pain, the third participant was conscious of maintaining her mobility and agility as she aged, recognizing that she might not always be able to walk and dance, but that these activities also kept her “fit.”
Strategic engagement with physical activity

Those who engaged strategically in physical activity showed adaptation and innovation in the face of increasing interference from pain and disability. Participants found ways of doing everyday activities that were easier, but that also incorporated the additional intention of maintaining their movement despite having a body in pain. For example, a participant talked about how he increased his opportunity for activity by taking individual dishes over to the cupboard to put them away rather than taking a stack in one journey. By so doing, he incorporated additional walks into his everyday activities and maintained movement:

I usually have a walk up the road about a mile or more, and I tend to, uh, if I'm washing up, I don’t wash up a load of dishes and wait till I've got a load of dishes then take them over to where I've got to . . . I take each one individual, so that I get me walking in as well. (Male, 80+ pni)

Strategies used by other participants included splitting house chores over multiple days or using physical aids to keep stiff joints moving:

Well, of course, you just have to keep using it. I’ve got a rubber ball down there—and I use that to try and keep these fingers going, because they are quite stiff at times. They don’t hurt, there’s no pain attached. Maybe that’s a bit funny but there’s not pain, it’s just a bit stiff. (Female, 65–79 np)

Even without pain, the stiffness the participant experienced in her fingers caused her to think of ways in which to keep her joints moving. The rubber ball provided an opportunity to maintain
movement, and she adapted the way she used it (squeezing it instead of throwing or rolling it) to achieve this.

Another strategy to maintain movement was to take rests in between walking over long periods:

There's a circular walk I can do round here and it's just two miles . . . I used to do that every day . . . But as far as walking now is concerned this hip joint and my feet let me down. I go, but sometimes I have to just have a rest for about three minutes just to let the pain barrier ease off and then I carry on again . . . I'd just have a wait, a stop, for about three minutes, twice, before I got home and I'd be glad to sit down then. (Male, 80+, pi)

Sitting had a strategic function in this case. It was necessary to ease pain, and as a reward for expending one’s energy, when it was seen as “resting,” essential to recuperation. Without this strategy the participant would most likely not have been able to walk every day.

*Natural engagement with physical activity*

Those who engaged naturally in physical activity maintained aspects of life habits and personal identity that related to physical activity and that constituted the style of life by which they defined themselves. Often, activity was presented as part of the individual’s natural mode of being, particularly for those involved in sports and physically demanding occupations, and this in part affected the way they managed their pain in later life:

Interviewer (I): Do you think there’s anything you do that helps you to prevent that pain from interfering with things?

Participant (P): I know I’m strong willed . . . if I’ve set out to do something I intend to get there, come what may. So it’s affected me that way, that’s all. Um, well it’s just
attitude of mind and, because I was athletic, as I say . . . even at school I was the senior
champion at the school . . . I was, you know, athletically minded then and I was athletic,
and I’ve kept myself fit enough to put up a good performance. (Male, 65–79, pni)

I: So you think that’s stood you in good stead, your athletics and that attitude that you
had with that and your job? And that seems to have had quite an impact on the way that
you deal with pain in later life as well, in terms of your attitude.

P: Oh yeah, yeah I would say that, yes.

As a retired miner and keen athlete, this participant had always been an active person—someone
who both enjoyed and valued the benefits of being active—and this had some bearing on his
attitude and management of his CMP:

Participant (P): I still like to be physical, I like to keep myself moving all the time, and
I’m finding that, you know, I can’t go and play football. I can’t go and do a 100-yard
sprint or whatever nowadays, so just a walk round the fields and back, for a couple of
hours is my alternative . . . I can carry on walking forever, I can walk all day [laughs]

Interviewer: So it seems important to you to keep moving then, as you say to be . . .

P: Oh, yes. I’ve got to. I know that if I decided to come home, sit in front of the
television for five or six hours a night, I wouldn’t have the style of life that I wanted.So
I’ve got to keep myself in a position where I can go out and meet people and have some
exercise and a bit of fresh air.
The participant naturally took to walking for health, once running was impossible, as a way of remaining both socially and physically active, using it as an alternative to the things that he could no longer do because of his joint pain and his age.

Another participant also tried to remain active after her husband died, despite having gout:

I've always been active and busy, out and about . . . When my husband was alive there wasn't a Sunday that we ever stayed in, even in the thick snow we always had to go for a walk when I didn't even want to, really, because I mean I was working all the week . . . We were motorbikers and we went all over the place. We were always active. He never danced but since this last seven years I've started to dance, so I dance most nights and one afternoon a week as well. And that's what's brought on my gout, the dancing . . . but I still go dancing. And that keeps me awake at night but I still go dancing. I don't think, “Ooh, I'll have to give it up.” (Female, 65–79, pni)

As a naturally active person, this participant also linked the social with the physical. Dancing was a way to socialize with other people and provided a way of maintaining the lifestyle she wanted. Although she perceived dancing to be a contributor to her gout, she did not think of stopping. She accepted pain as the price of being physically and socially active, and because she had retired, from a cost-benefit perspective she did not perceive it to interfere with her life.

**Striving Toward Maintaining Physical Activity**

In a moral sense, people wished to present themselves as “aging well.” More practically, participants were conscious of the importance of maintaining activity as they aged—through deliberate, strategic, or natural styles—to avoid developing pain or to manage it better. This
consciousness was evident in the language that participants used that showed a striving toward maintaining physical activity and was often characterized by aphorisms such as “use it or lose it,” and talk of “keeping going” and “not giving up.” There was also a perception that the more one aged the more one had to push oneself to remain active and free from interfering pain, as this participant (male, 65-79, pni) suggested, “A bit like, you’re getting older now so therefore you just have to get on, you do a bit more, you’ll be all right.” Participants also felt that if they could manage to remain active then it was possible to “learn” to live with any pain: “I think if you keep active, keep going and occupy yourself then, uh . . . think you can learn to live with it if you’ve got it” (male, 56-64, np).

In an earlier quotation, one participant spoke of keeping her hands moving despite the pain for fear that they would “fasten up” on her. Her perception was based on the belief that her own mother “got fast with arthritis.” She said, “That’s what I’m frightened of. You know, them going stiff and you can’t use them, because the saying is, isn’t it, ‘If you don’t use it you lose it.’” Her determination not to “lose it” is clear, and this sense of striving to retain movement seemed to be a key issue for some participants. A participant who was diagnosed with Dupuytren’s contracture in her hands and arthritis of the neck believed that her persistence and deliberation in exercising her joints was the reason she overcame both:

I made it go, you know, gradually. I didn’t over— if it hurts, I stopped, you know, but I did, I drove it, you know, pushed it as far as I could . . . A lot of it is exercise, you know, it helps, and persisting as well, I don’t give up . . . You see it’s no good saying you can’t, you’ve just got to try. (Female, 80+, pni)
The participant’s persistence was also evident in her outlook on life and in her natural approach to the limitations that she felt with old age:

Interviewer: Why is it that some people have pain and some people don’t?

Participant: I think—I don’t know, I think it’s what you want to do. You know, I want to get on with it, I want to be doing and I think that matters, you know. I’m not, I’m not here to be entertained and I’m not here to be looked after, I’m here to do, you know, to help other people, really, and do things.

Similarly, despite high levels of pain that interfered with his life this participant regularly danced with his wife:

My wife and I go dancing three times a week for exercise as much as anything . . . I sometimes lose my balance because I’m trying to avoid that pain. You know, if— you know how you can rock on your feet, you go “Oh! Oh blimey!” And it'll hurt, really hurt. And you think, “Am I doing the right thing?” But nevertheless, you know you keep on going and, well, exercise is more important than suffering a bit of pain, you know. (Male, 80+, pi)

For this participant, dancing was a valued, meaningful, and purposeful activity. His determination to keep going despite the suffering incurred in doing so highlights the meaning that movement and mobility had for these older people. At an even deeper level, one participant suggested that movement was part of what it meant to be alive:

You’ve gotta keep yourself alive, what I call alive, you know . . . and it doesn’t matter if you go shopping, if you go shopping at least you’re doing something, you’re keeping
your mind ticking over and at least you’re using your arms by carrying shopping . . .

Don’t sit, don’t sit and like . . . reading a book, okay it passes the time, but you’re not moving. (Male, 55–64, pi)

Movement was therefore understood as an affirmation that one is still living and animated. Movement also fends off what might be seen as a metaphorical rigor mortis, with many participants equating movement not just with quality of life but with life itself—if life was to have meaning for them—because movement and being physically active were a natural part of their self-identity.

Striving toward physical activity was also about a conscious avoidance of being sedentary. Characterized by sitting or a lack of activity, sedentariness was viewed as anathema to those who were naturally active or wished to remain active and engaged with others or with their immediate environment. Sitting was equated with being confined, inside, and disengaged from the outside world, which seemed intolerable to some participants:

Bear in mind in the daytime I'm out and about, I never sit in here. . . . To me, kids today have got a horrible life sitting in front of that [television] with the computers, with the games and that . . . I've got friends that I visit and actually I don't like visiting much because it means you're just sitting in. I'd much rather be out. (Female, 65–79, pni)

Only in the “pain with interference” group was sitting down dictated by pain or the anticipation of pain. However, even in this group there was a preference for standing and moving over sitting, which was partly strategic:

It doesn't allow you to sit for long or stand for long; you've got to keep moving it. You've got to get up and. . . . That gives you a bit of relief—and as daft as it sounds sometimes
when you—you keep it moving, it's probably better than sitting with it. . . . It's not so intense—when you're moving with it, than when you're sitting. (Male, 55–64, pi)

The perceived consequence of relinquishing activity routines was further degeneration, and using physical aids such as motorized mobility scooters was seen to undermine one’s motivation to remain mobile and independent. Despite interfering pain, one participant made efforts to remain mobile through everyday activities. His strategy was to recognize opportunities for movement and to persist in activity routines that enabled him to remain mobile:

It [hip pain] stopped me from doing some exercise. I still walk the dog, I still walk up to town instead of driving up to town. . . . I mean once you stop doing that then you start vegetating don’t you? . . . I see these people that go up to town in these invalid carriage things, the motorized ones, and they get up and they walk around the stalls and they get back on again and carry on. Well I suppose theoretically if I [asked] I could get one of those, but that again is degeneration and you’re going backwards all the time. So eventually they won’t bother to get out at the stalls, if they can’t get close enough they won’t bother. (Male, 65–79, pi)

Sedentariness was linked here with what the participant called “vegetating,” a part of the “degeneration” brought about by relinquishing movement. Furthermore, it appeared to represent a process that, if allowed to take hold, was irreversible. The narratives of all three pain groups seemed to reflect an overriding acknowledgement that being too sedentary was detrimental to one’s health, although those with joint pain were perhaps closer to a realization of these consequences and concerned about losing their independence.
**Slowing Down**

There was a sense that although people tried to avoid sedentariness, an inevitable slowing down occurred in later life. This was partly because of changes in physical function and also from a desire to be less active, which might be seen as “natural,” but also “strategic.” In retirement, people had more control over their time and could take more time to do things, putting less stress on their body if they suffered from chronic pain:

Participant (P): I suppose my—the pace of my life has changed, hasn’t it? I think that's what has happened, really. I sort of do the bathroom, hoover [vacuum clean] the hall, hoover in here, have a cup of coffee, [laughs] and do a bit more. It’s lunchtime, you know, do you know what I mean? (Female, 65–79, pni)

Interviewer: Yeah.

P: This is this business of, you know, you've got the time so you spread the work out, you know.

Having no paid work meant that time could be taken, but also that one’s pain could be accommodated more easily:

Interviewer: So, your day to day living—how has it affected that?

Participant: Um, well I just take my time now, now I’m not working. I do a bit on the good days, and if my back’s bad, I just take it easy, you know. (Female, 65–79, pi)

The change in lifestyle that resulted from retirement or partial retirement seemed to release people from the pressure of responsibility, and this could make the difference between whether
or not something interfered with that person’s life. For example, a participant was asked about her dancing and the pain in her toe that kept her awake at night:

Participant (P): I don't go to work or anything. I haven’t got to get up at 8 o'clock to go to work; I know I can rest in the day if I'm that jiggered. (Female, 65–79, pni)

Interviewer: Yeah, so if you'd had a job then it would interfere perhaps?

P: Oh yes, it would interfere if I was working because I'd be absolutely shattered.

Slowing down was not just seen as a consequence of arthritis or joint pain, but as part of the wider aging process. As one participant (female, 80+, pi) suggested, “It isn’t just the arthritis though, it’s age as well. I mean, everybody’s—if they get to the age of 86—bound to slow up, you know.” Retirement was not always seen as a benefit of aging, and participants perceived that it could also bring its own problems for those who were not prepared:

You can retire too soon. We’ve noticed this with friends who’ve retired in their 50s. . . .

Even if you sort of loathe the work you do, at least find something else. You’ve got to have projects in your life, you’ve got to have things that you want to do and want to achieve. (Female, 55–64, pni)

This participant’s words convey the importance she placed on having meaningful activities in one’s life.

Although retirement might be an opportunity to slow down, having nothing to replace one’s previous work, no incentive or meaningful activity, was seen as a disadvantage, and as such it suggests that the process of “slowing down” must be managed properly. One participant
suggested that involvement in the wider sense was not only important to having “a place” and a sense of meaning in the world, but was also vital to one’s health:

So I think from a health point of view, whether it's mental health or physical health, is to be part of something. It's absolutely essential. You've just got to go into an old folks’ home and see them sitting around in chairs all around the outside. They're just . . . they, they've got no place. They, they've signed away their life, in effect. And so I think involvement is absolutely vital . . . but involvement within your capabilities. (Male, 65–79, pni)

For the above participant, people who had become inactive had “no place,” suggesting a form of existential loss. For him such people were no longer integral to society. This “dis-integration” shares common ground with disengagement theories that suggest a mutual disengagement between society and the older person. Nonetheless, some felt it was normal and acceptable in later life to disengage from previous activities:

Interviewer: What will you do if that [swimming baths] closes, have you thought about that?

Participant: I won’t go anymore. It’ll be a relief in one way, because I don’t like getting up in the morning, and about keeping fit, well I must be getting to the end of the line now. (Male, 80+, np)

At 91 years old, the participant believed his time was coming to an end and his motivations and desires had changed. He no longer strived to remain active and was no longer interested in “keeping fit” because he perceived himself nearing the end of his life. There were, however,
exceptions, such as a participant (male, 80+, pni) who, in his late 80s, was quite active and enjoying the “happiest time of my life,” though he too recognized his changing capacities for physical activity.

**Discussion**

Through the deliberate, strategic, and natural ways that people found to remain active despite having a body in pain, we found an underlying sense of striving toward activity, which fits with the current active/successful aging discourse. We also found a recognition of slowing down. Our findings show that striving is born out of the concerns of participants over loss of mobility. These concerns might be interpreted as driven by a “fear” of losing one’s ability and independence and being assigned to the “frail elderly” (Grenier, 2007).

In contrast to theories of chronic illness as biographical disruption (Bury, 1982), chronic conditions might be experienced as part of the “aging process” requiring acceptance (Gignac et al., 2006) and normalized into a biographical flow, such that an enduring chronic illness narrative is part and parcel of personal biography (Fairecloth, Boylstein, Rittman, Young, & Gubrium, 2004; Sanders, Donovan, & Dieppe, 2002; Sinding & Wiernikowski, 2008; Williams, 2000). In addition, personal experiences of continuing agency and self-management, despite physical limitations, can sustain personal identities and lifestyles (Gillett & Higgs, 2011) and a belief that one is successfully aging (Bowling, 2006).

We suggest that striving illustrates a simple wish for a quality of life to be preserved, and although participants did not deny losses, any losses were either accepted or compensated for because participants chose other ways of remaining active or changed the way in which they carried out activity. These findings echo those of others such as Janke et al. (2011), who found that older people valued the health-promoting aspects of activities and showed commitment to
activities to maintain health, adapting to changes in ability by replacing activities they could no
longer do with others they could. Baltes and Baltes’ (1990) SOC theory provides a useful way of
understanding the strategies that older people use to modify their activities to suit their changing
body and changes in their experience of pain, reflecting Moody’s (2010) assertion that “the idea
of successful aging should never be based on denial of real losses in functioning in the last stage
of life” (p. 21).

Moreover, the choices made by those who adjusted or replaced activities were often
informed by concepts of continuity (Atchley, 1993) and were illustrated in their histories of
physicality. These showed that those who were active in earlier life tended to want to continue
with an active lifestyle in later life. Histories of physicality gave some idea of meanings and
attitudes in relation to activity and how these influenced individuals’ subsequent approaches to
pain. Although they might not have been able to continue the same sports, hobbies, or activities
to the same level, the typology showed that they adapted their activities and settled for what they
could do rather than for what they could no longer do, or strived to carry on with activities
despite pain to maintain their health. For the most part, this seemed to indicate an attitude or
approach that had developed over a lifetime.

The opposite of striving toward physical activity is slowing down. At different points
during the life course people might become, or choose to become, less active. Although we
provide a typology of styles to illustrate how older people managed and maintained activity,
these are also relevant to how they managed “slowing down.” There is a temptation in society to
make moral judgments about when people decide to slow down. This might be influenced by a
Western cultural ideology of aging that focuses on independence and fear of physical decline
(Waid & Leslie, 2003): a “busy ethic” that reflects and follows on from the “work ethic” valuing
productivity and contribution to society in retirement (Ekerdt, 1986). It might also reflect dominant discourses that focus on activity as a way to maintain health (Katz, 2000).

In our sample, those who were younger generally spoke of remaining active despite pain, as conventional wisdom might suggest, and there was a point at which others felt that they had lost their desire for exercise. What might be considered premature slowing down could have more to do with individuals’ beliefs about aging and their own limitations as a result of their pain (a diagnosis of “wear and tear” in arthritic joint pain can be interpreted as meaning that if one moves more, one will deteriorate more) and is therefore more strategic or purposeful. Slowing down might also have more to do with a choice to enjoy the wisdom accrued through age (Gattuso, 2003), to be more peaceful and reflective, and to enjoy having more time to do things slowly.

Slowing down can also involve a sense of “dis-integration”. Those who wish for a better quality of life despite the presence of chronic painful conditions might view such “dis-integration” as less acceptable than others who recognize that they are slowing down and do not have the same “care” for exercise or activity as they come to what they perceive as the end of their life. So it would seem that the goal is to find a more balanced perspective of physical activity within the healthy aging ideal that takes account of painful conditions in a more coherent way. We might consider the question: “When does slowing down become acceptable in discourses of active and successful aging?”

The answer possibly lies in new theories of aging. Liang and Luo (2012) have recently called for a discourse shift in social gerontology from “successful aging” to a more dialectic and complementary “harmonious aging” that includes body and mind (which might include pain) and family and social relationships. This view of aging would also incorporate both the opportunities
(having more time) and challenges (having less mobility) that occur in old age. To our knowledge, few studies have shown how pain intersects with ideologies of aging to influence individuals’ perspectives on when it is morally acceptable to slow down, and this poses an opportunity for further exploration.

In this study we also build on work that identifies the “hard work of self-management” (Ong, Jinks, & Morden, 2011), which should be acknowledged within practitioner/patient relationships and utilized when promoting specific or tailored self-management programs that include physical activities. It is easy to overstate the importance of activity and to imply that older people with chronic pain should move more to reduce pain. As individuals, our capacity for mobility will change, and it is important to be aware that the desire to be active might be lost and possibly replaced with a desire to be more reflective and peaceful. Although this might be less acceptable for those who still desire to be more active, it makes sense to those who believe they are coming to the end of their life, and this should be respected by those involved in their care.

**Conclusion**

It is important to recognize that not only are the meanings that individuals give to remaining activities variable, but the manner in which they engage in activities differs, and this is influenced by a combination of physical determinants (chronic pain, illness), moral values, a continuity of self-identity, and beliefs about the value of health as one ages. Although people might engage less in physical activity as they get older, this does not necessarily equate to failure, and it is important to recognize that individuals generally slow down as they age.

Drawing on Wiles’s (2012) interpretation of resilience, it seems more important to balance what is no longer possible with what is, and physical activity for those in pain can be defined in
different ways depending on how people perceive and define activity rather than solely on external behavior.

So, for those in pain, remaining active can mean something entirely different from what it means for those who are not in pain or for those who are at a different life stage. In recognition that older people are not a homogeneous group, following Bowling and Dieppe (2005) we suggest that clinicians should look more closely at individuals’ values and expectations of aging. They should also consider how activity has featured in an individual’s personal history, how they engage in activity, and their beliefs about what it means to them, to ascertain what kinds of interventions might or might not be suitable.

Declaration of conflicting interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and publication of this article

Funding

The authors disclose receipt of the following financial support for the research, authorship and publication of this article: National Institute for Health Research Research for Patient Benefit Grant and Arthritis Research UK Centre Grant.
References


QSR International Pty Ltd. (2008). NVivo (Version 8) [Computer software]. Doncaster, Australia: Author


community: The comparative prevalence of symptoms at different anatomical sites, and the relation to social deprivation. *Annals of the Rheumatic Diseases, 57*(11), 649-655. doi:10.1136/ard.57.11.649


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Table 1. Interview sample distribution in terms of age and pain status

<table>
<thead>
<tr>
<th>Age group</th>
<th>No pain</th>
<th>Pain no interference</th>
<th>Pain with interference</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>Age 56–64</td>
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</tr>
<tr>
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