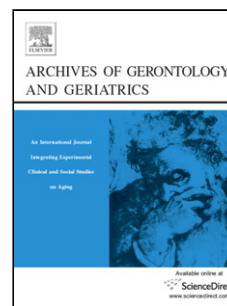


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**TITLE: What do older people understand by mobility-related difficulties?**

**SHORT TITTLE: Mobility-related difficulties in older people**

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**ABSTRACT**

Despite the centrality of the difficulty concept in the study of disability, there has been little research on its significance from the point of view of people with functional limitations. The main objective of this study was to describe what older people understand when asked about difficulty in undertaking mobility activities. As a secondary objective, we considered whether there are any differences depending on the type of activities, according to the International Classification of Functioning (ICF) mobility domains. Methods: Seventeen community-dwelling men and women aged 70 years old or over were interviewed by means of a questionnaire containing 55 items covering the ICF mobility domains. The participants responded to the items while thinking aloud, saying what led them to give a specific answer about their level of difficulty. Inductive content analysis was conducted and categories, subthemes and themes were identified. Results: Causes of difficulty (pathologies, impairments, symptoms) and accommodations (task modifications and use of aids) were the two themes identified; and their importance (and that of the subthemes included) varied across the types of activity. All the participants said that they had no difficulty in at least one task, despite mentioning changes in the way they performed them. Conclusions: Older people's opinions were consistent with theoretical models of disability and with the standard practice of measuring functional limitations by asking about the degree of difficulty; however, the design of these measures needs to be improved in order to detect perceptions of no difficulty in the presence of task modification.

**KEYWORDS:** difficulty, mobility, functional limitation, older people, qualitative study

## 1. Introduction

Difficulty is a central concept in the main disability models, the Disablement Process and International Classification of Functioning, Disability and Health (ICF). The Disablement Process model defines disability as difficulty doing activities in any domain of life (the domains typical for one's age-sex group) due to health or physical functional limitations (Verbrugge & Jette, 1994). Meanwhile, the ICF reserves the term difficulty for defining activity limitations (the difficulties an individual may have in executing activities), and uses the term problems to refer to restrictions on participation (WHO, 2001). Despite the differences in the terms in the two models, there is a clear parallelism between the concepts which they refer to: functional limitations and activity limitations on the one hand, and disability and participation on the other (restrictions) (Jette, 2009).

Difficulty is also a critical concept from the perspective of the measurement of disability and functional limitations. In national disability surveys, the respondents are asked directly about their degree of difficulty in performing certain activities: personal care (activities of daily living [ADLs]) and household management tasks (instrumental ADLs [IADLs]), and about difficulties with basic physical, cognitive, and sensory actions (Verbrugge, Mehta & Wagenfeld-Heintz, 2006). This is, to measure both functional limitations (bending and lifting, descending stairs, walking, etc.) and disability (difficulty performing basic and instrumental activities of daily living). Moreover, in the context of the measurement of patient-based health outcomes, although some of the most widely used self-reporting measures for assessing physical function (which commonly include items referring to I/ADL and functional limitations) are designed in terms of limitations, such as the Physical Function Questionnaire of the

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SF-36 (Haley, McHorney & Ware, 1994), most of the instruments are designed in terms of difficulty (Haley et al., 2002; Haley et al., 2004; Rose, Bjorner, Becker, Fries & Ware, 2008; Simonsick et al., 2001). However, there are no operational definitions of difficulty as a construct, and these instruments do not give the respondents any instructions on how the different levels of difficulty should be understood.

Despite the theoretical and operational centrality of the difficulty concept in the study of disability and physical function, its significance from the point of view of people with functional limitations or disabilities has been explored to a very limited extent in the literature. Porter (2007) identified six themes which a sample of older women thought about when asked about their difficulties in ADL/IADL, which included thinking that difficulty is not the best word to describe it, difficulty varies from time to time, problems with rating difficulty and wondering what difficulty really is. Other studies have reported difficulty in specific activities as one of the reasons why older people consider themselves disabled (Verbrugge et al., 2006), or as the onset of the search for accommodations to perform a task (Fried, Young, Rubin, Bandeen-Roche & WHAS II Collaborative Research Group, 2001; Wolinsky, Miller, Andresen, Malmstrom & Miller, 2005; Lorenz, 2010).

Although the surveys and questionnaires for measuring disability and physical function assume that the construct of difficulty has the same meaning for all population groups, this claim has not been proven (Porter, 2007). Different ideas and attitudes about how to define difficulty, or different expectations regarding their own health may influence the perception of difficulty (Melzer, Lan, Tom, Deeg & Guralnik, 2004; Cornman, Geli, Rodríguez, Goldman & Hurng, 2011). It is also assumed that the difficulty construct is similar for any type of activity, and instruments based on

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difficulty including a wide variety of tasks are used, although there is no literature to support this claim.

The main objective of this study was to describe what older people understand when asked about difficulty when undertaking mobility-related activities. As a secondary objective, we considered whether there are any differences depending on the type of activities, according to the ICF mobility domains (WHO, 2001): walking and moving, changing or maintaining body positions, and carrying, moving and handling objects.

## **2. Materials and methods**

### *2.1. Design and study sample*

The data presented in this article are taken from the initial phase of the creation of a mobility item bank for the older Spanish population. A convenience-consecutive sample of seventeen participants (7 males, 10 females) was selected from individuals aged 70 years old or over who consecutively attended two primary healthcare centres in the Valencian Community (Spain), one of which was in an urban environment (11 participants) and the other in a rural area (6 participants). The exclusion criteria were presentation of cognitive deterioration as assessed by the SPMSQ (Pfeiffer, 1975) or having serious communication problems (e.g. deafness) or blindness.

### *2.2. Questionnaire*

We identified 104 mobility items in the international literature, which were evaluated by a panel of experts as to their relevance and appropriateness to the study population, and their relationship with the indicators and domains of the Mobility

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section in the Activities and Participation component of the ICF (WHO, 2001). Walking and going up and down stairs were considered separately, while travelling using transportation was not included. As a result of this process, 55 items were selected for the interviews and classified into four domains based on ICF mobility indicators: changing and maintaining body position, carrying, lifting and pushing objects, walking and going up and down stairs. The number of items in each of these domains was: 19 referred to changing or maintaining body positions, 7 to carrying, lifting and pushing, 18 to walking and 11 to going up and down stairs. The core question for all the items was: How much difficulty do you have, without any help from someone or something, in...?. This question is similar to that used in other measures of physical function (Haley et al., 2002; Haley et al., 2004).

### *2.3. Data collection*

The data were collected at the primary healthcare centres, but not during the subject's medical appointment. The interviews were face-to-face and followed a semi-structured schedule, with a maximum duration of 60 minutes. The participants were asked to answer each item with 4 response options (no difficulty, some difficulty, much difficulty and unable to do). Previously, the participants were told to respond to each item thinking aloud, mentioning everything that led them to give a particular response. After the participant had chosen a response option, the interviewer asked open questions for the participant to clarify ideas in order to explore what they meant by difficulty. Because this took place when the participant responded that he/she had no difficulty, we also explored the meanings of no difficulty. This could be interesting, because the literature has identified that some people respond that they have no difficulty despite having made changes to the way they carry out activities (Fried, Herdman, Kuhn, Rubin

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& Turano, 1991). The advantage of this type of interview is that all participants are asked the same questions, while they simultaneously allow individual expression and exploration of the issues raised (Adams & Johnson, 1998).

All the participants were given an informed consent form to be returned to the interviewer by their doctor or nurse. All the interviews were audio-recorded.

#### *2.4. Analysis*

After verbatim transcription of the interviews, the data were analyzed using qualitative content analysis. Content analysis is a systematic and objective way of describing and quantifying a phenomenon (Elo & Kyngas, 2008). Inductive or conventional thematic content analysis is appropriate when the existing knowledge of a phenomenon is limited (Hsieh & Shannon, 2005).

The analysis was conducted as follows (Graneheim & Lundman, 2004): the interviews were read through several times by two researchers to obtain a sense of the whole. The two researchers then read the interviews separately once again, highlighting the text fragments (words, phrases or sections) that referred to the participants' mobility difficulties. Both the comments on difficulty and comments which mentioned no difficulty were taken into consideration. The text fragments identified by both researchers were deemed to be meaning units, while the discrepancies were resolved in consensus meetings with a third researcher.

The meaning units were then condensed, and the condensed meaning units were abstracted and labelled with a code. The codes were compared according to similarities and differences, and after being discussed and reviewed by the authors, the final grouping of the codes into categories referring to the manifest content of the interviews



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was agreed. These categories were then defined operationally (Appendix A). After this inductive phase, and by means of an interpretative process in group meetings, the categories were grouped into subthemes and these were grouped into themes, which constitute the latent content or the underlying meaning. MAXQDA 10.0 was used for the content analysis.

Finally, in order to describe the existence of differences depending on the type of activities (according to the ICF mobility domains) within the concept of difficulty, we calculated the relative frequencies of the subthemes and themes identified in each mobility domain (the frequency of appearance of each subtheme and theme in each domain was divided by the number of items in the domain).

### *2.5. Trustworthiness*

Trustworthiness was considered according to the criteria of credibility, dependability, confirmability and transferability (Lincoln & Guba, 1985). The participation of two researchers in identifying the meaning units, consensus meetings between the authors in the coding process, the selection of a sample of older people from different contexts and of different genders, and a comparison of the results obtained with other studies and knowledge were the strategies followed to meet these criteria.

## **3. Results**

1149 meaning units were identified, with a level of agreement between the researchers of 94%. Examples of the meaning units, condensed meaning units and codes are shown in Table 1. Twenty five categories were obtained from the group of coded

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meaning units, which were grouped into seven subthemes: health conditions, fear, loss of physical capacity, changes in the way the task is performed, not normally doing the task, the need to use assistive devices, and needing help from other people. The first three refer to the causes to which people attribute their difficulty, while the other four refer to accommodations that people use in order to cope with their mobility difficulties. These are the main two themes identified (Table 2).

First, we present the results for the two main themes, and make a distinction between those related to the meanings given when the respondents answered that they had some degree of difficulty (a little, some, a lot or unable to do the activity) and when they answered that they had no difficulty. Second, we present these results using the mobility domains of the ICF.

### *3.1. Findings from the interviews*

#### *3.1.1. Theme 1: Causal attributions of the difficulty*

In the health conditions, the respondents mentioned difficulty as a result of various processes, mainly of osteoarticular origin: participant 2 (P2) said that when taking something out of a cupboard "*I can't do it, because my arm lets me down because I have osteoarthritis.*" Pain and discomfort were also identified by the participants as a cause of their mobility difficulties: P5 said that when getting up from a low, soft couch, "*I have quite a lot of difficulty because my legs hurt.*" Overweight, dizziness and balance problems were other health-related conditions that were considered causes of difficulty.

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As regards fear, the respondents said that they had mobility difficulties because of a fear of falling, tripping over or exacerbating their existing health problems. P15 said about walking outside the home that *"I never go out because I'm afraid of falling over"*. For P11 the non-difficulty was *"Doing things without any risk of hurting myself"*.

The perception of loss of capabilities was also identified as a cause of mobility-related difficulties by the participants: P14 said that *"I can't do it because I don't have any strength for anything, it's not like it used to be."*

Almost all the comments made by the respondents on this subject occurred when the respondents expressed some degree of difficulty in performing the activity. When the respondents said that they had no difficulty, the few comments made were related to the presence of an unspecified fear in the absence of difficulty: *"I don't have any (difficulty) but I'm afraid of it"* (P14).

### 3.1.2. Theme 2: Accommodations

Most participants said that they had difficulty performing at least one task because they did it in a different way to the way they had done it previously: P9 said that *"Difficulty is when you can't do something the way you want to or the way you used to."* They also mentioned performing a task gradually or more slowly: P1 said that to go down 4 or 5 steps, *"What I do is to go down more slowly than before"*.

However, some participants understood difficulty as an inability to perform the task, regardless of whether they had changed the way they performed it: P12 stated that *"Having difficulty is not being able to do things. Doing things my way is not having difficulty"*. Using assistive devices, reducing the frequency with which a task is

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performed and requesting help from other people were other strategies for coping with mobility-related difficulties mentioned by the participants.

Almost all the comments made when the respondents expressed no difficulty (in doing a specific activity) were about this theme, accommodations, and within this, mainly concerned with the subtheme changes in the way of doing the task. It should be noted, however, that all the participants said they had no difficulty in at least one activity, despite having referred accommodations. For example, P13 answered that to carry a weight of 4 or 5 kg, such as a shopping bag, *"I leave it on one step, then on another step, and so on, and climb to the top. I look for tricks and I don't have any difficulty."*

### 3.2. Findings from the analysis using the ICF mobility domains

In the first theme, causal attributions of the difficulty, the respondents most frequently mentioned health conditions to describe their difficulty in activities of changing or maintaining body positions and going up and down stairs; fear, and especially fear of falling, was mentioned more to describe the difficulty in the domains of going up and down stairs and walking; and loss of capacity was mentioned with a similar frequency in the activities of the four domains (Figure 1).

In theme 2, in which most of the comments were related to subtheme changes in the way of doing the task, the respondents described changes in the way of doing the activity mainly in the domains of going up and down stairs, and to a lesser extent, changing or maintaining body positions. The use of devices was mentioned most frequently for the activities of walking and going up and down stairs, while help from other people was related primarily to the activities of going up and down stairs and

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changing or maintaining body position. Stopping doing the activity was an accommodation used in a similar but very limited manner for the four domains (Figure 2).

In overall terms, the domains of going up and down stairs, primarily, and changing or maintaining body position, secondarily, were the subject of most comments in both themes; meanwhile, the domains of walking and carrying, lifting and pushing met most of their comments on the first theme, causal attributions (Figure 3).

#### 4. Discussion

The aim of this study was to describe how older people think when they are asked about their difficulties in performing mobility activities. The results show that there are two themes that underlie these judgments: the causes to which the difficulty is attributed, and the strategies used to cope with the difficulty. The causes to which older people attributed their difficulties in mobility generally matched the background factors for disability identified in the epidemiological research: pathologies, mainly osteoarticular conditions, and impairments and symptoms, mainly pain, fear and tiredness (Fried & Guralnik, 1997; Gregory & Fried, 2003; Leveille, Bean, Ngo, McMullen & Guralnik, 2007; Brown & Flood, 2013). The most frequently mentioned accommodations made to deal with mobility difficulties were changes in the way of doing the task (e.g. doing it more slowly or holding onto something). These accommodations matched those found in other studies (Gignac, Cott & Badley, 2000; Gregory & Fried 2003; Hoenig, Ganesh, Taylor, Pieper, Guralnik & Fried, 2006; Lorenz, 2010). Furthermore, we must emphasize that all participants said that they had no difficulty in at least one task, despite using accommodations or mentioning changes

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in the way they performed them, which is consistent with the concept of preclinical disability, a state that predicts disability and which is characterized by individuals who perceive no difficulty with performance of a task and yet are found to have either general diminution in activities requiring related abilities, or changes in the performance of specific tasks (Fried et al., 1991; Fried, Bandeen-Roche, Chaves & Johnson, 2000; Wolinski et al., 2005).

We interpret these findings more broadly, drawing a parallelism between the meanings attributed to difficulty in mobility activities by the patients and the conceptual model of the disablement process. The revised version of this model establishes a main pathway that sequentially links pathology (e.g. osteoarthritis), impairments and symptoms (e.g. dizziness, pain), functional limitations (e.g. mobility limitations), accommodations (e.g. doing the activity in a different way) and disability (e.g. difficulty in activities of daily living) (Verbrugge & Jette, 1994; Leveille et al., 2007; Freedman, 2009). For the subjects in our study, the meanings of difficulty in mobility activities (in the language of the disablement process, mobility difficulties are functional limitations) were in two themes: causal attributions of the difficulty and accommodations. Causal attributions of the difficulty included (according to the disablement process language) pathologies, impairments and symptoms, i.e. the background to the functional limitations. Accommodations included changes in the way of doing activity, avoiding doing the activity and using technical or personal assistance. These accommodations to a large extent covered the concept of accommodations in the model of disability, defined as behavioural responses to changes in functional capacity (Freedman, 2009). In short, the people in this study understood difficulty in mobility activities to mean both

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its causes (the background to the functional limitations) and its effects (the accommodations to overcome functional limitations).

Other results of this study concern how the meanings of difficulty varied depending on the types (ICF mobility domains) of activities. Going up and down stairs, first, and changing or maintaining position, second, were the two domains (compared to walking and carrying, lifting and pushing) with the most occurrences in both themes, causal attributions and, even more notably, accommodations. More specifically, health conditions and changes in the way of doing the task (the two subthemes with the most occurrences) were the most mentioned in the domains of going up and down stairs and changing or maintaining body position; fear, especially the fear of falling, was mentioned most often in the domains of walking and going up stairs, and the same was true of the use of assistive devices. Although Fried et al. (1996) and Gignac et al. (2000) examined related issues, they used different analysis categories, and as such we cannot compare our results with theirs: Fried et al., (1996) made a distinction between more and less demanding/challenging activities, and Gignac et al. (2000) between inside and outside the home mobility. However, the use of the ICF domains in our study could facilitate future comparison with the results of other studies. Furthermore, our results supported the validity of the content of this classification based on mobility domains.

The main results of this study, the strong parallelism between what older people think when they are asked about difficulty and conceptual models of disability, reaffirm the confidence in continuing to measure functional limitations, and perhaps disability, with a response framework based on difficulty, as is the case in many current surveys and questionnaires. However, our results on the perception of no difficulty despite performing the activity with accommodations, also call the standard practice of these

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measures into question. To overcome this limitation and thereby be able to identify individuals with incipient difficulties or preclinical disabilities, measures of functional limitations should include the following response option: without difficulty but with changes in the way of doing the activity (parallel to the method of Fried et al, (1991)) or as has been proposed in other studies, include the accommodations in the wording of the items (Cabrero-García, Ramos-Pichardo, Muñoz-Mendoza, Cabañero-Martínez, González-Llopis & Reig-Ferrer, 2012). How to measure functional limitations when no perceived difficulty but the person mentions some accommodations is an issue that needs more attention and research.

This study has some limitations. It was not possible to confirm the results by means of the participants' review in the study (Lincoln & Guba, 1985). In any event, given the rigour with which the process for collecting and analyzing data was carried out, we believe that this does not affect the reliability of the study. Triangulating the data with quantitative mobility measures (objective or self-reported) would also enhance the results, and as such we suggest that different ways of gathering information are combined in future research in this area.

## 5. Conclusions

When questioned about mobility difficulties, older people mainly think about the causes to which they attribute this difficulty, and the strategies they use to try to compensate for them. This thought pattern is consistent with the main models of disability, and particularly with the disablement process. This reinforces the habit of using difficulty as the benchmark measurement in the development of self-reported disability questionnaires. The importance conferred by older people on accommodations



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to the task suggests the need for further research on how to measure disability to highlight preclinical disability, thereby making instruments measuring disability more sensitive.

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**Author contributions:** JCG conceived the study, JDRP and LGL conducted and transcribed the interviews, and JDRP, JCG and LGL drafted the manuscript. All authors participated in the design of the study and analysis and interpretation of data. All authors read and approved the final manuscript.

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Figure captions

Fig 1. Relative frequencies of subthemes in theme 1 (Causal attributions of the difficulty) according to ICF mobility domains

Fig 2. Relative frequencies of subthemes in theme 2 (Accommodations) according to ICF mobility domains

Fig 3. Relative frequencies of the two main themes according to ICF mobility domains



## Mobility-related difficulties in older people

Table 1. Examples of condensed and coded meaning units.

Meaning unit	Condensed meaning unit	Code
I cannot go down even one or half a step if I am not holding the railing	Cannot go down without holding the railing	Need to hold on
If I'm walking on a pavement it has to be wide because if it is narrow, I think I'm going to fall because of the small kerb	Believes he/she will fall on narrow pavements	Fear of falling
I have a vertebra here that affects all this area and prevents me from doing this (referring to turning around)	Vertebra problem preventing him from turning around	Vertebra problem
Yes, in my arms. See, I have osteoarthritis everywhere, my back, my arms, everywhere	Has generalized osteoarthritis	Arthrosis
With some difficulty, I have to find other ways to get up.	Finds other ways to get up. Difficulty.	Find other ways
If I see that I have time I take a breath, but if not when I arrive, I'm very tired	Rests or arrives very tired	Arrives tired
I can't walk and look at something, I have to walk and looking at the ground	Has to walk looking at the ground	Look at the ground
Yes, a few years ago yes, maybe because before when I went to bed you put your knee out and roll, you roll and you roll. Not now, now I sit down and then I lift my legs, I get a little comfortable, and then I put my head up and then I stand up	Difficulty in recent years because he has to do it in another way	Do it another way
When I put my trousers on and I have to lean on the wash basin or somewhere to put my leg in, because I'm not stable	Has to lean because he has no stability	Instability
In bed, I don't get into that position and then turn, instead I turn and then I sit up.	Turns and then sits	Do it differently
For a while now, when I turn my head, I've been getting a little dizzy	Gets a little dizzy	Dizziness

## Mobility-related difficulties in older people

Table 2. Scheme of themes, subthemes and categories, with the frequency of codes included in each category.

Themes	Subthemes	Categories	Codes (when difficulty)	Codes (when no difficulty)
1. Causal attributions of the difficulty	Health conditions	Osteoarticular health problem	130	3
		Non-osteoarticular health problem	34	-
		Pain	84	-
		Discomfort	26	1
		Overweight	18	-
		Balance problems	14	-
		Dizziness	18	-
	Fear	Fear of falling	98	-
		Fear of stumbling	20	-
		Fear of deterioration	27	-
		Non-specific fear	2	5
	Loss of ability	Tiredness	80	3
		Age	38	-
		Insufficient strength	32	1
Total codes in Theme 1			621	13
2. Accommodations	Changes in the way of doing the task	Do it slowly	52	-
		Do it differently	71	21
		Lean	80	7
		Hold	86	18
		Walk looking at the ground	13	1
	Do not usually do the task	Avoid doing it	16	-
		Unable to do it	10	-
	Need to use assistive devices	Stick	31	4
		Crutches	23	3
Need help from others	Personal help	28	2	
Total codes in Theme 2			410	56
Other			48	1

**APPENDIX A. OPERATIONAL DEFINITION OF THE CATEGORIES**

(The number of codes grouped in each category is in brackets)

**1.- Osteoarticular health problem (133):** This groups the codes that refer to suffering from a problem in any joint of the body. No medical diagnosis is specified in most cases, although there are some cases of rheumatism (2) or arthritis (7). The largest proportion is made up of knee (82) and leg problems (15), followed by the back-spine (15).

- *The problem when going upstairs is the knees*

- *[...] all the difficulty I have is in my knee*

- *I can't, because of my arm because I have arthrosis*

- *[...] dragging the bed would be difficult for me because of my leg because I find it very hard to stretch it*

**2.- Non-osteoarticular health problem (34):** This comprises all the codes related to other health problems, which the respondents mention when talking about difficulty and which do not affect the bones or joints. Cardiac problems (5), corns/calluses (2), vision problems (4), tumors (1) hemorrhoids (4), stomach problems (1) hernia (1) allergy (1), headache (1), memory problems (2), neurological problems (5), circulation problems (7).

- *Well, the difficulty I have is that it gives me like... let's see, like vertigo*

- *Yes, but I think that's more the vertigo than the other things, but a little bit, yes.*

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- [...] I had a heart attack in 1979, I was 47 years old, and so of course, that always leaves a trace behind. And there, yes I do have some difficulty.

- Yes, all my problems I've had on the right side, because the little tumor in my head affects me ...

- My difficulty is with hemorrhoids

**3.- Pain (84):** This includes the codes in which people refer to pain.

- [...] when I'm sitting down and I try and get up in bed or they call me and I turn round, I feel pain.

- When I'm sitting down and I try to get up, this leg (the right one), ahhh, I find it very very hard, it hurts.

**4.- Discomfort (27):** These are codes for discomfort in various parts of the body, without specifying what this discomfort consists of.

- It bothers me a little but nothing more

- [...] my legs bother me a bit

- If I made all these movements without thinking about what I'm going to do, they might make me uncomfortable

**5.- Overweight (18):** This category groups comments by those interviewed about their perception of difficulty related to their overweight.

- if I lose weight perhaps I'll do it better, I notice that I do it much better if I lose weight

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- *The thing is that I don't turn around like when I weighed 60 kg, because now I weigh almost 80, and so of course, turning round when you weigh so much is a little more difficult.*

**6.- Balance problems (14):** This refers to comments about the feeling of instability or balance problems that people perceive when performing the task.

*Respondent: A little, yes*

**Interviewer: You have difficulty with that one**

*Respondent: Yes, because I lose my balance a bit*

- *[...] I've already told you that my stability is poor.*

**7.- Dizziness (18):** This refers to all the comments that the respondents make about feeling dizzy when performing certain tasks.

- *Well, the difficulty I have is that it gives me like... let's see, like dizziness*

- *[...] I get dizzy, I think I'm going to fall, [...]*

**8.- Fear of falling (98):** Comments about the feeling of fear of falling while performing the task suggested.

- *If I'm walking down the middle of the street I have no problem, but if I'm walking along a pavement that's not wide enough, I think I'm going to fall.*

- *[...] I never hurry because I'm scared of falling.*

- *I have some difficulty but it's because I'm scared of falling.*

**9.- Fear of stumbling (20):** This covers comments by people who are scared of stumbling while performing the task.

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- *It's not my legs, it's that I'm scared of stumbling when I walk.*

- *[...] if I'm carrying the package, I can't see the ground and I'm scared of stumbling.*

**10.- Fear of deterioration (27):** This includes peoples' references to their fear of deterioration or relapse in a health problem that they suffer or have suffered from. This includes situations in which the fear is due to a medical recommendation.

- *As I've had an operation for hernias, I'm scared and I always lie on my back.*

- *[...] some difficulty, mostly because I'm not allowed to do it at all.*

**11.- Non-specific fear (7):** These are comments about fear, but where the reason for the fear is not specified.

- *[...] I can't, I'm scared.*

- *No, I couldn't because I'd be afraid*

- *[...] some but because I'm scared.*

**12.- Tiredness (83):** This refers to the meaning units in which people talk about the feeling of tiredness they feel when performing the task suggested.

- *If I get up with no problems and I haven't done any exercise or made any effort I can go to the lagoon and back without resting, but when I get home I have to sleep because I'm very tired.*

- *Not very, what happens is that I don't know whether it's because of the heat or whatever, I get tired.*

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**13.- Age (38):** This includes the codes in which people refer to their age when talking about the difficulty. They do not necessarily refer to age explicitly, but those who mention the changes perceived by the person compared to the previous situation or experience have been included.

- [...] *let's say it's not the same as when you're young*

- *I used to move that one, but of course, now I'm 80, so not any more ...*

**14.- Insufficient strength (33):** Meaning units in which people say they do not have enough strength to accomplish the task without difficulty.

*Respondent: No, I can't, no, I can't be squatting.*

***Interviewer: You couldn't***

*Respondent: I have no strength for anything*

- *I used to pick up a hundred kilograms and I now can't lift anything.*

**15.- Do it slowly (52):** This groups the comments people make about doing the task more slowly and taking longer to do it.

- *Some, but I can, more slowly*

- *It's difficult for me but I can go up it, my street is a steep street and I go up it slowly.*

- *No, I couldn't do it quickly. At my own pace yes, but quickly no, no, I couldn't*

**16.- Do it differently (92):** This groups all the comments made by people about doing the task differently from how they used to do it. It includes both those that the person believes they have difficulty with because they have changed the way they do it, and

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those they believe they have no difficulty with despite having changed the way they do it (there are not many of these - 6, the last example is one of them).

- *Yes, now, when I put my socks on, because I have to lift my foot up instead of bending down.*

- *I don't usually go down face on, I come at it from one side instead.*

- *I have no problem there... doing it my way, of course.*

**17.- Leaning (87):** These are comments that indicate the need to lean on something to perform the task.

- *Well if I don't have something to lean on, I don't sit down*

- *[...] and if I lean I don't have any difficulty.*

**18.- Holding (104):** These are comments that indicate the need to hold on to something in order to perform the task.

- *I cannot go down even one or half a step if I am not holding the railing*

- *[...] no difficulty. I hold on, not on my own, but I hold on [...]*

**19.- Walk looking at the ground (14):** These statements are about the need to look at the ground while walking when performing the activity.

- *Some difficulty, because I walk looking (at the ground).*

- *[...] If I don't walk looking at the ground, I put the edge of my shoe there*



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**20.- Avoid doing it (16):** These are comments made by people who given the difficulty they perceive in performing a task, avoid doing it as much as possible.

- [...] *I never sit down on the sand, because I can't get up.*

- *That bothers me. I try not to do it because I have some difficulty.*

**21.- Unable to do it (10):** These are people who say they have difficulty due to being unable to perform a given task.

- [...] *if there is something I know I can't do [...] I try to do it, but when I see that I can't, I give up.*

- *No, I can't do it, so it is a difficulty.*

**22.- Stick (35):** This includes comments by people who need their stick to perform the task.

- [...] *I have to walk with the stick*

**Interviewer:** *So you don't have any difficulty*

**Respondent:** *No, not with the stick*

**23.- Using crutches (26):** This includes comments by people who need a crutch or crutches to perform the task.

- [...] *I can't leave the house without the crutch*

- *Walking with the crutch is not a difficulty for me, the problem is when I let it go*

## Mobility-related difficulties in older people

**24.- Personal help (30):** These are comments about needing another person's help to perform the task.

*Interviewer: You would have a lot of difficulty without any help*

*Respondent: No, I couldn't do it*

*- To get out a lot yes, they have to pick me up to take me down and open the car door for me.*

*- I get up if I have some help [...]*

**25.- Other (45):** These are all the categories formed by codes or meaning units that appeared a few times and/or are mentioned by a single respondent, and were deemed not to attain theoretical saturation. Some examples of meaning units are given, and the number of times they appear is shown in brackets.

*- That also depends on who goes up more and who goes up less. (I categorized this as "habit", it appears three times mentioned by the same respondent)*

*- It's difficult, it's very difficult, and when I am bending over I don't feel safe (which I categorized as "unsafe" and there are only three similar comments, although from different respondents)*

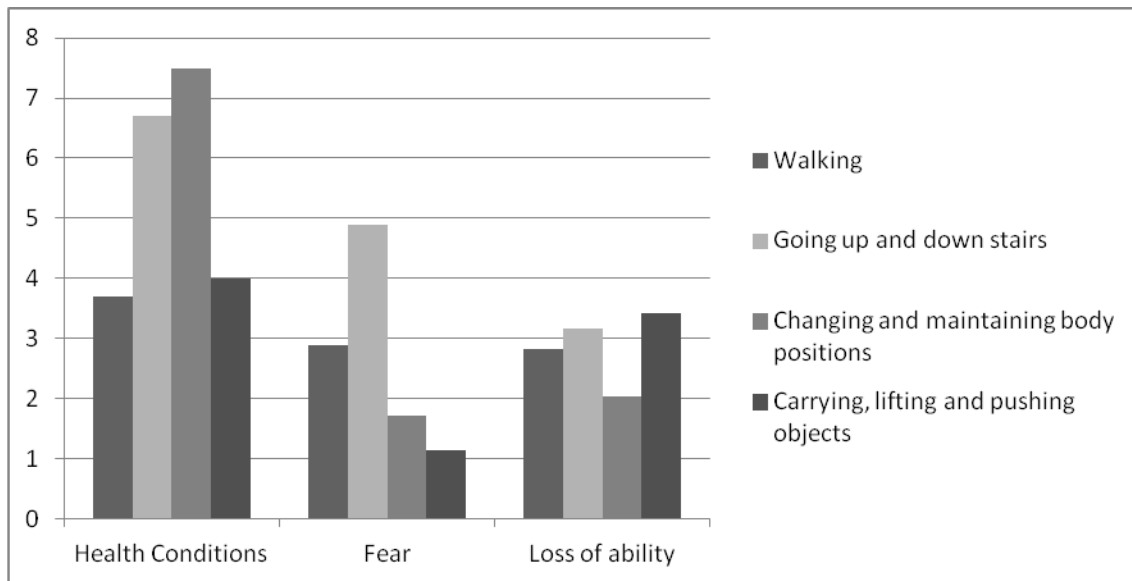
*- No, not now, top-class, I have an automatic bed, so it's fantastic (only one person who had no difficulty because they used an automatic bed. This only appears in this comment)*

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- *I'm always grazing myself on doors and the stumbling (shows me bruises)* (this comment only appears about walking around the home banging against doors or furniture)

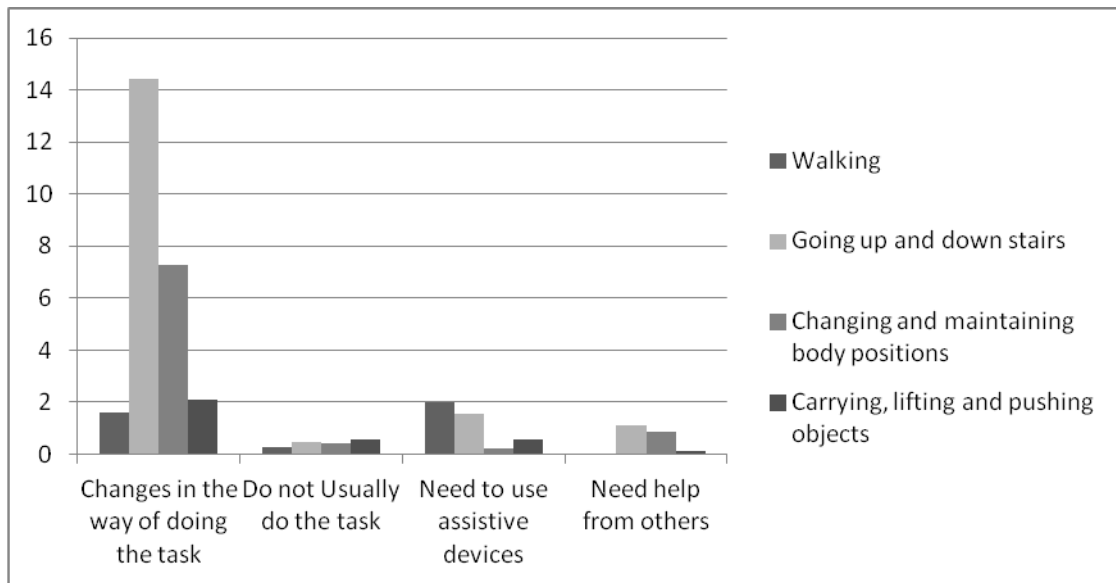
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Figure 1.



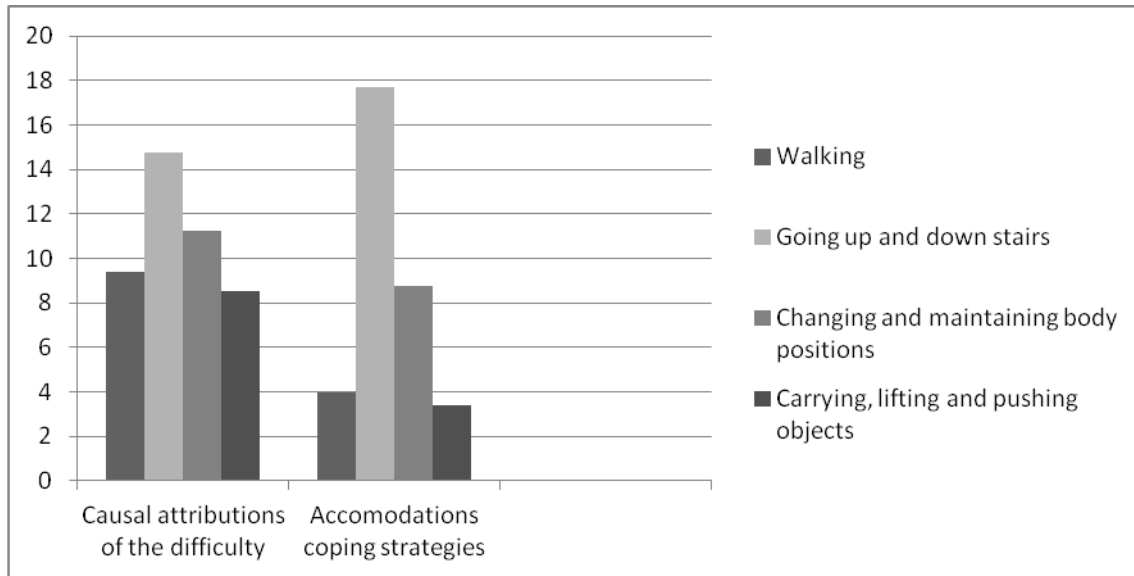
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Figure 2.



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Figure 3.



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