Inventory and Analysis of Definitions of Social Participation Found in the Aging Literature: Proposed Taxonomy of Social Activities

Mélanie Levasseur^{a,b,*}, Lucie Richard^{c,d,e,f}, Lise Gauvin^{f,g,h}, and Émilie Raymond^{i,j}

^aResearch Centre on Aging, Health and Social Services Centre, University Institute of Geriatrics of Sherbrooke, Sherbrooke, Québec, Canada

^bSchool of Rehabilitation, Faculty of Medicine and Health Sciences, Université de Sherbrooke, Sherbrooke, Québec, Canada

^cInstitut de recherche en santé publique de l'Université de Montréal, Montréal, Québec, Canada

^dFaculty of Nursing, Université de Montréal, Montréal, Québec, Canada

^eResearch Centre, Institut Universitaire de Gériatrie de Montréal, Montréal, Québec, Canada

^fCRCHUM, Centre de Recherche du Centre Hospitalier de l'Université de Montréal, Montréal, Québec, Canada

^gDepartment of Social and Preventive Medicine, Université de Montréal, Montréal, Québec, Canada

^hLéa-Roback Research Centre on Social Inequalities of Health in Montréal, Université de Montréal, Montréal, Québec, Canada

ⁱSchool of Social Work, McGill University, Montréal, Québec, Canada

^jNational Institute of Public Health, Québec, Canada

Abstract

Social participation is a key determinant of successful and healthy aging and therefore an important emerging intervention goal for health professionals. Despite the interest shown in the concept of social participation over the last decade, there is no agreement on its definition and underlying dimensions. This paper provides an inventory and content analysis of definitions of social participation in older adults. Based on these results, a taxonomy of social activities is proposed. Four databases (Medline, CINAHL, AgeLine and PsycInfo) were searched with relevant keywords (Aging OR Ageing OR Elderly OR Older OR Seniors AND Community involvement/ participation OR Social engagement/involvement/participation) resulting in the identification of 43 definitions. Using content analysis, definitions were deconstructed as a function of who, how, what, where, with whom, when, and why dimensions. Then, using activity analysis, we explored the typical contexts, demands and potential meanings of activities (main dimension). Content analysis showed that social participation definitions (n=43) mostly focused on the person's

*Corresponding author. Université de Sherbrooke, School of rehabilitation, 3001, 12ième Avenue Nord, Sherbrooke, Quebec, Canada J1H 5N4. Melanie.Levasseur@USherbrooke.ca (M. Levasseur).

involvement in activities providing interactions with others in society or the community. Depending on the main goal of these social activities, six proximal to distal levels of involvement of the individual with others were identified: 1) doing an activity in preparation for connecting with others, 2) being with others, 3) interacting with others without doing a specific activity with them, 4) doing an activity with others, 5) helping others, and 6) contributing to society. These levels are discussed in a continuum that can help distinguish social participation (levels 3 through 6) from parallel but different concepts such as participation (levels 1 through 6) and social engagement (levels 5 and 6). This taxonomy might be useful in pinpointing the focus of future investigations and clarifying dimensions specific to social participation.

Keywords

Social participation; Community involvement; Social engagement; Social involvement; Social role; Social activities; Community participation; Social interaction; Older adults

Introduction

Social participation is an important modifiable health determinant and a key outcome measure as well as a common emerging intervention goal of health professionals. Mortality (Berkman, 1995), morbidity (Berkman, Glass, Brissette, & Seeman, 2000), and quality of life (Levasseur, Desrosiers, & St-Cyr Tribble, 2008) have all been shown to be associated with social participation. Enhancement of social participation is a key proposal of the World Health Organization's (WHO) policy framework in response to concerns about population aging (WHO, 2002). Social participation is highly valued by older adults and provides fulfilment (Levasseur, St-Cyr Tribble, & Desrosiers, 2009). Moreover, volunteering, which might be viewed as part of social participation, can provide free essential services and create a better community environment (Wuthnow, 1991). Therefore, it is not surprising that social participation has been a key component of many conceptual models of human functioning or successful aging, and the focus of a substantial amount of research.

Contributions to social participation research by investigators in the field of gerontology have been described as very rich (e.g. Dijkers, 2008). Social participation of older adults has been the subject of theorizing (McPherson, 2004) and the focus of a considerable number of empirical studies. Since older adults in particular spend less time in structured employment activities and thus have more time to participate in other activities, their social participation might differ from that of younger adults. Although the volunteer rate has been shown to be lower among older people, older volunteers offer more time than younger volunteers (Statistics Canada, 2009). Even if current trends in socioeconomic (Erlinghen & Hank, 2006) and health disparities (Boneham & Sixsmith, 2006) have a major impact on opportunities for social participation, older adults' plans for retirement are more diverse than ever (Lesemann, 2007).

Despite the interest in social participation, there is no agreement around a common definition. In fact, the fields of public health and rehabilitation seem to have different ways of defining social participation. Moreover, many similar concepts such as participation, social engagement, social connectedness, social capital, social support, social network,

social integration, and community involvement have sometimes been used interchangeably with social participation. The lack of consensus around a definition of social participation has important consequences: communication difficulties between those using the concept, problems in the development and selection of instruments to measure social participation (Levasseur, Desrosiers, & St-Cyr Tribble, 2007), and blurred or incomplete social policy efforts. Specifically for clinicians, problems could result from inconsistent analyses of social participation situations followed by incomplete or inappropriate interventions. For researchers, another important consequence of the lack of consensus around a definition is the difficulty in comparing results stemming from a variety of conceptualizations (theoretical organization of a concept) and measurement scales (Field & Jette, 2007).

In this paper we provide an inventory and content analysis of definitions of social participation in older adults. To achieve this goal, we examined materials from the fields that usually address social participation (public health, rehabilitation, and gerontology) as well as literature on psychology, sociology, and social work. The inventory was restricted, although not exclusively, to papers on older adults. To contribute to the debate over the conceptualization of social participation, a taxonomy of social activities (see explanations below) was also proposed. A taxonomy is a clear and consistent system that allows differentiation between the levels of a concept (Polatajko, Backman, Baptiste, Davis, Eftekhari, Harvey et al., 2007) such as social participation. It presents a hierarchical ordering of related concepts that enable their specification and placement in relation to each other (Kratwohl, Bloom, & Masia, 1964).

Method

We retrieved papers published between January 1980 and February 2009 in four databases (Medline, CINAHL, AgeLine, and PsycInfo) using keywords: Aging OR Ageing OR Elderly OR Older OR Seniors AND Community involvement OR Community participation OR Social engagement OR Social involvement OR Social participation. Papers were excluded if written in a language other than English or French and if they focused on narrower concepts (e.g. exclusively on participation in a senior center or volunteering). Inclusion criteria were: 1) reporting an empirical study, a review, or a conceptual paper and 2) providing a definition of social participation. For the sake of parsimony, the definitions chosen represent an original, i.e. not referring to another source, statement of the meaning or description of the target concept. The title and, when available, the abstract were reviewed for all the papers retrieved through electronic searches. Bibliographies, personal reference files, lists of references, and Websites were also searched.

Conceptual definitions (not their operationalizations) were extracted from each paper and their content analyzed using seven specific predetermined interrogative pronouns (who, how, what, where, with whom, when, and why). These pronouns were used to both identify critical dimensions of the concept (Polatajko et al., 2007), here social participation, and analyze the underlying activity. To shed light on the content analysis, underlying dimensions, conceptual models of social participation and definitions of associated concepts such as participation and social integration found in the literature were also examined. Content analysis was independently performed by two members of the research team (ML,

ER), with an interrater agreement before discussion of 92% (number of identical codes/total number of codings performed), and validated by the rest of the team. All discrepancies were resolved through discussion. Finally, the five commonest dimensions identified with the interrogative pronouns in the content analysis provided the starting point for the second level of examination (taxonomy) using the activity analysis (Blesedell Crepeau & Boyt Schell, 2009). The activity analysis was performed to classify social activities, i.e. activities in direct interaction with others (Maier & Klumb, 2005). For this analysis, the main focus was on understanding social activities since they proved to be, although arguably, the most frequent, significant and analyzable dimension found in the definitions of social participation. Activity analysis is a rigorous process in which a systematic framework is applied to understand exactly how activities are accomplished by the person. This process is widely used by occupational therapists, mainly in clinics, to explore typical contexts, demands (from the physical and social environments, the sequence and timing, and the required actions), and potential meanings that can be ascribed to an activity (Blesedell Crepeau & Boyt Schell, 2009). Activity analysis has been used previously in a similar conceptual exercise to clarify the concept of human occupation (Polatajko et al., 2007).

Results

Of the 246 papers retrieved through the electronic search, 92 did not meet the inclusion criteria. Thirty-two others were added by the extended search strategies. Of the resulting 186 papers, we excluded 76 (41%) papers since they did not provide a definition of social participation and 67 (36%) others because they referred to another source (did not provide an original definition). Forty-three original definitions, seven of which came from extra sources (not electronic databases), were thus extracted and content-analyzed (Table 1). Year of publication of the papers with an original definition ranged from 1981 to 2009. Of these, almost three quarters (n=31; 72.1%) were published after 2000, with the most productive years being 2002, 2005, and 2006 (n=4, 5 and 6 respectively). About one third (n=14) came from the field of public health, almost one fifth (n=8) from rehabilitation, and approximately one quarter (n=11) from gerontology. Only a limited number (<7% each) of the definitions came from psychology, sociology, social work and education literature. The majority of the papers specifically concerned older adults (n=27; 62.8%) and used the term social participation (n=23; 53.5%) or social engagement (n=13; 30.2%). Papers from the rehabilitation literature referred to the terms social participation or community participation, which are sometimes used interchangeably, but not to social engagement. The latter was used more recently and almost always (12 out of 13 definitions; 92.3%) in papers related to older adults.

Overall, a majority (n=30; 69.8%) of the papers with an original definition reported empirical results, mostly from quantitative cross-sectional (n=15; 34.9%) or longitudinal (n=13; 30.2%) studies. Less than one third (n=13) were drawn from papers of a more conceptual nature, with the majority from a review, textbook, or dictionary.

Definitions

Of the seven interrogative pronouns used to deconstruct the definitions, dimensions related to four (who, how, what and where) were found in the majority of the definitions (Table 2). Dimensions concerning two others (with whom and why) were present in more than two fifths of the definitions. Finally, the dimensions related to the interrogative pronoun *when* were found less frequently (n=10; 23.3%). Overall, definitions mostly focused on the person's (who) involvement (how) in activities that provided interactions (what) with others (with whom) in society or the community (where). Below is a detailed description of the dimensions found in the definitions for each interrogative pronoun.

Who – Depending on an individual or populational perspective, social participation involves either a person or people (Table 2).

How – The term engagement was distinguished from involvement since it is stronger and relates to a guarantee or commitment to do something. Involvement is defined as to take part and included participation, connection, contribution, or integration of the person. Performance focused on the objective outcome and was more frequently cited in papers from rehabilitation but rarely from gerontology.

What – References to social activities (n=20; 46.5%) and interactions (n=22; 51.1%) were predominantly found in the definitions. Social activities were seldom cited in rehabilitation. Productive and community activities were sometimes the focus of the definition, especially in the gerontology literature.

Where – Individuals can participate in the broadly defined environment (physical or social environment), which included the home as well as society or the community (Table 2). More narrowly and according to most definitions, social participation occurs in the community or society, which is rarely mentioned as a dimension in the gerontology literature, and sometimes in organizations or associations.

With whom – Depending on the authors, participation with others includes family, friends, neighborhood, and society at large, or specifically with a formal group. References to groups or organizations were less frequent in the rehabilitation literature. Although nearly half of the definitions specified a dimension related to the 'with *whom*', only four described how others or groups are involved. Three of these definitions emphasized collaborative work and one stressed that others provided emotional and instrumental social support.

When – According to a few definitions, the person needs to do the activity currently and regularly.

Why – Compared to gerontology and public health, the rehabilitation literature regularly included dimensions related to the pronoun *why* to explain social participation. Someone can participate socially because activities satisfy needs or ensure survival. While allowing the person to accomplish personal, professional, and public goals, social participation also ensures his/her development and contribution to society. Finally, social participation might represent opportunities for meaningful life activities and for developing or maintaining significant relationships and roles, including helping others (Table 2).

Although not associated with the interrogative pronouns mentioned above, other important elements emerged from the content analysis. Social participation can be an objective (observed by someone; based on performance) or a subjective (reported by the person; satisfaction with the experience) outcome and requires the interaction between personal and environmental factors. To some extent, social participation is a process that reflects age, sex, and the sociocultural identity of the person and necessitates adjustment to social and cultural norms. As highlighted by some definitions, social participation can be influenced by political (Young & Glasgow, 1998; Mars et al., 2008), economic (Mendes de Leon et al., 2003) and community contexts. Social participation involves choices by the person, coherent and consistent with his/her identity. Only three definitions (7.0%; data not shown) referred to the cultural aspect of social participation.

Finally and outside the field of gerontology, some differences were identified from the dimensions of the interrogative pronoun *what*. These differences concerned personal care or instrumental activities necessary for survival. Although some definitions emphasized the inclusion of these activities, other definitions specifically excluded them. However, of the five (11.6%) definitions that referred to daily activities, the majority also focused on social activities, roles, or interactions. Another difference found across definitions is the need to have activities that contribute to others or that benefit the community.

Taxonomy of social activities

As mentioned, dimensions (Table 2) related to five of the seven interrogative pronouns found in the definitions of social participation (Table 1) were useful in exploring social activities (what) according to two main elements: 1) levels of involvement (how) of the individual (who) with others (with whom), and 2) goals of these activities (why). The two elements used to explore social activities were chosen based on the commonest dimensions identified in the content analysis and their helpfulness in differentiating between social activities. As they did not help to discriminate between social activities, dimensions concerning two of the interrogative pronouns (where and when) were not used when developing the taxonomy. Indeed, the same activities can sometimes be carried out in different environments (home, neighborhood, community center, etc.) and at different times of the day or frequencies. The taxonomy has, along a continuum, six proximal to distal levels of involvement of the individual with others in social activities having different goals (Figure 1). As mentioned, these levels were mainly differentiated by examining: i) individual proximity of involvement with others (level 1: alone, level 2: in parallel, levels 3 to 6: in interaction), and ii) goals of the activity (levels 1 and 2: basic needs oriented, level 3: socially oriented, level 4: task oriented, level 5: oriented toward helping others, and level 6: society oriented). Activities can be performed for oneself (levels 1 and 2), with others (levels 4 and 5) or for others (levels 5 and 6). The levels also include the typical context where activities are performed but, as mentioned, these were not helpful in discriminating across levels.

The first level (Figure 1) involves all daily activities that an individual normally does alone in preparation for other activities that will connect him/her with others. These activities are basic and survival activities such as eating and dressing or can be more complex activities such as preparing meals (includes both activities of daily living and instrumental activities of

daily living). Solitary activities such as listening to the radio and watching TV are also included in this level. While listening to the radio or watching TV, the person informs himself/herself about what is going on in society, a common way to initiate conversation with others. Unlike in the following levels, the person usually does the first level activities alone and in his/her home.

The second level also includes activities where the individual is not directly in contact with others but others are around. One example is when the individual is walking around the neighbourhood. Nowadays, new technology makes activities without contact possible: one can buy tickets online (Internet) and go alone to the cinema, execute financial transactions or shop for groceries without the services of a cashier, etc. Most of these activities take place in the community.

In the third level, the individual is in social contact with others, in person or through the Internet, but does not do a specific activity with them. For example, when shopping, the individual interacts with others to find what he/she wants or to pay for merchandise.

In the fourth level, the individual collaborates with others to perform an activity, reach a common goal (Figure 1). Examples include most recreational activities like tennis or shuffleboard. Level three and four social activities include but are not restricted to social roles at a specific time or someone's personal situation (e.g. being a parent).

The fifth level includes activities where the individual helps others, such as being a caregiver or volunteer. A person or group of persons being helped can be identified. Finally, in the sixth level, the individual contributes more broadly to society (civic activities), for example by being involved in political parties and organizations. Contrary to the previous level, these contributions are seldom made solely by one individual and can potentially be beneficial to many persons, i.e. not intend to help specifically one person or a group of persons at the time, and interaction occurs with the community or society.

Discussion

This paper provides an inventory and content analysis of 43 definitions of social participation from a broad array of disciplinary traditions. The content analysis of the original definitions found that social participation mostly focused on the person's involvement in activities that provide interaction with others in society or the community. With the focus on critical components (the interaction of the individual with others in social activities having different goals), a taxonomy comprising six levels was developed. By providing a clear and consistent hierarchical ordering system that allows differentiation between the levels of social activities, the taxonomy makes an innovative contribution to the debate over the conceptualization of social participation. The taxonomy enables specification and placement of related concepts, and might make it easier to compare research results by allowing studies to be classified on the basis of the definition, operationalization, or intervention aimed at improving or maintaining social participation.

Trends from disciplinary traditions

Differences were identified between two major fields providing definitions of social participation. On the one hand, the rehabilitation field mainly uses the concept of social participation or community participation, which are sometimes used interchangeably, but not social engagement. Specifically linked to its expertise, the rehabilitation field more frequently focuses on performance, and seldom refers to social activities and to groups or organizations. On the other hand, the field of gerontology almost exclusively cites social engagement. It rarely focuses directly on performance, but sometimes focuses on productive and community activities. Moreover, the field of gerontology infrequently mentions that social participation occurs in the community or society. Although such differences are interesting and might reflect disciplinary roots such as the importance of performance for the field of rehabilitation, generalizations regarding the vision of one field must be viewed with caution. Indeed, the results are based on only a small number of original definitions (8 from rehabilitation and 11 from gerontology), which do not necessarily purport to represent the visions or all definitions present in the field. Nevertheless, differences help to enrich the vision of social participation, which can consider both the performance of the person and his/her engagement in social activities.

Involvement of the person and social activities and interactions as distinctive features of the definitions

First, the dimension ‘involvement’ is the one most frequently found in the definitions of social participation. According to these definitions, involvement of the person is a critical element of social participation. As social activities and interactions are for the most part based on the volition of the individual to participate, a minimal level of involvement of the person is required. Indeed, if the person is alone or with others but in parallel, social activities or interactions are not possible. Nevertheless, involvement of the person in social activities and interactions can be seen on a continuum from relatively passive to very active. A different perspective comes from the ‘performance’ dimension. Based on almost one third of the definitions, mainly from the field of rehabilitation, the accomplishment of activities is the focus of social participation. Accordingly, the level of performance of the person can be quantified as accomplished with or without 1) difficulty and 2) human or technical assistance. This focus does not mean, however, that the person is not involved, but the emphasis is on an objective measurable outcome.

Second, the main dimensions of the interrogative pronoun *what* found in the majority of the definitions of social participation were social activities and interactions. According to these definitions, social activities and interactions are essential elements of social participation. Although not all the definitions specified that social participation required contact with others, further analyses reveal that all but one definition (Glass & Balfour, 2003) either stressed the dimensions or underlying sub-dimensions of social activities, social roles, social interaction, community or society, or others. This is consistent with previous work on the conceptualization of social participation (Larivière, 2008; Mars et al., 2008; Raymond, Gagné, Sévigny, & Tourigny, 2008) and conceptual models (Fougeyrollas et al., 1998; Glass & Balfour, 2003). For example, according to the Disability Creation Process model (Fougeyrollas et al., 1998), social participation includes activities and roles which result

from the interaction of individual factors (e.g., personal characteristics, organic systems, and capabilities) with the physical and social environment.

Nevertheless, some definitions specifically focused on productive (including work and volunteering), community or recreational activities. Although these activities can usually be included under social activities, focusing on social activities and interaction can be seen as a narrower view of social participation. Indeed, this focus on social activities can mask the importance of the productive, meaningful and recreational dimensions of social participation. Finally, the majority of the definitions did not explicitly specify how others should be involved or refer to the cultural aspect of social participation. Lack of emphasis on the cultural significance might be explained by the fact that most definitions specifically refer to the community or society, which is a component of the wider environmental context linked to cultural aspects.

Social activities are, by definition, carried out with others (interaction between the person and the social environment), which might explain the lack of explicit references to the environment in some definitions. Moreover, nowadays, being in direct contact with others does not necessarily mean being in the same physical environment and can be achieved through other forms of communications such as chatting online. The environment can be a virtual space (Internet, videoconference, etc.), a friend's house, or a community center. Nevertheless, social participation requires being responsive to environmental situations (Glass & Balfour, 2003). Contrary to concepts such as social network or social support, the focus of social participation is on the person's interaction with the environment, not on the environment itself (Fougeyrollas et al., 1998). According to Herzog and colleagues (2002), the most obvious form of social participation is direct interaction with family members, relatives, friends, neighbors, or coworkers. Interactions, a fundamental aspect of social participation (Badley, 2008), are not the result of social support but the consequence of participation in a meaningful social context (Berkman et al., 2000).

Distinctive features of the taxonomy

Our taxonomy reflects the multidimensionality of social participation (Raymond et al., 2008), possible involvement from the micro (personal) to macro (societal) level (Lariviere, 2008), and its links with the ecological model (Green & Kreuter, 2005). Social participation can be thought of as levels of involvement of the individual with others in social activities. Based on the content analysis of the definitions, the taxonomy and according to some authors, the six levels might be hierarchical and help to distinguish social participation (levels 3 through 6) from similar concepts such as participation (levels 1 through 6) and social engagement (levels 5 and 6). That is, the concept of participation is different but includes the concepts of social participation, which excludes levels 1 and 2, and social engagement, which excludes levels 1 through 4. Moreover, the concept of social participation is different, since it encompasses levels 3 and 4, but also includes the concept of social engagement. This representation of the concepts according to the taxonomy has the advantage of clearly highlighting links between the concepts and suggests how they relate to each other. Indeed, the taxonomy makes it possible to differentiate between definitions of social participation based on individual proximity of involvement with others (level 1: alone,

level 2: in parallel, levels 3 to 6: in interaction), and goals of the activity (levels 1 and 2: basic needs oriented, level 3: socially oriented, level 4: task oriented, level 5: oriented toward helping others, and level 6: society oriented). These activities can be performed for oneself (levels 1 and 2), with others (levels 4 and 5) or for others (levels 5 and 6). Broader concepts such as those including levels 1 through 6 are however harder to operationalize and their associations with other concepts might be more difficult to verify (i.e. might mask associations between smaller concepts). Consequently, it is now generally agreed that daily and social activities must be measured separately.

Several authors (e.g. Badley, 2008) point to the difference between social participation and participation, although no consensus exists in the literature. The difference is seen that activities specific to participation (e.g. feeding, washing, dressing, etc.) are daily activities that must be done before social participation (and not included under the latter). Terminology attributed to levels 1 through 6 is consistent with ICF definition of participation, i.e. involvement of the person in life situations, which includes the following nine domains: 1) learning and applying knowledge, 2) general tasks and demands, 3) communication, 4) mobility, 5) self-care, 6) domestic life, 7) interpersonal interactions and relationships, 8) major life areas, and 9) community, social, and civic life. Although these specific activities are usually categorized as less complex than social activities, it does not mean that an individual who needs technical or human help to accomplish his/her daily activities cannot participate socially. As emphasized by the ICF (WHO, 2001), health problems, impairment or activity limitations do not necessarily lead to restrictions in participation. Moreover, as only a small proportion of the definitions of social participation emphasized the inclusion of daily activities and other definitions specifically excluded them, the debate on the topic must continue. The origin of this debate lies in differences between the fields providing a variety of definitions of social participation.

According to Mars and colleagues (2008), for social participation, the individual must be involved in an activity and be in contact with other. These activities are performed primarily for their own sake and cannot, therefore, be delegated to a third party without losing the benefit (Maier & Klumb, 2005). Our taxonomy shares similarities with the results of authors or groups that specifically worked on the conceptualization of social participation. From the study of Mars and colleagues (2008), participants perceived social participation as a positive experience having one or more of the following three dimensions: social contact, contributing resources to society, or receiving resources from society. Raymond, Gagné, Sévigny, and Tourigny (2008) identified four types of definition of social participation in the literature: daily living functioning, social interactions, social networking, and formal involvement. Our third and fourth levels share similarities with social interactions (Raymond et al., 2008) and receiving resources from society (Mars et al., 2008). Even though social integration (Berkman, 1995) and social networking (Raymond et al., 2008) also partially refer to our third through fifth levels, they can be seen as an outcome of social participation rather than a particular type or level.

Our fifth and the sixth levels are included under the concept of social participation but specifically encompass the conceptualization of social engagement, where social activities are often not obligatory and require active and meaningful engagement. Charpentier and

Quénart (2007) also differentiate between two kinds of engagement: proximity (social participation) and social engagements. Accordingly, while social participation involves less formal engagement with friends and family, social engagement necessarily involves a desire for social change or to be heard to affect community choices. By volunteering and being involved in some social organizations, some people contribute to making the community a better place to live, and have a direct or indirect impact on others' well-being.

Finally, the taxonomy focused on broader social activities which are, contrary to specific activities such as employment or education, relevant for the majority of older adults. Because of this broader focus, the taxonomy could be applicable to a wider population of adults, who also have various levels of involvement with others in social activities having different goals. Moreover, the taxonomy may also complement human functioning conceptual models (Fougeyrollas et al., 1998; Verbrugge & Jette, 1994; WHO, 2001). Indeed, the taxonomy allows detailing of the interaction of the person with his/her social environment (levels of involvement of the person with others), which is a central component of these models.

Strengths and limitations

This study carefully reviewed a large number of original definitions of social participation and used a rigorous and innovative procedure, involving at least two coders, to analyze their content. It considered important concepts such as community involvement/participation and social engagement/involvement/participation. However, the electronic search did not specifically include other potentially interesting terms such as participation, civic/societal participation, social activity/contact, handicap, disability, occupation, and social integration/involvement. Also, time and budget constraints prevented the inclusion of papers written in a language other than English or French. Among the interrogative pronouns used to deconstruct the definitions, the content of the *why* was the most complex to decompose: the meaningfulness of an activity might sometimes be part of the description of an activity and not always an explanation for social participation. Some definitions found might be implicit, serve the main purpose of being consistent with the operationalization of the concept (measurement tool) without considering what the concept involves in detail, and only include a limited number of dimensions. Moreover, although they might reflect evolution in the definitions or different perspectives in the group, opinions from two active groups of authors (Glass, Balfour, Berkman, Mendes de Leon & Bassuk; and Lindstrom, Hanson & Ostergren) might be overrepresented in the analysis. Finally, the taxonomy focused specifically on the commonest activities found in the definitions, social activities, and not on productive, community or recreational activities. Although these latter activities are often included under social activities, specific dimensions related to these and not to social activities might be underrepresented in the taxonomy.

Conclusion

This paper provides interesting insights into how social participation and related concepts are defined in the literature. According to the results of this analysis, social participation can be defined as a person's involvement in activities that provide interaction with others in

society or the community. The majority of the definition maintain that to participate socially the individual must specifically be involved with others. This synthesis of the definitions found in the literature from various disciplinary fields covers all the essential dimensions. However, the synthesis of the definitions does not purport to 1) represent the vision from all disciplinary fields, 2) distinguish social participation from similar concepts, or 3) describe these dimensions in sufficient detail as is required for such complex human phenomena. For example, it does not specify how others should be involved. Nevertheless, this synthesis is a meeting of disciplinary trends and a good starting point for further discussion. Future work should continue to deepen the conceptualization of social participation according to the different social representations resulting from the perspectives of multiple fields.

Six distal to proximal levels of involvement of the individual with others in social activities having different goals were also identified from the analysis of the literature: 1) doing an activity in preparation for connecting with others, 2) being with others, 3) interacting with others without doing a specific activity with them, 4) doing an activity with others, 5) helping others, and 6) contributing to society. These levels are along a continuum and can help distinguish social participation (levels 3 through 6) from parallel but different concepts such as participation (levels 1 through 6) and social engagement (levels 5 and 6). As a way to come closer to achieving a consensus, this paper suggests ideas that can contribute to the debate over the conceptualization of social participation. We recommend that investigators identify a specific definition of social participation when designing and conducting their research. Yet surprisingly, more than one fifth of the papers from all disciplines did not provide any conceptual definition. Positioning of definitions in the taxonomy may be helpful in allowing research findings to be integrated.

References

- Ashman AF, Suttie JN. The social and community involvement of older Australians with intellectual disabilities. *J Intellect Disabil Res.* 1996; 40 (Pt 2):120–129. [PubMed: 8731469]
- Badley EM. Enhancing the conceptual clarity of the activity and participation components of the International Classification of Functioning, Disability, and Health. *Soc Sci Med.* 2008; 66(11): 2335–2345. [PubMed: 18314239]
- Bassuk SS, Glass TA, Berkman LF. Social disengagement and incident cognitive decline in community-dwelling elderly persons. *Ann Intern Med.* 1999; 131(3):165–173. [PubMed: 10428732]
- Bath PA, Deeg DJ. Social engagement and health outcomes among older people: introduction to a special section. *Eur J Ageing.* 2005; 2:24–30. [PubMed: 28794713]
- Beckley MN. Community participation following cerebrovascular accident: impact of the buffering model of social support. *Am J Occup Ther.* 2006; 60(2):129–135. [PubMed: 16596916]
- Berkman LF. The role of social relations in health promotion. *Psychosom Med.* 1995; 57(3):245–254. [PubMed: 7652125]
- Berkman LF, Glass T, Brissette I, Seeman TE. From social integration to health: Durkheim in the new millennium. *Soc Sci Med.* 2000; 51(6):843–857. [PubMed: 10972429]
- Blesedell Crepeau, E., Boyt Schell, BA. Analyzing occupations and activity. In: Blesedell Crepeau, E.Cohn, ES., Boyt Schell, BA., editors. *Willard & Spackman's Occupational Therapy*. Philadelphia: Lippincott Williams & Wilkins; 2009. p. 359-374.
- Boneham MA, Sixsmith JA. The voices of older women in a disadvantaged community: issues of health and social capital. *Soc Sci Med.* 2006; 62(2):269–279. [PubMed: 16039027]

- Bukov A, Maas I, Lampert T. Social participation in very old age: cross-sectional and longitudinal findings from BASE. Berlin Aging Study. *J Gerontol B Psychol Sci Soc Sci*. 2002; 57(6):P510–517. [PubMed: 12426433]
- Centers for Disease Control and Prevention. Principles of Community Engagement. Atlanta, GA: Public Health Practice Program Office; 1997.
- Charpentier, M., Quéniart, A., editors. Pas de retraite pour l'engagement citoyen. Québec: Presse de l'Université du Québec; 2007.
- Dalemans RJP, De Witte LP, Wade DT, Van den Heuvel WJA. A description of social participation in working-age persons with aphasia: A review of the literature. *Aphasiology*. 2008; 22(10):1071–1091.
- Del Bono, E., Sala, E., Hancock, R., Gunnell, C., Parisi, L. A gendered review and secondary analysis of the data. Essex, UK: Institute for Social and Economic Research; 2007. Gender, older people and social exclusion.
- Dijkers, M. Issues in the conceptualization and measurement of participation: an overview. International Symposium on Measurement of Participation in Rehabilitation Research; Toronto, Ontario. 2008.
- Dijkers MP, Yavuzer G, Ergin S, Weitzenkamp D, Whiteneck GG. A tale of two countries: environmental impacts on social participation after spinal cord injury. *Spinal Cord*. 2002; 40(7): 351–362. [PubMed: 12080463]
- Ellaway A, Macintyre S. Is social participation associated with cardiovascular disease risk factors? *Soc Sci Med*. 2007; 64(7):1384–1391. [PubMed: 17196313]
- Erlinghen M, Hank K. The participation of older Europeans in volunteer work. *Ageing and Society*. 2006; 26:567–584.
- Field, MJ., Jette, AM. Definition and monitoring of disability. In: Field, MJ., Jette, AM., editors. The future of disability in America. Washington, DC: The National Academies Press; 2007. p. 35-64.
- Fougeyrollas P, Noreau L, Bergeron H, Cloutier R, Dion SA, St-Michel G. Social consequences of long term impairments and disabilities: Conceptual approach and assessment of handicap. *Intern J Rehab Res*. 1998; 21(2):127–141.
- Glass, TA., Balfour, JL. Neighborhoods, aging, and functional limitations. In: Kawachi, I., Berkman, LF., editors. Neighborhoods and health. New York: Oxford University Press; 2003. p. 303-334.
- Glass TA, De Leon CF, Bassuk SS, Berkman LF. Social engagement and depressive symptoms in late life: longitudinal findings. *J Aging Health*. 2006; 18(4):604–628. [PubMed: 16835392]
- Gottlieb, H. Introduction to Community Engagement. Community-Driven Institute Library; 2006.
- Green, LW., Kreuter, MW. Health promotion planning: An educational and environmental approach. Palo Alto, CA: Mayfield Publishing/McGraw-Hill; 2005.
- Herzog AR, Ofstedal MB, Wheeler LM. Social engagement and its relationship to health. *Clin Geriatr Med*. 2002; 18(3):593–609. [PubMed: 12424874]
- Hsu HC. Does social participation by the elderly reduce mortality and cognitive impairment? *Aging Ment Health*. 2007; 11(6):699–707. [PubMed: 18074257]
- Hyypä M, Mäki J. Social participation and health in a community rich in stock of social capital. *Health Educ Res*. 2003; 18(6):770–779. [PubMed: 14654508]
- International Index and Dictionary of Rehabilitation and Social Integration. Definition of the term: social participation. 2009.
- Jang Y, Mortimer JA, Haley WE, Graves ARB. Role of social engagement in life satisfaction: its significance among older individuals with disease and disability. *J Appl Gerontol*. 2004; 23(3): 266–278.
- Jason LA. Benefits and challenges of generating community participation. *Prof Psychol: Res Practice*. 2006; 37(2):132–139.
- Keysor JJ, Jette AM, Coster W, Bettger JP, Haley SM. Association of environmental factors with levels of home and community participation in an adult rehabilitation cohort. *Arch Phys Med Rehabil*. 2006; 87(12):1566–1575. [PubMed: 17141635]
- Krathwohl, DR., Bloom, BS., Masia, BB. Handbook II - Affective domain. New York: Holt, Rinehart & Winston; 1964. Taxonomy of educational objectives: The classification of educational goals.

- Larivière N. Analyse du concept de la participation sociale: définitions, cas d'illustration, dimensions de l'activité et indicateurs. *CJOT*. 2008; 75(2):114–127. [PubMed: 18510255]
- Lesemann, F. La fin de la retraite telle qu'on la connaît?. In: Charpentier, M., Quéniart, A., editors. *Pas de retraite pour l'engagement citoyen*. Sainte-Foy, Québec: Presse de l'Université du Québec; 2007. p. 25-39.
- Levasseur M, Desrosiers J, St-Cyr Tribble D. Conceptual comparison of the Disability Creation Process and International Classification of Functioning, Disability and Health models. *CJOT*. 2007; 74(ICF special issue):233–242. [PubMed: 17844978]
- Levasseur M, Desrosiers J, St-Cyr Tribble D. Subjective quality-of-life predictors for older adults with physical disabilities. *Am J Phys Med Rehabil*. 2008; 87(10):830–841. [PubMed: 18806510]
- Levasseur M, St-Cyr Tribble D, Desrosiers J. Meaning of quality of life for older adults: importance of human functioning components. *Arch Gerontol Geriatr*. 2009; 49(2):e91–100. [PubMed: 18977542]
- Lindstrom M. Ethnic differences in social participation and social capital in Malmö, Sweden: a population-based study. *Soc Sci Med*. 2005; 60(7):1527–1546. [PubMed: 15652685]
- Lindstrom M, Hanson BS, Ostergren PO. Socioeconomic differences in leisure-time physical activity: the role of social participation and social capital in shaping health related behaviour. *Soc Sci Med*. 2001; 52(3):441–451. [PubMed: 11330778]
- Lovden M, Ghisletta P, Lindenberger U. Social participation attenuates decline in perceptual speed in old and very old age. *Psychol Aging*. 2005; 20(3):423–434. [PubMed: 16248702]
- Maier H, Klumb PL. Social participation and survival at older ages: is the effect driven by activity content or context. *Eur J Ageing*. 2005; 2:31–39. [PubMed: 28794714]
- Mars GM, Kempen GI, Mesters I, Proot IM, Van Eijk JT. Characteristics of social participation as defined by older adults with a chronic physical illness. *Disabil Rehabil*. 2008; 30(17):1298–1308. [PubMed: 17882727]
- McBride AM. Civic Engagement, Older Adults, and Inclusion. *Generations*. 2006; 30(4):66–71.
- McPherson, BD. *Aging as a social process: Canadian perspectives*. 4. Don Mills, ON: Oxford University Press; 2004.
- Mendes de Leon C. Social engagement and successful aging. *Eur J Ageing*. 2005; 2(1):64–66. [PubMed: 28794718]
- Mendes de Leon CF, Glass TA, Berkman LF. Social engagement and disability in a community population of older adults: the New Haven EPESE. *Am J Epidemiol*. 2003; 157(7):633–642. [PubMed: 12672683]
- Morgan K, Dallosso HM, Arie T, Byrne EJ, Jones R, Waite J. Mental health and psychological well-being among the old and the very old living at home. *Br J Psychiatry*. 1987; 150:801–807. [PubMed: 3651735]
- Pohjola P. Social participation and life-style: a longitudinal and cohort study. *J Cross-Cultural Gerontol*. 1991; 6(1):109–117.
- Polatajko, H., Backman, CL., Baptiste, S., Davis, J., Eftekhari, P., Harvey, A., et al. Human occupation in context. In: Townsend, E., Polatajko, H., editors. *Enabling Occupation II: Advancing an Occupational Therapy Vision for Health, Well-being, & Justice through Occupation*. Ottawa, Ontario: CAOT publication ACE; 2007.
- Raymond, É., Gagné, D., Sévigny, A., Tourigny, A. *Réflexion critique appuyée sur une analyse documentaire*. Québec, QC: DSP de l'ASSS de la Capitale-Nationale, INSPQ, Centre d'excellence sur le vieillissement de Québec et Institut sur le vieillissement et la participation sociale des aînés de l'Université Laval; 2008. La participation sociale des aînés dans une perspective de vieillissement en santé; p. 111
- Smits CHM, Van Rijsselt RJT, Jonker C, Deeg DJH. Social participation and cognitive functioning in older adults. *Intern J Geriatric Psychiatry*. 1995; 10:325–331.
- Sourina, JC. *Dictionnaire des personnes âgées, de la retraite et du vieillissement*. Paris: Franterm; 1991.
- Statistics Canada. *Caring Canadians, Involved Canadians: Highlights from the Canada Survey of Giving, Volunteering and Participating*. Ottawa, ON: Statistics Canada; 2009.

- Thompson E, Whearty P. Older men's social participation: the importance of masculinity ideology. *J Men's Studies*. 2004; 13(1):5–24.
- Utz RL, Carr D, Nesse R, Wortman CB. The effect of widowhood on older adults' social participation: an evaluation of activity, disengagement, and continuity theories. *Gerontologist*. 2002; 42(4):522–533. [PubMed: 12145380]
- Verbrugge LM, Jette AM. The disablement process. *Soc Sci Med*. 1994; 38(1):1–14. [PubMed: 8146699]
- WHO. International Classification of Functioning, Disability and Health. Geneva, Switzerland: WHO; 2001.
- WHO. Active Ageing: A Policy Framework. Madrid, Spain: 2002.
- Wright LK. Mental health in older spouses: the dynamic interplay of resources, depression, quality of the marital relationship, and social participation. *Issues Ment Health Nurs*. 1990; 11(1):49–70. [PubMed: 2298561]
- Wuthnow, R. Acts of compassion: Caring for others and helping ourselves. Princeton, N.J: Princeton University Press; 1991.
- Young F, Glasgow N. Voluntary social participation and health. *Res Aging*. 1998; 20(3):339–362.
- Zay, N. Dictionnaire-manuel de gérontologie sociale. Québec, QC: Les Presses de l'Université Laval; 1981.
- Zimmerman S, Scott AC, Park NS, Hall SA, Wetherby MM, Gruber-Baldini AL, et al. Social engagement and its relationship to service provision in residential care and assisted living. *Soc Work Res*. 2003; 27(1):6–18.
- Zunzunegui MV, Kone A, Johri M, Beland F, Wolfson C, Bergman H. Social networks and self-rated health in two French-speaking Canadian community dwelling populations over 65. *Soc Sci Med*. 2004; 58(10):2069–2081. [PubMed: 15020020]

Figure 1.

Proposed taxonomy of social activities based on 1) levels of involvement of the individual with others, and 2) goals of these activities.

Table 1

Definitions of social participation identified through an extensive search of the literature from January 1980 to February 2009 (n=43)

#	Concepts (Reference)	Definitions
1	Community engagement (Centers for Disease Control and Prevention, 1997, p.4)	process of working collaboratively with and through groups of people affiliated by geographic proximity, special interest, or similar situations to address issues affecting the well-being of those people
2	Community engagement (Gottlieb, 2006, p.2)	process of building relationships with community members who will work side-by-side with you as an ongoing partner, in any and every way imaginable, building an army of support for your mission, with the end goal of making the community a better place to live
3	Community participation (Beckley, 2006, p. 130)	individual's ability to participate in his or her community
4	Community participation (Jason, 2006, p.132)	activity involving community members in their work
5	Formal social participation (Young & Glasgow, 1998, p.343)	voluntary activity in the context of a community organization with a name and explicit purpose (club memberships, volunteer work, and political activity)
6	Home and community participation (Keysor, Jette, Coster, Bettger, & Haley, 2006, p.1567)	person's mobility, functioning in work, and other ADLs (community participation); self-care and domestic functioning; financial functioning; social relationships; and communication (social and home participation)
7	Social and community involvement (Ashman & Suttie, 1996, p.120)	involvement of people in community activities and social interactions
8	Social engagement (Zimmerman, Scott, Park, Hall, Wetherby, Gruber-Baldini et al., 2003, p. 7-8)	social activity participation; visit or telephone contact with family and friends
9	Social engagement (Zunzunegui, Kone, Johri, Beland, Wolfson, & Bergman, 2004, p.2070)	community involvement such as belonging to neighbourhood groups, religious groups or non-governmental organizations
10	Social engagement (Glass & Balfour, 2003, p. 313-314)	adaptive behavioural responses resulting from the balance between personal competencies and environmental press (degree of person-environment fit may alter the probability that adaptive or maladaptive behavioural responses such as social engagement versus isolation will be chosen); lead to health and functional outcomes
11	Social engagement (Herzog, Ofstedal, & Wheeler, 2002, p.593-594)	person's myriad of activities performed within the context of their social environment; some [...] activities [...] chosen to promote single tasks and overarching goals or to maintain a current valued state (e.g. sing in the church choir or sign up for a senior citizens' outing); [...] other activities such as personal care and housework [...] serve the goal of independence and survival; [...] the most obvious form of social engagement is the direct interaction with family members, relatives, friends, neighbors, or coworkers and the building and maintenance of social relationships
12	Social engagement (Berkman et al., 2000, p. 849)	enactment of potential ties in real life activity; getting together with friends, attending social functions, participating in occupational or social roles, group recreation, church attendance; [...] social roles includ[e] parental, familial, occupational, and community roles, which in turn provide a sense of value, belonging, and attachment to one's community [...] a coherent and consistent sense of identity [...] and] enhanced individual's feeling of attachment
13	Social engagement (Glass, De Leon, Bassuk, & Berkman, 2006, p.606)	performance of meaningful social roles for either leisure or productive activity
14	Social engagement (Bassuk, Glass, & Berkman, 1999, p.165)	maintenance of many social connections and a high level of participation in social activities
15	Social engagement (Jang, Mortimer, Haley, & Graves, 2004, p.267)	interpersonal relationships and participation in social activities; degree of social connectedness
16	Social engagement (McBride, 2006, p.66)	actions that connect individuals to others and that relate to care or development; behaviors in the social sphere include acting as a member of, donating or contributing to, and volunteering for an individual, group, association, or nonprofit organization
17	Social engagement (Mendes de Leon, 2005, p. 64)	participation in social activity; various components of an individual's social behaviour and social structure
18	Social engagement (Morgan, Dallosso, Arie, Byrne, Jones, & Waite, 1987, p.802)	degree to which individual actively engage (e.g. voting, going on holiday) or symbolically (e.g. watching television, listening to the radio) in the social milieu

#	Concepts (Reference)	Definitions
19	Social engagement (Zay, 1981, p.195)	attitude or action of a person aware of belonging to a group and wishing to play a role in it
20	Social engagement (Mendes de Leon, Glass, & Berkman, 2003, p.633–634; 639)	degree of participation in social and productive activity, the latter defined as activity that represents an intrinsic economic value, such as paid employment, volunteer work, or gardening; extent to which persons are meaningfully involved in their social environment
21	Social participation (Del Bono, Sala, Hancock, Gunnell, & Parisi, 2007, p.55)	advantages that come with developing and maintaining a variety of social relationships and involvement in the community. Aspects of social participation include contact with a partner, adult children or other family members, interactions with neighbours and friends, as well as engagement in voluntary work and local leisure and social activities
22	Social participation (Sourina, 1991, p.75)	action of participating in the life of the group or society
23	Social participation (International Index and Dictionary of Rehabilitation and Social Integration, 2009)	action of taking part in group or societal life
24	Social participation (Mars, Kempen, Mesters, Proot, & Van Eijk, 2008, p.1298)	positive experience in 1) social contacts and social activities, 2) work and informal support, 3) cultural activities as well as public events, and 4) politics and media involving social contact; contribution of resources to society or receiving resources from society
25	Social participation (Lindstrom, 2005, p.1528)	civic and social participation within organisations as well as formal and informal social networks which serve to strengthen the norms and values of society and to promote generalised trust and reciprocity between its citizens
26	Social participation (Lindstrom, Hanson, & Ostergren, 2001, p.443; 448)	how actively the person takes part in the activities of formal and informal groups in society (social activities); individual's participation in several social activities within the life of modern society; extent to which citizens involve themselves in their communities
27	Social participation (Utz, Carr, Nesse, & Wortman, 2002, p.523)	social interaction with persons other than a spouse; formal (e.g., meeting attendance, religious participation, and volunteer obligations) and informal (e.g., telephone contact and social interactions with friends) social roles
28	Social participation (Pohjolainen, 1991, p.111–113)	interest in activities (e.g. reading, [...] religious, travelling, going to restaurant, dancing[...] and bingo), membership in various organizations and participation in their work and informal social contacts described as meeting friends at least a few times a week or visiting friends and relatives
29	Social participation (Bukov, Maas, & Lampert, 2002, p.P510)	socially oriented sharing of individual resources; consequences of activities for the social environment
30	Social participation (Lariviere, 2008, p.118)	doing activities that involved an action by the individual and that contributed to others
31	Social participation (Maier & Klumb, 2005, p. 31)	time spent in social interaction as well as time spent in the presence of others (daily social activities)
32	Social participation (Bath & Deeg, 2005, p.24)	involvement in actual activities which have a social element
33	Social participation (Dalemans, De Witte, Wade, & Van den Heuvel, 2008, p.1073)	performance of people in actual activities in social life domains through interaction with others in the context in which they live
34	Social participation (Dijkers, Yavuzer, Ergin, Weitzenkamp, & Whiteneck, 2002, p.351)	accomplishment of all that is needed for living in direct or indirect exchange with others; satisfaction of needs and the accomplishment of personal, professional and public goals in direct and indirect contact with others, in one's immediate family and neighbourhood, and in society at large
35	Social participation (Ellaway & Macintyre, 2007, p.1385)	regular participation in any groups and associations
36	Social participation (Hsu, 2007, p.700)	paid or unpaid work for a family business or farm, volunteer work (participating in productive activities) and other social group participation (regularly)
37	Social participation (Hyypä & Mäki, 2003, p. 773)	civic and social activities; social engagement and participation in voluntary associations
38	Social participation (Lovden, Ghisletta, & Lindenberger, 2005, p.424)	individual's investment of physical and psychological resources in socially oriented activities of a sharing or instrumental kind; involvement and time invested in instrumental activities beyond personal care activities, leisure activities, social activities, and work
39	Social participation (Fougeyrollas, Noreau, Bergeron, Cloutier, Dion, & St-Michel, 1998, p.130)	accomplishment of daily activities and social roles valued by the person corresponding to his/her age, gender, and sociocultural identity; ensuring survival and development of a person in society throughout his/her life; result of interaction between what belongs to the person and what belongs to the environment

#	Concepts (Reference)	Definitions
40	Social participation (Wright, 1990, p.55)	person's active and/or committed involvement in activities broadly referred to as leisure in the literature but also including such activities as volunteer work and participation in associations or organizations (activities other than employment or housework)
41	Social participation (Smits, Van Rijsselt, Jonker, & Deeg, 1995, p.326)	individual socially active; activities in the context of clubs or organizations (societal participation) or on an individual basis, lacking an organizational setting (sociocultural participation)
42	Social participation (Thompson & Whearty, 2004, p.5–6; 10)	active engagement in society or one's social world; social interaction a person has with others who also provide them with specific types of emotional and instrumental social support
43	Societal involvement (Badley, 2008, p.2338)	individual in the context of societally defined and acknowledged areas of human endeavour; social role

Table 2

Synthesis of the content analysis of the 43 original definitions of social participation found in the literature

Interrogative pronouns	Dimensions [reference # of definitions provided in Table 1]	Frequency (%)	
		By dimensions	Total*
Who	1. People ^{4, 7, 16, 20, 26, 33}	6 (14.0)	23 (53.5)
	1.1 Person ^{3, 4, 6, 10–12, 17–19, 26, 29, 30, 34, 38–43}	19 (44.2)	
How	2. Involvement ^{1, 3, 4, 7–9, 12, 14–17, 19–23, 25–27, 31, 32, 35–38, 40, 41}	27 (62.8)	33 (76.7)
	2.1 Engagement ^{18, 21, 37, 42}	4 (9.3)	
	3. Performance ^{3, 6, 11–13, 16, 19, 22, 23, 30, 33, 34, 39}	13 (30.2)	
What	4. Activities ^{4, 11, 12, 28–30}	6 (13.9)	38 (88.4)
	4.1 Social activities ^{5, 8, 12, 14–17, 20–26, 28, 31–33, 37, 38}	20 (46.5)	
	4.1.1 Productive activities ^{13, 20, 36}	3 (7.0)	
	4.1.1.1 Work ^{4, 6, 20, 24, 28, 36, 38}	7 (16.3)	
	4.1.1.2 Voluntary activities ^{5, 16, 20, 21, 27, 36, 40}	7 (16.3)	
	4.1.2 Community activities ^{5, 7, 11, 12, 16, 24, 27, 28, 37, 40, 41}	11 (25.6)	
	4.2 Recreational activities ^{12, 13, 18, 20, 21, 28, 38, 40}	8 (18.6)	
	4.3 Daily activities ^{6, 11, 18, 39, 41}	5 (11.6)	
	4.4 Instrumental activities ^{6, 11, 38}	3 (7.0)	
	5. Social roles ^{12, 13, 16, 19, 27, 39, 43}	7 (16.3)	
	5.1 Responsibilities ^{18, 27}	2 (4.7)	
	6. Social interactions ^{2, 6–8, 11, 12, 14–17, 19, 21, 24, 25, 27–29, 31, 33, 34, 38, 42}	22 (51.1)	
	7. Environment ¹⁰	1 (2.3)	
Where	7.1 Community or society ^{1, 3, 9, 11, 12, 16, 18–21, 25, 26, 29, 33, 34, 36, 39, 41–43}	20 (46.5)	26 (60.5)
	7.1.1 Organizations ^{5, 9, 19, 25, 28, 35, 37, 40, 41}	9 (20.9)	
With whom	8. Others ^{8, 11, 12, 16, 19, 21, 24–27, 30, 31, 33, 34}	14 (32.6)	21 (48.8)
	8.1 Group ^{1, 5, 9, 16, 17, 19, 22, 23, 25, 26, 35, 36}	12 (27.9)	
When	9. Current ^{2, 32, 33}	3 (7.0)	10 (23.3)
	10. Regular ^{11, 14, 21, 28, 35, 36, 39}	7 (16.3)	
Why	11. Satisfaction of needs or survival ^{10–12, 16, 34, 38, 39}	7 (16.3)	19 (44.2)
	12. Development ^{11, 16, 34, 39}	4 (9.3)	
	13. Meaningfulness ^{2, 11–13, 19–21, 24, 25, 28, 39}	11 (25.6)	
	13.1 Contribution ^{16, 24, 25, 38}	4 (9.3)	
	13.1.1 Helping others ^{1, 2, 24, 25, 29, 30, 38}	7 (16.3)	
	13.1.2 Receiving support ^{19, 24, 25, 42}	4 (9.3)	

* The same definition can appear under more than one dimension but only once for the total of each interrogative pronoun