Motivation to perform activities of daily living in the institutionalized older adult: can a leopard change its spots?

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RESNICK B. (1999) Journal of Advanced Nursing 29(4), 792–799 Motivation to perform activities of daily living in the institutionalized older adult: can a leopard change its spots?

The concept of motivation has great relevance for the older adult because of the multiple problems that can result in functional limitations. The ability to overcome and transcend these problems is related to the individuals' motivation to maintain and/or improve function. The purpose of this study, which used a naturalistic or constructivist inquiry, was to explore what motivates the institutionalized older adult to perform functional activities. Primary selection was used to obtain the sample which included 44 older adults, 37 (84%) females, and 7(16%) males. The average of participants was 88 ± 6.4 , and they were institutionalized for 2.8 ± 2.8 years. Semi-structured interviews were done in the participants room. Data analysis involved content analysis. A total of 27 codes were initially identified, and these were categorized and developed into five major themes: Personality, Goals, Beliefs, Fear and Physical factors. The participants indicated that basic personality had a major on motivation, i.e. 'a leopard can't change his spots'. Further findings suggested that although personality may be central to the individuals' motivation to perform, goals, fear, beliefs and physiological sensations also influenced motivation and behavior. Appropriate interventions can be used to foster motivation to perform functional activities for institutionalized older adults.

Keywords: motivation, geriatrics, functional performance, activities of daily living

Can the Ethiopian change his skin, Or the leopard his spots? Then may you also do good, That are accustomed to do evil. (Jeremiah, 13.23)

INTRODUCTION

There is increasing awareness of the pivotal role that declining performance of activities of daily living (ADL) (bathing, dressing, transferring, continence, ambulation

Correspondence: Dr Barbara Resnick, 5435 Watercress Place, Columbia, MD 21045, USA. Tel.: H 410 740 3252; W 410 706 5178; E-mail: bresnick@umaryland.edu and stair climbing) plays in maintaining independence, and the impact this has on health care resources (Cress et al. 1995, Fried & Guralnik 1997). For older adults who are already institutionalized, further loss of function alters the type and amount of nursing required (Waters 1994) puts the individual at risk of sequelae from immobility (Ouslander et al. 1991), and has a major impact on quality of life (Jirovec & Kasno 1993, Kaplan et al. 1993, Mulrow et al. 1994, Oleson et al. 1994, Ettinger et al. 1997). As much 15% of the variance in life satisfaction has been accounted for by functional independence (Gould 1992).

The majority of older adults living in nursing homes require some assistance with activities of daily living (Aller & Coeling 1995). Approximately 91% require assistance with bathing, followed by 78% in dressing, 63% in toileting and 40% in eating. Almost two-thirds require assistance in transferring from bed to chair, and about the same percentage have walking difficulties. The cause of these functional impairments are multifactorial and include lack of motivation (Mulrow et al. 1994), social issues and cultural expectations (Aller & Coeling 1995, MacRae et al. 1996), environmental factors (MacRae et al. 1996), co-existing disease states (Ailinger et al. 1993, Bloom 1993), fear of falling (Hill et al. 1996), and/or nursing care that creates dependency (Jirovec & Kasno 1993, Waters 1994, Beck et al. 1997).

The concept of motivation has great relevance for the older adult because of the multiple problems that can result in functional limitations. The ability to overcome and transcend these problems is related to the individuals' motivation to maintain and/or improve function (Kemp 1988, Glickstein 1990, Resnick 1991, 1996a). By definition, motivation is the inner urge that moves or prompts a person to action (Thatcher & McQueen 1980). Motivation comes from within the individuals, and is primarily concerned with how behaviour is activated and maintained. Atkinson (1974) suggested a working definition of motivation based on two known properties: (1) it is an inferred, rather than an observed event; and (2) it energizes as well as directs behaviour. Thus the critical attributes of motivation include an inner urge or desire followed by action to achieve a goal.

VARIABLES THAT IMPACT FUNCTION IN NURSING HOME RESIDENTS

Studies of older adults in nursing homes (Mulrow et al. 1994, 1996, Schnelle et al. 1995) indicated that number of chronic illnesses, even when incorporating severity levels, was not predictive of function. However, specific disease states such as acute infections, stroke, and decubiti significantly predicted function (Mulrow et al. 1994, 1996). The relationship between disease states and function may actually be better explained by the physical findings associated with disease, such as contractures and impaired balance (Resnick, 1998a). Moreover, sociodemographic variables, cognitive status and affective state (depression) add significantly to the explanation of functional performance (Mulrow et al. 1994, 1996).

Other aspects of care, such as interactions with staff and the perception of choice with regard to care activities, have been noted to influence functional performance of institutionalized older adults (Jirovec & Kasno 1993, Jirovec & Maxwell 1993). In a descriptive study of 107 older adults from four different nursing homes perceptions of actual and desired choice (with regard to performance of activities of daily living) were related to performance (r = -0.23, P < 0.05, r = -0.17, P < 0.05,

respectively) (Jirovec & Maxwell 1993). Specifically, as independence in functional activities increased, both actual and desired choice related to those activities was increased. Based on the design of this study it was impossible to determine causality, and further research is needed to decipher if decreased function results in decreased feelings of control or vice versa.

Leidy (1994) suggested a useful framework for understanding the complexity of functional performance, and described functional status as having four dimensions: capacity, performance, reserve and capacity utilization. Functional capacity is the individual's maximum potential to perform activities of daily living, and includes underlying physical and cognitive status. Functional performance is what the individual actually does with regard to activities of daily living. Functional reserve is the difference between capacity and performance, or one's dormant abilities that can be used if needed. Lastly, functional capacity utilization is the extent to which functional potential is called upon during performance. It has repeatedly been recognized that nursing home residents do not use their full potential to perform activities of daily living (Small 1993, Leidy 1994, Vogelpohl et al. 1996). Individual motivation, and strengthening motivation to perform functional activities, may be an important component to helping order adults use their full functional capacity.

MOTIVATION IN THE OLDER ADULT

Dishman & Ickes (1981) conceptualized motivation as intrinsic to the individual, and defined self-motivation as a general disposition to persevere. Similarly, Marin (1990) described motivation, or the lack of motivation which he referred to as apathy, as a dimension of the individual's behaviour and personality that was continuous and quantifiable. Apathy describes those patients whose lack of motivation is not attributable to a diminished level of consciousness, an intellectual deficit, or emotional distress.

Motivation also has been conceptualized as multidimensional and as a component of personality that is influenced by variables extrinsic to the individual (Bandura 1986, 1995, 1997, Kemp 1988, Resnick 1996b). Prior research with older adults (Ruiz 1992, Resnick 1996b, Schneider 1997) indicated that motivation was influenced by a number of factors including: (a) goals; (b) the cost of participation in some activity; (c) the reward for participation; (d) the individuals' beliefs (self-efficacy and outcome expectancy) about their ability to participate and succeed; (e) mood; (f) physiological factors such as mental status, sensory changes, nutritional status and medication effects; and (g) psycho-social-cultural factors including social support, verbal encouragement, finances, cultural

and spiritual beliefs and exposure to role models. These studies focused mainly on those who were accepted into rehabilitation programmes, or volunteered to participate in exercise activities. These individuals were a select group in that they were generally more motivated with regard to functional activities (McAuley 1993, Chandler 1996, Resnick 1996b). Motivation related to the performance of functional activities of older adults residing in nursing homes has not been considered. Therefore, the purpose of this study was to explore what motivates the institutionalized older adult to participate in, and perform, their activities of daily living.

THE STUDY

Design

This study used naturalistic, or constructivist inquiry (Haberman-Little 1991, Crabtree & Miller 1992), which is based on several underlying assumptions: (a) that reality is dynamic and multiple; (b) that phenomena must be studied within the context in which they occur; and (c) that the researcher is an integral part of the research process. The purpose of this type of study is to gain a greater understanding of the phenomenon of interest, and it involves an ongoing process of discovery of interpretation. Semi-structured interviews were carried out in the participant's rooms, and all data were collected by a single interviewer, a geriatric nurse practitioner. Initial interviews lasted from 10 to 30 minutes, and repeat interviews were carried out as appropriate to confirm findings. Questioning focused on what motivated these individuals to participate in and/or independently perform functional activities such as bathing, dressing, and ambulating, and/or what stopped them from initiating performing these activities. Participants were encouraged to talk about aspects of their personalities, as well as interactions with staff, family and friends that influenced their willingness to perform functional activities. Interviews were taperecorded and transcribed verbatim.

Sample

Primary selection, which allows the researcher to have some control over who the study participants are (Morse 1991), was used to obtain the sample in this study. With primary selection the researcher has a relationship with the prospective informants and identifies those individuals who have the knowledge required, can articulate their thoughts and would be willing to participate. Residents were eligible to participate in the study if they were: (a) free of acute illness; (b) were able to perform activities of daily living independently, or with minimal assistance from a careprovider (Katz et al. 1963); (c) not terminal; and (b) able to recall and describe daily events. The total

sample included 44 older adults, 37 (84%) of whom were female, and seven (16%) who were male. The average age of the participants was 88 ± 6.4 , and on average they were institutionalized for 2.85 ± 2.8 years. Informants were selected from two adjacent nursing homes in an East coast city in the United States. Nursing Home A, from which 26 (59%) of the informants were selected, is a small 65-bed skilled nursing facility within a Continuing Care Retirement Community. Nursing Home B, from which 18 (41%) informants were selected, is a larger 200-bed skilled nursing facility. The nursing homes were similar with regard to resident demographics, and services provided. In addition there were some staff members who worked at both facilities.

Data analysis

Data analysis was performed using basic content analysis (Miles & Huberman 1984, Crabtree & Miller 1992), and started with the first interview. A code list and definition of each code was made and continually revised as new codes were added. These codes were then grouped based on similarities and differences. For example, pain, feeling tired or fatigued, being short of breath, having impaired vision, feeling weak or old or feeling good were initially coded separately, and then categorized together as physical sensations that affected motivation to perform functional activities. Similarly, 'laziness' and 'determination' were identified by informants as components of their personality that influenced motivation to perform functional activities. These were categorized together under the theme personality.

Credibility of the data

Credibility of the data refers to the believability, fit and applicability of the findings to the phenomena under study (Lincoln & Guba 1985). Credibility was addressed by confirmation initial codes with the participants, and exploring these codes with subsequent study participants. Evidence of applicability of findings was supported in that the staff recognized the issues identified by the participants. For example the staff were aware of: (a) the constant reminders they gave to residents to avoid performing activities that would put them at risk for falling; and (b) the important influence that friends and family had on motivating residents to perform functional activities.

Confirmability of the data refers to the objectivity of the factual aspects of the data (Lincoln & Guba 1985). This was considered by giving a random sample of the coded data and definitions of categories to a geriatric nurse practitioner who works with older adults in a different nursing home setting. There was 90% agreement between the rater and the principal investigator (PI).

RESULTS

A total of 27 codes were initially identified, and these were categorized and developed into five major themes: Personality, Goals, Beliefs, Fear and Physical factors. For example, the individual codes 'maintaining appearances', 'maintaining one's pride or dignity', 'being ready for a visit with family or friends', 'getting things done' and 'maintaining a routine' were all described as goals that strengthened motivation to perform functional activities.

PERSONALITY

The participants in this study identified two different components of personality that affected motivation to perform functional activities: (a) laziness; and (b) determination. Many participants acknowledged that they were capable of doing much more functionally than they did on a daily basis and blamed themselves and 'laziness' for not doing more. They also admitted that when at all possible, i.e. if the help was available, they took the 'easy was out'.

- ...I am just lazy. If there is someone around I like them to do it for me. I have never had much get up and go. I have always been this way. I am a lazy old something.
- ...I can go back and forth here and take a few steps but I know I should do more than I do. I am a sedentary person I guess. I am content to sit here and look at the sky and I look at the planes come in and wonder where those people have been.
- ...The reason I don't do more is lack of motivation. I need them [the therapists] to motivate me to walk. This is the way I have always been. I don't admire athletes, and I don't respond to sports. I would rather sit and read.

Conversely, there were other participants who described themselves as being determined to care for themselves and remain independent. It was this determination that helped them perform functional activities. These individuals recognized that they could 'give up' and be cared for; however, they chose to keep trying and to do as much for themselves as they possibly could.

- ...I have taken care of myself all of my life. I don't like to be waited on. I think I was born that way and it isn't any credit to me. A leopard can't change his spots!
- ...I am determined to maintain some independence. To use it as much as you can. You can't get upset with failure. Just say, maybe I will make it. I have been on the floor a few times, but you can't give up after one fall. Maybe the next day will be better. You have to try it again.
- \dots I want to stand on my own two feet. Without that my independence is lost. They know I have gotten up a few times. They yell to me, Mrs. W watch out you are going to fall. Maybe I am and maybe I am not.

GOALS

The participants described identified goals as helping to motivate them to perform functional activities. In some cases the goals were specific, such as being able to walk across the room or get up from a chair. Other participants described more general goals such as, 'maintaining my independence', 'maintaining a routine', 'doing what I always have done' and maintaining 'pride' and 'modesty' as motivating them to perform functional activities.

- ...I want to be able to move from my chair and go across the room and get something on the table. I think that keeps me pushing along.
- ...It is important to me to bathe and dress myself, and I don't want to be an invalid. I want to keep looking decent for as long as I can.
- ...It is easier to get in the chair but I want to keep moving. I don't want to end up sitting all the time, I want to keep moving till the Lord calls me.
- ...I wouldn't let them help me with bathing and dressing. I can't describe it. I think in part it is modesty. I don't want to show myself to everybody. I would much rather do it myself than have someone else do it for me.

Social sports, which included friends and family, indirectly influenced the participant's motivation to perform functional skills by also serving as goals. The participants were motivated to bathe and dress to get ready for a visit with friends or family, or to continue to ambulate so that they could go with friends and family to places that were not wheelchair accessible. In addition, performance of functional activities was done to prevent becoming a burden on family or friends.

- ...My friends that I used to go around with make me want to do it [bathe, dress, transfer, and ambulate]. I don't want them to go without me.
- ...If I know someone is going to come and visit me I get ready.
- ...I have no family and so I depend on friends, and I don't want to do that, or be a bother to people.

Beliefs

Beliefs held by the older adults in this study had a major impact on motivation to perform functional activities. Beliefs seemed to be influenced by prior experience, as well as interactions with health care providers. The beliefs were related to: (a) confidence or lack of confidence in the ability to perform a specific activity; (b) acceptance of changing abilities; and (c) information received from health care providers and family. The participants described their feelings of confidence, or their lack of confidence, with regard to performance of functional

activities, and these feelings dictated what they were willing to do.

...I feel secure doing it the way I have been doing it. When they mentioned taking a shower I was upset. I feel comfortable with my pan of water and I reach as far as I can. I have been doing that a long time.

...Well I think if I could get up enough confidence by practicing I wouldn't be scared, and I would walk more. The problem is getting the strength and confidence.

Being repeatedly told by staff what they were and were not able to do had a major impact on what the residents believed they were capable of doing, and what they were willing to do. The staff may have been showing concern for the resident's safety and/or trying to efficiently get the job of bathing and dressing done. However these interactions made the resident 'feel unsure' and 'unconfident'.

...They didn't say I shouldn't walk, they told me that I needed to be careful. They gave me the idea that I wasn't able to and therefore I was liable to fall. That made me feel like I didn't want to do anything.

...I feel that I could go to the bathroom right now by myself, or get dressed. I don't do that because someone comes in and tells me not to do it. When it comes to dressing they say 'hold out your hand and we will put it on'. I think they think they are doing something good so I just let them.

...They [the nurses] have been doing a lot of it [personal care]. They want to get through. I think I could do it, but not an awful lot of it. They want to come in and get out. I don't say anything about it as I thought they were supposed to tell me what to do, and then I would do it. They didn't tell me to do it. I was a little bit urked with some of those people, because they didn't tell me to keep on doing it. Then I wanted to do it and I couldn't do it. It takes me a long time to do it.

Many of the described interactions with the staff had a negative impact on the participants' beliefs about performing functional activities, and what they actually did. However, there were some instances in which interactions with the staff were positive, and helped increase the older adults' beliefs in their ability to perform functional activities, and improve maximal performance.

...They don't say to me that since you fell you have to stay in the chair. Instead they say go ahead and give it a try and if you need help give me a call.

...After I had my fall they were doing it all for me, but not any more. I think that the therapists are just great. They tell me that I can do it, and help me to believe that maybe I can. Like this morning. They told me that I could bathe and dress by myself. It was scary, but I was able to do most of it.

The older adults' beliefs about their functional ability and performance are based on what these individuals consider as the 'normal, expectable life cycle' (Neugarten & Reed 1996) with chronic illness and disability an expected event. Consequently, many of the older adults in the study described an acceptance of the inevitability of functional decline. They believed that this was what happened with age and that there was no sense to fight it.

...It is one of the things that you learn to accept. I can't do the things that I used to do. I am old and I am handicapped. You have to accept it.

...I simply could not do my dressing. To get my clothes on is very difficult. It is not a problem. I have adjusted to this.

Fear

The fear of falling had a major impact on function, especially with regard to walking. The participants described previous falls, some of which had been the reason for their admission into the nursing home, and their intense desire to avoid any future falls.

...I am afraid that I am going to drop. I know I won't but I am afraid that I might get hurt to the extent that I won't be able to use the walker.

...I haven't tried to walk here as I don't trust anybody to help me. I fell so many times. First time I broke my left leg and then I broke my right leg in two places. I am afraid something is going to happen. They always want to get me up, up, up in the chair. When you fall four times you worry that you are going to do it again.

...I am afraid to walk because I am afraid I will fall. All of my falls occurred after I walked or did a lot. You have to be moving to fall. I fall when I am walking back from the dining room. My legs just sag and go out on me. When I am tired it seems to happen more.

This fear of falling made some of the residents choose to use the wheelchair for mobility. The chair was safe and allowed them the freedom to get around the nursing home, and participate in activities.

...The chair is support. I hang on to the chair because I am afraid that something else is going to happen and I won't be able to walk with the walker even.

...I am very comfortable in the chair, and I move around in it very well. Maybe I am too used to it. It is hard for me now to get up out of the chair.

Physical factors

Pain, fatigue, shortness of breath, and impaired vision were all described as physical factors that decreased the residents willingness to perform functional tasks.

...I have some arthritis pain especially in my right leg. It is pretty bad right now. The pain stops me because it hurts.

...I had therapy when I first came here but therapy didn't do anything but hurt me. I did exercises down there until it got so I couldn't turn over in the bed I was so sore. I said that is it I am not coming any more. She said the therapy didn't do it but I know that it did. I know better case I hadn't done anything else to be sore. I thought the therapy was supposed to help me. But I couldn't live through that pain.

...My biggest problem is that I get tired, and don't have enough energy for it. It is easier to have the nurses do it.

...I do it [bathing and dressing] if I can find what I need. When they put me up to where the basin is they tell me here is this and there is that, and half the time I can't find what they are telling me. I have to get help.

There were some participants, however, who had pain and/or fatigue but did not let these feelings stop them from performing. These individuals used coping strategies, such as positioning, to decrease pain, and continued to work toward their own personal goals such as maintaining their independence.

...I have pain constantly in the back of my legs. The pain doesn't stop me though, I just keep pushing along. I get tired very easy as well, but try to keep going anyhow. It is important to me to walk and do some things for myself.

...I have a little bit of pain. The pain is controlled if I get myself into the right position in bed. I have a crackling feeling in my shoulder and I suspect it is arthritis. I am not stopped by my pain, as I want to continue to do what I can for myself.

...I have pain all the time, and I just adjust to it. I find if I move my body in a certain way, or push on the pain like this with my hand it goes away. I hurt but I don't think that is what stops me. It takes me a little longer now than it used to and it is little more difficult for me to get my stocking on, but I just keep working on it and do it. I want to do as much as I can for myself.

Most of the residents reported that negative physical sensations associated with functional activities decreased their motivation to perform these activities. However, there was one resident who described a positive physical sensation that helped motivate her to walk.

...It makes me feel good after I walk, and I like to walk. I feel like taking a deep breath after I walk and that makes me feel better.

DISCUSSION

A central theme identified by the participants in this study was the important influence of basic personality on motivation. Similar to the unchangeable spots of the leopard, the informants felt that they were either 'determined' or 'lazy' by nature, and that there was little that could be done to change the way they responded. Simi-

larly, in a study of 77 older adults who were participating in a rehabilitation programme following an orthopaedic event, determination was identified as an essential component to motivation (Resnick 1996b). Moreover, self-motivation, which is defined as a single unitary trait reflecting a general disposition to persevere, consistently correlates with physical activity, and is probably indicative of the types of individuals who are prone to be active or inactive (Dishman & Ickes 1981, Dishman 1991).

Personality may be central to the individuals' motivation to perform; however, goals, beliefs and physiological sensations also influenced motivation and behaviour. Goals were usually self-determined such as wanting to maintain independence, or to continue to ambulate independently. Other important sources of goals for the older adults in this study were related to visits with family and friends.

The beliefs held by the participants in this study influenced goal identification and motivation. Beliefs can be influenced by cultural expectations (D' Andrade & Strauss 1992), prior experience (Kemp 1988), current performance of functional activities (Resnick 1998b) and verbal interactions with health care providers (Resnick 1998b, Bandura 1986, 1995). Unfortunately, many of these interactions with health care providers were negative, and made the resident feel they were not capable of performing the activity of interest. The participants interpreted the nurses' verbal and nonverbal communication (telling them not to walk as they might fall, or coming in and bathing or dressing them) as an indication that they were not capable of performing the functional activity, and thus they did not set functional goals and did not perform.

There were some examples in which nursing home staff encouraged the participants to perform functional activities, regardless of the risk involved. This helped the participants to believe in their ability to perform and to set appropriate goals, and increased their motivation to bathe, dress, or ambulate. If nursing home staff frequently reminded the residents that they were able to perform a functional skill, rather than warning them to avoid performing a functional activity that puts them at risk for falling, it might help residents identify appropriate goals, increase motivation to perform functional activities, and improve functional performance. Moreover, exercise and increased activity is one of the most effective interventions used to decrease falls (Province et al. 1995, Wolter & Studenski 1996). Therefore, for nursing home residents, encouragement to remain active may be a more appropriate intervention than encouraging avoidance of activity.

Unpleasant physical sensations such as pain, fatigue and shortness of breath decreased some participants, willingness and ability to perform functional activities. These sensations should be assessed frequently by nursing staff, and interventions developed to decrease these sensation and encourage the resident to participate in functional activities. For example, making appropriate alterations in pain medication regimens in conjunction with the residents' primary care provider, and use of alternative modalities such as ice and heat, effectively decreased pain in older adults with orthopaedic problems and thereby increased performance of functional activities (Resnick 1996b). Goal identification and striving may be another way in which to decrease the negative impact of unpleasant physical sensations on performance. The participants in this study who had pain during functional activities, but continued to perform, indicated that goal striving and attainment were more important to them than the unpleasant physical sensations they experienced.

Although mood was not identified by the participants as a factor that influenced their willingness to participate in functional activities, altered mood, particularly depression, has repeatedly been noted to influence functional performance (Mossey *et al.* 1990, Parikh *et al.* 1990, Ruiz 1992, Harris *et al.* 1995, Resnick & Daly 1997). Future research needs to consider the impact of mood on motivation, and consider interventions to decrease depression as a way in which to augment functional performance.

CONCLUSION

The leopard is born with many black spots and, as suggested in Jeremiah 23.13, these spots remain throughout the leopard's life and cannot be hidden or changed. However, there may be ways in which to make those spots more vibrant, such as maintaining a healthy diet or cleaning the animal's fur. Similarly, there may be an inherent personality trait that predisposes the individual to be more or less motivated, but there are many ways in which health care providers can influence and alter the individuals' motivation. Helping older adults to set appropriate goals that have meaning to them, such as going out with a family member, identifying and decreasing any physical discomfort associated with an activity, and providing encouragement related to performing functional activities rather than reminders to avoid these activities because of the possibility of falling, may all strengthen the residents' willingness to participate in and perform functional skills. Using these interventions can help change the spots of the leopard, and may help nursing home residents use their full functional capacity and achieve and maintain their highest level of function.

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