Physical Activity in People Age 80 Years and Older as a Means of Counteracting Disability, Balanced in Relation to Frailty

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The aim of this study was to describe experiences of physical activity, perceived meaning, and the importance of and motives and barriers for participation in physical activity in people 80 years of age and older. A qualitative design with focus-group methodology was used. The sample consisted of 20 community-living people age 80–91 yr. Data analyses revealed 4 themes: physical activity as a part of everything else in life, joie de vivre, fear of disease and dependence, and perceptions of frailty. Our results suggest that physical activity was not seen as a separate activity but rather as a part of activities often rated as more important than the physical activity itself. Thus, when designing physical activity interventions for elderly people, health care providers should consider including time for social interaction and possibilities to be outdoors. Moreover, assessment of physical activity levels among elderly people should include the physical activity in everyday activities.

Keywords: focus groups, daily activities, social participation

People 80 years of age and older are commonly described as a frail and vulnerable group. For example, more than half of those 80 years and older in Sweden need help with one or more daily activities (National Board of Health and Welfare, 2005). Low physical activity is considered one of the major contributing factors to the physical dimension of frailty (Lally & Crome, 2007). It has been shown that physical exercise can prevent or delay the onset of disability (Balzi et al., 2010). Physical activity recommendations suggest that older adults do 30 min of accumulated physical activity most days of the week, or 20 min of vigorous physical activity 3 days/week (Nelson et al., 2007). Many older adults do not meet these recommendations (Harris, Owen, Victor, Adams, & Cook, 2009). To implement successful interventions, research is needed on factors associated with engaging in physical activity among older adults.
In a focus-group study on younger rural women, physical activity was viewed as broader than exercise; for example, it included household activities (Wilcox, Oberrecht, Bopp, Kammermann, & McElmurray, 2005). In a study on Swedish and Irish people 65 years of age and older, the more active participants described physical activity as an integral part of their self-identity, used as a means for them to show the world who they are (Leavy & Åberg, 2010). In another qualitative study on 3 Canadian women over 90 years old, strenuous sport, play, and work activity were described as relevant aspects of their girlhood (O’Brien Cousins & Vertinsky, 1995). Although exercise for physical fitness was not a goal in their adult years, all 3 women used daily exercises to maintain their health in their tenth decade. These late-life exercise patterns seemed to be rooted in their early years. Knowledge of what constitutes physical activity in people 80 years of age and older can be used to recommend forms of physical activity, enhance recruitment and participation, and choose measures that can adequately assess the level of physical activity in this group. Indeed, the level of physical activity in older people in general is difficult to determine since there is inconsistency in defining physical activity across studies and a considerable variation in measures often reflecting different domains of physical activity (Prohaska et al., 2006).

There is a strong connection between older peoples’ expected benefits and perceived importance of the expected benefits, and their participation in physical activity (Conn, Burks, Pomeroy, Ulbrich, & Cochran, 2003). Perceived benefits from physical activity, as reported from both qualitative and quantitative studies with older people, are health benefits, greater happiness, enjoying life more, being able to help others, and social benefits (Conn, 1998; Pan et al., 2009).

In a study on older women’s experiences of a fitness program, the women stated that involvement in the program provided a social context that enriched their lives and contributed to happiness and better health (Bidonde, 2009). Another motivator of physical activity reported among Swedish elderly people was the draw of nature (Leavy & Åberg, 2010). Further motives for participation in physical activity reported by older adults have, for example, been maintaining health, confidence in one’s ability to be regularly active, and positive attitudes to exercise; advice from a doctor to take exercise; social contact; and environmental factors such as proximity to paths and facilities (Belza et al., 2004; Benjamin, Edwards, & Bharti, 2005; Leavy & Åberg, 2010; Newson & Kemps, 2007; Prohaska et al., 2006; Rasinaho, Hirvensalo, Leinonen, Lintunen, & Rantanen, 2007). Barriers to regular physical activity reported by older adults in long-term care and in the community are physical health problems and frailty, resultant injury or falling, lack of motivation, feeling low, time constraints, social barriers, past sedentary lifestyle, feeling too tired, and environmental restrictions such as transportation, weather, neighborhood safety, fatigue, and having no one to exercise with (Belza et al., 2004; Bird et al., 2009; Chen, 2010; Conn, 1998; Lees, Clarkr, Nigg, & Newman, 2005; Newson & Kemps, 2007; Prohaska et al., 2006).

In general, much of what is known about physical activity is based on surveys with standardized questionnaires (Prohaska et al., 2006). Standardized questionnaires may, however, not be sufficient to describe the respondents’ priorities or experiences (Meredith, 1996). A study of elderly people receiving community-based health care suggested that standardized questionnaires fail to capture factors that the respondents rated as important in interviews (Hill, Harries, & Popay,
Interviews give the respondents opportunities to raise their own priorities in their own ways and may reveal ideas that are not anticipated by the researchers (Britten, 1995). The aim of the current study was to explore the perceived meaning, importance, and experiences of physical activity, as well as the motives for and barriers to participation in physical activity, among people age 80 years and older.

Method

Focus-group methodology, which is a form of group discussion, was used (Kitzinger, 1994, 1995). The methodology is suitable for picking up the views and experiences of a selected group, which will generate a broad understanding. The uniqueness of the methodology is its ability to generate information based on the interaction between the participants in the target group and thus generate a broad knowledge and understanding. The group process encourages the participants to clarify not only what they think but also how and why they think in a certain way (Ivanoff & Hultberg, 2006). The underpinning methodology in focus-group research in this article is based on social constructivism. As in social constructivism, participants are seen as constructing a framework to make sense of their experiences, and in interaction with others these experiences will be modified, leading to the construction of new knowledge (Ivanoff & Hultberg, 2006; Schwandt, 2000).

Participants

The participants were recruited among individuals enrolled in a health-promoting and disease-preventing randomized controlled trial (RCT). The RCT included 450 people living in two communities in a city area. Inclusion criteria were being community-living individuals (i.e., living in their own homes), 80 years of age or older, not receiving formal or informal care (i.e., independent in personal and instrumental ADLs), with a Mini Mental State Examination (MMSE; Folstein, Folstein, & McHugh, 1975) score ≥25. The intervention included two intervention groups and one control group. Purposive sampling was used to ensure a broad representation of the target group. In focus-group methodology, it is important to consider the homogeneity and heterogeneity of the groups to create an atmosphere that facilitates discussion (Ivanoff & Hultberg, 2006). The groups were homogeneous according to the inclusion criteria of the RCT and heterogeneous by gender, education, and marital status. Twenty-three people among those included in the RCT were asked to participate in the focus-group study. Three refused to participate. Thus, 20 subjects finally participated in the study. Twelve were recruited from the first intervention group (instruction and home visits), 2 from the second intervention group (home visits), and 6 from the control group. The focus-group discussions were conducted after the intervention activities. The first intervention group in the RCT included instructional multidisciplinary meetings and a home visit, and the second intervention group included a preventive home visit. The instruction included four meetings and focused on two areas: providing information about the aging process and providing tools and strategies to stay able to live at home for as long as possible in a safe and secure manner. Information about physical activity was given as one part of this intervention.
Procedure

Five focus-group interviews were conducted: three focus groups each with 1 participant from the first intervention group, one focus group with 2 participants from the second intervention group and 1 participant from the control group, and one focus group with 5 participants from the control group. The participants were invited by personal contact and given an information leaflet in which anonymity was guaranteed. They all agreed to take part in a group discussion lasting no longer than 2 hr, including a coffee break. The focus-group leader (the moderator) was a physical therapist familiar with the focus-group method. The moderator was part of the intervention team, although she was not familiar with the participants of the focus groups. She was personally trained by the last author, who is very experienced in focus-group methodology. Throughout data collection, the last author continuously supervised and guided the moderator by listening to all interviews and giving her comments. The discussions took place in a local, quiet environment. Each group met on one occasion. The sessions lasted 1–1.5 hr and were audiotaped. The moderator guided the discussions and explained that the aim of focus groups is to encourage people to talk to each other rather than address themselves to the moderator. Furthermore, the moderator explained to the participants that they are the experts in the topic of interest, not the moderator. The focus-group questions were developed from the literature (Conn et al., 2003; Newson & Kemps, 2007; Prohaska et al., 2006; Rasinaho et al., 2007). Three main questions were asked:

- What are your thoughts on physical activity?
- What value does physical activity hold for you?
- Who or what encourages or discourages you from engaging in physical activity?

The questions were specified in a moderator guide. The moderator followed the participants’ discussions and asked supplementary questions, when needed, to get the participants to further describe their views and experiences. For example, she may have asked, “Can you give me an example of what you mean?” The questions were reviewed by researchers and clinicians involved in the RCT, as well as people from a pensioners’ organization. The first focus group was used as a pilot group. As there were no systematic differences between the views expressed in the pilot focus group and the focus groups for the main study, these data were pooled for the analysis.

Analysis

Audiotaped group sessions were transcribed verbatim, and the transcript was analyzed according to the method described by Kreuger (1998). The first and second authors conducted the analysis, assisted by the third author. Focus groups usually generate a large amount of data, which can be hard to overview. The key to success in analyzing was to let the purpose of the study guide the process. All authors listened to the audiotapes and read the transcribed discussions several times. The next step was to distinguish material that was important to the purpose of the study and to divide each discussion into categories (Kreuger, 1998). At this stage, the working material was still in the form of raw data to comprehend its contextual meaning. Based on the raw data, descriptive statements were formed and illustrative
quotations were selected. The process was continued by interpreting the meaning of the categories and quotations to arrive at qualitative formulations. Relations and patterns prepared the way for identification of four different qualitative themes. The process of coding the data was iterative; that is, each step was first conducted by each author separately and was then discussed by all authors together. The level of coherence was very high, although sometimes we used different words to describe the same results. The categories were chosen in consensus by all authors. The quotes cited in the article were translated by a native-English-speaking person. All other text was translated by us. The translation occurred after the analyses.

Ethics

The study was approved by the regional ethical review board, ethics number 650-07, T 636-08. Informed consent was obtained from all participants.

Results

Demographic data and information on level of physical activity for the 20 subjects (mean age 84.7, range 80–91) who participated in the study are presented in Table 1. As a result of the analyses, four themes emerged. The first theme, physical activity as a part of everything else in life, describes the meaning of physical activity as something being embedded in everyday life. In “joie de vivre,” the participants describe the importance of being able to be physically active for joie de vivre. The third theme, fear of disease and dependence, deals with the participants’ motives for engaging in physical activities and their perceived importance of the expected benefits. In “perceptions of frailty” the participants described their perceived obstacles for engaging in physical activities in relation to their perceptions of frailty. The latter theme also deals with how the participants adapt their physical activities so they can be accomplished with reduced physical ability. Following are descriptions of the themes. Each theme is followed by quotations illustrating it. Table 2 provides an overview of the themes and categories.

Physical Activity as a Part of Everything Else in Life

The participants did not see physical activity as a separate activity but rather as a part of everything else in life. Sometimes physical activity was a means of achieving something, and other times it was a consequence of other activities often considered more important than the physical activity. The participants prioritized activities differently from when they were younger. As a result of the analyses, three categories emerged: physical activity as a part of social interaction, physical activity in everyday activities, and physical activity as a part of enjoying outdoor life.

Physical Activity as a Part of Social Interaction. A good social life was seen as a positive consequence of physical activity. Social interaction was considered more important than the physical activity itself. Some of the participants, however, preferred to walk alone so they could walk at their own pace, while others expressed the opinion that having someone to walk with provided an incentive. One’s physical activity could be limited by having a life partner who was no longer able to participate in one’s same activities. Taking one’s partner into account was perceived
as binding but not necessarily as a burden. This was expressed as part of life, and
the participants felt a joy in supporting and helping their partners. Loneliness,
lack of activities suitable for the elderly, and not being able to carry out a physical
activity in the same way as before sometimes made the participants reluctant to
participate in physical activity. Examples of activities that were described as giving
social interaction were swimming, playing golf, dancing, and walking.

Woman: That’s the main thing—being able move about, being up and about
and able to join in. And when you can’t keep up any longer you might just as
well put an end to it all. That’s the meaning of life, sort of, being on the go.
Woman: If you can’t keep on the go any longer, then. Well, you don’t really know how you’d feel in that situation. I have a feeling that, if you can’t keep on being active somehow or other, then you might just as well throw in the towel.

**Physical Activity in Everyday Activities.** All movement was considered physical activity. Performing household activities such as making the bed, washing, cleaning, and gardening gave double satisfaction, both from the physical activity and from getting something done at home. Viewing household activities as physical activity was something the participants had started to do in recent years. Performing their domestic activities was sometimes described as sufficient physical activity. Sometimes, however, household activities were considered necessary and unpleasant. Some of the participants liked to go out just for a walk, while others rarely went for a walk without having an errand. Walks were often preferred to domestic activities because domestic activities were more tiring and boring. The participants claimed that, in their youth, physical activity had been a more natural part of everyone’s life than it is today. For example, the participants cycled to school and to work instead of going by car or bus.

Woman: I reckon looking after my home, doing the shopping, going down into town and running errands, and so on as my activities. That’s what activity is for me.

Man: As long as you can keep that up, things are very simple.

**Physical Activity as a Part of Enjoying Outdoor Life.** The physical activity was seen as only one part of the whole experience of being outside and, for example, of taking a walk or working in the garden. The fresh air and the experience of the beauty of the countryside were just as, or more, important aspects. The beauty of nature was something the participants felt they had started to perceive and enjoy more as they got older.

Man: It [going for a walk] enriches my whole life. That’s how it is for me. I feel so creative when there’s a bit of movement and when I go out in the woods and. . .

Man: You agree, too, that you see all this with different eyes now than when you were younger?

**Joie de Vivre**

Physical activity—for example, morning gymnastics or a walk—gave the participants joie de vivre and the energy to be more active. It helped them “get started” and made them more energetic, alert, and in a better mood. They also felt less slow and were motivated to do other things like cleaning the house. Physical activity gave satisfaction because the body still managed to perform the activity, which made them feel alive and free. It was important that the activity be pleasant. Dancing was mentioned as a pleasant activity that gave joy, social interaction, and exercise. If they were not physically active, they felt passive, slow and stiff, dejected, and lacking in motivation to do other things.
Woman: You feel that you’re still alive [when you’re out on a walk].

Woman: For me, it’s entirely for my own sake—that I feel good when I’ve finished a job that feels almost impossible to manage before you start on it—and you’re always surprised when you see how well you cope with it. I’ve never started cleaning and then had to stop altogether because I can’t manage it any longer. I just get the feeling that I’ve still got a bit of energy left.

**Fear of Disease and Dependence**

Fear of disease and dependence was described as an incentive to be physically active. The goal was not to live longer but to stay healthy as long as possible. It was considered important to remain independent and not be a burden to others, especially one’s children. Being able to live at home as long as possible was also considered important. Physical activity was described as a way to take responsibility for one’s own health instead of depending on health care. Being physically and mentally active was also described as a way of staying healthy and thus being able to fulfill tasks that might be helpful to others, such as passing on one’s experience to younger generations. Worry about their bodies’ not working as well as before was a motive for being physically active. They had, however, no ambition to get into better physical shape—only to maintain health and independence.

Man: Well. Let’s say that I do my exercises and so on. It’s not because I want to live longer but that I want to keep well longer. So that the countdown will be as short as possible.

Woman: I want to die in good health [laughter].

**Perceptions of Frailty**

All physical activities had to be balanced in relation to the participants’ perceptions of their own frailty. For example, they economized on their strength and were not so keen to make physical efforts, became tired and felt pain more quickly, and did things more slowly than when they were younger. Strenuous efforts in old age were often considered dangerous due to the unpleasant sensation of breathlessness. The elderly therefore avoided strenuous activities like running. Fear of falling could make the participants more physically active—for example, by doing more exercises—or less active, for example, by walking more slowly or avoiding certain activities like bicycling and using the stairs. Because of their perception of frailty, slippery conditions were an obstacle to going out, and pain was an obstacle to engaging in physical activity. However, some pain could be an incentive to be physically active to overcome it and maintain some flexibility. The older adults tended to adapt physical activities by taking more pauses and doing things more slowly. In addition, for example, they adapted activities by choosing to take walks in the city center during the winter, where the streets are less slippery, instead of outside the city. Sorrow and depressive thoughts sometimes made them question the meaning of continuing to live, which made them passive. This could be caused, for example, by having a disease themselves or by the death or illness of friends or family members.
Woman: Well, I can tell you one thing, running. Running to get on the tram I’ll have to stop doing that now. It was only last month, I was running out at Valand to get on the red tramcar and I fell and hurt myself here, so it’s a bit swollen now. But it’s all right, I haven’t been to the doctor. But I think it’s a bit risky when you’re getting on in years.

Woman: After all, you’re afraid it’s going to trigger a heart attack or something of the sort. Yes, really. So you have to take a break, somehow, you just have to.

Our results suggest that physical activity was not seen as a separate activity but rather as a part of activities often rated as more important than the physical activity itself. The participants described the importance of being physically active for joie de vivre and to counteract disease and dependence. Moreover, the results suggest that the participants constantly adapted their physical activities in relation to their perceptions of their own frailty.

Discussion

The results of the study provide an understanding of the perceived meaning, importance, and experiences of physical activity, as well as motives for and barriers to participation in physical activity, among people 80 years of age and above. This knowledge may be useful for health-promotion interventions and to recommend forms of physical activity, enhance recruitment and participation, and choose measures that can adequately assess the level of physical activity among people age 80 years and above.

The meaning of physical activity was described as embedded in everyday activities, such as in social interaction, daily activities, and enjoying the outdoors. These activities were in general viewed as more important than the physical activity itself. In accordance with earlier studies on elderly people, social contact was an important motivator to be physically active (Allender, Cowburn, & Foster, 2006; Bidonde, 2009; Conn, 1998). Our results together with those of others (Allender et al., 2006; Bidonde, 2009; Conn, 1998) indicate that when arranging physical activities for older people, it seems important to include time and opportunities for social interaction. In our study, the participants also expressed the belief that, although it may be motivating to have someone to walk with, walking alone can often be preferable, to be able to walk at one’s own speed. Considering these results, walking groups that allow everyone to walk at their own speed and to meet each other afterward for coffee may be one appropriate health-enhancing intervention for people 80 years of age and above. The participants expressed the view that participation in physical activity may be limited by having a life partner who is no longer able to participate in the same activities as oneself. Social barriers to participation in physical activity have been described elsewhere (Lees et al., 2005). Specific to our study was that taking account of one’s partner was viewed as binding although not necessarily as a burden.

The participants pointed out that viewing household activity as physical activity was something they had begun to experience in recent years. They expressed the opinion that performing household activities may give double satisfaction: that of being physically active while also accomplishing something. In line with a study
on 3 Canadian women over 90 years old (O’Brien Cousins & Vertinsky, 1995), the participants in our study described growing up with physical activity as a natural part of everyday activities. It is therefore possible that, for example, walking for pleasure is sometimes considered unusual and unnecessary. In light of our findings, when assessing physical activity levels or prescribing physical activities for people age 80 years and above, it seems important to consider the physical aspects of household activities.

In line with an earlier qualitative study (Leavy & Åberg, 2010), physical activity was seen as only one part of the whole experience of being outdoors and, for example, taking a walk or working in the garden. It has been suggested that enjoying nature is related to better quality of life as perceived by long-term-care residents (Guse & Masesar, 1999). These results emphasize the importance for people 80 years of age and above of being able to get out and about. When designing physical activity interventions for people 80 years of age and above, health care providers should consider including the possibility of being outdoors.

The participants described physical activity as important because it gave them joie de vivre and the energy to be more active. Physical activity made them alert and put them in a better mood. These findings support an earlier qualitative study on older women’s experiences of a fitness program, in which the women said that involvement in the program provided a social context that enriched their lives and contributed to their happiness and better health (Bidonde, 2009). Our results on physical activity and mood also concur with the findings of a previous review of quantitative studies that showed evidence for positive effects of exercise on depression and anxiety (Ströhle, 2009). Our study adds further knowledge about the participants’ own experiences of this association. For example, the participants indicated that physical activity gave them satisfaction because their body still managed the activity, which made them feel alive.

Fear of disease and dependence was an incentive to be physically active for the participants. Earlier questionnaire studies including elderly people in general have shown that health concerns, disease management, and health promotion are common motives for participation in physical activity (Newson & Kemps, 2007; Rasinaho et al., 2007). Specific to our study was the fact that the participants feared disease and disability mainly because they wanted to be healthy as long as possible and not because they were afraid of dying. Our findings concur with the existent literature (Haak, Fänge, Iwarsson, & Dahlin-Ivanoff, 2007; Hall, Longhurst, & Higginson, 2009). For example, Hall, Longhurst, and Higginson found that older people living in nursing homes did not appear to experience distress due to thoughts of impending death but were distressed by the multiple losses they had experienced. Likewise, Haak et al. found that people age 80 years and over in their study valued independence and did not wish to be a burden to others. Our results together with those of others (Haak et al., 2007; Hall et al., 2009) emphasize the importance for people 80 years of age and above to maintain independence. The results of our study also add to the existing literature by describing how the participants considered physical activity a means of countering disability, although they had to adapt their physical activities in relation to their perceptions of their frailty. Thus, physical exercises that aim to preserve functional ability may be an important part of a physical activity intervention for people 80 years of age and above.
The participants were aware of their frailty and constantly adapted all physical activities in relation to it. A useful framework for discussing their response to physical frailty is provided by the model of selection, optimization, and compensation (SOC; Baltes & Baltes, 1990). The SOC model suggests that people use strategies of selection, optimization, and compensation to enable continuity of identity in daily life. These strategies are used throughout the life span but become amplified in older age due to the challenges posed by the aging process. The process of selection is described as a reduction of the range of one’s activities in response to loss of functional capacity (Baltes & Baltes, 1990). The participants in our study stated that fear of falling made them avoid certain activities like bicycling, using the stairs, and going out in slippery conditions. According to the SOC model, the process of optimization includes engaging in behaviors that augment existing function (Baltes & Baltes, 1990). In our study both fear of falling and some pain could make the participants more physically active to maintain their function. Compensation arises due to a restriction in active potential to levels that are unacceptable (Baltes & Baltes, 1990). The elderly people in our study adapted their physical activities by taking more pauses and doing things more slowly, for example, walking slower. Similar to our findings, a recent qualitative study exploring health in relation to home as experienced by very old people found that the participants were aware of their vulnerability and adapted their activities so that they could perform them differently but still independently (Fänge & Dahlin-Ivanoff, 2009). Our study together with the study by Fänge et al. emphasizes the importance for people 80 years of age and above to remain active despite perceived limitations.

The participants experienced a fear of strenuous exercise, perhaps because they associated being breathless with a fear of dying. Our results indicate that when encouraging participation in physical activity for people 80 years of age and above, it is important to adapt the activity to the needs of this frail group. The guidelines for physical activity, however, emphasize that for most health outcomes, additional benefits occur with higher intensity, greater frequency, and/or longer duration of physical activity (Nelson et al., 2007). Furthermore, the guidelines stress that if older people cannot engage in the recommended level of physical activity because of chronic conditions, they should be as physically active as their conditions allow (Nelson et al., 2007). Therefore, individually tailored physical activities seem like a good strategy to adapt physical activity to the needs of people 80 years of age and above.

The current study also highlights the balance between the battle waged by the participants to remain active and the difficulties they may experience with motivation when depressive thoughts become too overwhelming. Sorrow and loneliness were described as paralyzing and as counteracting physical activity. Since physical activity has been shown to have positive effects on mood and well-being (Ströhle, 2009), it is clinically important to identify elderly people at risk for becoming sedentary because of depressed mood. However, there is little knowledge of how best to deal with depression-related symptoms that hinder patients from participating in and benefiting from physical activity (Ströhle, 2009). More research is therefore needed in this area.

Focus-group methodology was used, which specifically involves group interaction. To stimulate discussion in a group, it is important that the members have something in common (Ivanoff & Hultberg, 2006). In the current study, the inclusion
criteria of the RCT were the common characteristics. The participants stated that meeting in the focus group was a positive experience. Interaction worked out well, and several different experiences and views of physical activity were discussed. The results of focus-group studies have to be interpreted with caution. When drawing conclusions, the context of the specific discussions has to be considered. For example, we do not know if differently composed groups would have raised similar views. To obtain a broad representation of the target group, we included both men and women with different educational backgrounds, as well as both married and single people. The fact that all focus groups were led by a physical therapist might have implications. That is, the participants may have perceived that they were expected to talk about physical activity in a certain manner. However, the facilitator was very aware of this possibility and encouraged the participants to speak freely. The fact that some of the participants had participated in the intervention group of an RCT might have influenced the results, especially their perceptions of the benefits of physical activity. These results therefore have to be interpreted with caution. Although the participants in the intervention groups had more knowledge about the importance of physical activity, similar discussions about the perceived meaning, motives, and barriers to participation in physical activity emerged among the participants in the control group as among those in the intervention groups.

Another limitation of the study is that the design did not allow us to determine if there were any gender differences. Although the oldest and most vulnerable people are often defined as those 85 years and above (Bravell, Malmberg, & Berg, 2010; Drewes et al., 2011), we chose to include people 80 years of age and above in the current study. This inclusion represents a population-based definition of the oldest people, since about 50% of all people in Sweden die before 80 years of age (National Board of Health and Welfare, 2006). Moreover, the need for help with personal care usually increases after age 80. We do not know, however, if including only the oldest and most vulnerable people—those 85 years of age and above or those 90 years of age and above—would have yielded different results. The study included a healthy group of nondisabled and cognitively intact elderly people. Since the presence of mobility limitations, as well as having pain and one or more chronic diseases, decreases the likelihood of engaging in physical activity (Ashe, Miller, Eng, & Noreau, 2009), the fact that our sample was healthy may have influenced the results, probably even more than the chronological ages of the participants. The health status and age of the participants have to be considered when interpreting the results of the study. Further studies are needed to explore the perceived meaning, importance, and experiences of physical activity, as well as motives and barriers to participation in physical activity, in more chronologically, as well as biologically, aged people.

In summary, physical activity was not seen as a separate activity but rather as a part of activities often rated more important than the physical activity itself. The participants described physical activity as important, as it gave them joie de vivre and the energy to be more active. The fear of disease and dependence was an incentive for the participants to be physically active, although their goal was not to live longer but to be healthy for as long as possible. Remaining independent in daily activities was an important aspect of being healthy. The participants had to adapt all their activities to their perception of their frailty. Our results suggest that when designing physical activity interventions for people age 80 years and above, health care providers should consider including time for social interaction,
as well as the possibility of being outdoors. Moreover, physical exercises that aim to preserve functional ability may be an important part of a physical activity intervention for these people. Furthermore, assessment of physical activity levels of people age 80 years and above should include the physical activity in everyday activities. Health care providers may build their physical activity advice on the motives described in this study. Moreover, they must tackle the barriers to plan effective interventions.

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