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Interpretations of some aspects of conversations and their relations to health and longevity in ageing populations

Introduction and problem

The theme that social factors are related to longevity and health has been discussed since the early days of social science. One such example is the studies of suicide first published in French in 1897 [1]. This line of inquiry has been followed during the 20th century [2] and it has also been found in international comparisons [3, 4]. It has been shown that access to a confidant or a close friend is related to health and survival [5, 6]. Having someone to talk to about personal problems and having someone for company are relevant for health and longevity [7]. After a brief introduction of pathways by which activities affect health, this presentation focuses on mechanisms working in conversations. The problem discussed in this presentation is: How can traits of conversations contribute to health and longevity?

Background

A common assumption is that various human functions have to be exposed to a functional load to be maintained [8]. One dominant function is physical activity, and in this regard the trainability of humans even at older ages has been documented [9–13]. Essential parts of this research are covered by Hardman and Stensel in their book *Physical activity and health: The evidence explained* [14]. It has also been shown that ordinary domestic activities make a considerable contribution to maintaining physical fitness in the elderly [15], while on the other hand exaggerated functional loads may produce stress that could be harmful [16, 17]. Thus, I assume in this presentation that maintaining or moderately increasing physical activities promotes health and longevity. With regard to the idea that conversations initiate or maintain other activities, I assume that conversations generally expose the participants to a functional load. As the functional reserve capacity decreases with increasing age, it is increasingly important to the ageing person to reach a functional load to maintain the function.

Another guiding principle is that the older a cohort grows, the greater the variation between individuals becomes in many important aspects [18]. In this context, I shall try to show the importance of conversations for exploring and even developing a variety of activity resources and possibilities, especially among the aged population. For research purposes, conversations with the aged are important to access this variation.

My interpretations of how some social factors are related to health and longevity draw support from three sources: earlier research and literature, longitudinal population studies of ageing among seventy year olds in Göteborg [8, 19–21] and my own experiences, especially during work with more than 1000 home helpers and 500 officials in the Swedish home help service for the elderly.

One general point of departure was delivered by the pragmatic philosophy stemming from Charles S. Peirce, and originally from Alexander Pain: the principle that people are acting on beliefs. This idea is more commonly recognized from W. I. Thomas as his “theorem” that what an individual believes to be true has consequences for his or her further actions and interpretations as if it were true: “If men define situations as real, they are real in their consequences” [22, p. 572].

The line of my argument is to describe general salutogenic mechanisms that are at work in everyday conversations. These mechanisms are of much greater importance for those who have lower reserve capacity, like the frail elderly. Let me give an example: physical training can increase strength and physical fitness [9]. For a fifty-year-old person with normal strength and fitness, a fortnight’s lack of training through daily activities has little impact on his or her ability to lead a normal life. For a person who is living with marginal strength and physical fitness, a lack of support to engage in daily activities that results in a fortnight’s lack of daily training with consequent decrease in capacity creates a much higher risk of falling, for instance, compared with the person with higher strength derived from the effects of training through daily activities [15].

The importance of confidants for health and longevity has been recognized at least since the myths of creation in many cultures, in folklore like the Icelandic sagas as well as in science [23, 24]. Thus, this text pays special attention to conversations with confidants and salutogenic mechanisms in this context. I choose to present examples from my experience, with some of the examples given as extracts of conversations. I realize that these are not accurate

descriptions of conversations. I have chosen this mode of presentation because I find them easier to write than descriptions of the same events.

The empirical bases for these interpretations are my experiences working with conversational analyses and with the Centre for Development of Home Help Services in Sweden. I am aware of the difficulties of remembering details of conversations. On the other hand, I have been trained to observe interactions in a laboratory for the study of face-to-face interaction in groups. In my examples, I have chosen to present extracts of conversations as I remember them. My second reason for this is that it takes less space to present my experiences in this way than using descriptions of what took place. The first example is constructed without an actual experience.

Explaining the effects of conversations on health and longevity

Definition of situations in conversations in general

The definition of situations, especially uncertain ones, is an important function of conversations in general. Take a hypothetical experience like this one:

Sitting on a train to Stockholm I observed a man looking at the signpost indicating that this is the train to Stockholm. He enters the door with a sign 'Stockholm'. He sits down next to me and asks: "This is the train to Stockholm? Is it not?" I nodded and said yes. It would not have been wise to have replied: "I am travelling to Malmö" because that could have produced severe stress in the man.

In many everyday situations, we often act like this. We seek confirmation of our definition of the actual situation. The definition of the situation is fundamental to how we act in the situation. This function also operates in conversations, even with casual acquaintances. People who are isolated have difficulty getting this kind of support for their definitions of situations. This could be interpreted as one of the mechanisms of lack of support for isolated people leading to less favourable health outcomes.

Sharing definitions of situations in conversations with confidants

The function of defining situations becomes more important when the predicament of the situation is harmful to the person or people involved, for example: Is fatigue that develops suddenly and quickly a symptom that should be treated or not? The importance of the function of confidants increases when

it comes to defining unclear situations where the situation is delicate. Then a person needs someone whom he or she has confidence in to talk to. For example, a person might get support if he or she shares the definition of a situation with a confidant, but would hesitate to share it with a non-confidant partner. One example from the Home Help Service shows this (the names used are not participants' real names):

Anna had a client, Ulla. Ulla managed her life fairly well and had a visit from Anna once every fortnight. On one such occasion Anna found Ulla almost hysterical, crying that she had to move to a nursing home. The flat was all upside down with dirty bed linen and underwear everywhere. The bed was totally soiled. It happened in a community with well-functioning elderly care, so by that afternoon Ulla was in a nursing home. It turned out that Ulla was incontinent, but had managed on her own with a small washing machine in her flat. Two weeks earlier, just after Anna's last visit, she had severe influenza and was not well enough to use the washing machine. Thus, she ran out of bed linen and underwear. She could not stand the sight of it so she hid the laundry on bookshelves, behind doors and wherever. When Ulla's situation came to the home helper's knowledge, her flat was cleaned and the laundry done. She could now move back and was given therapy and aids to manage the incontinence.

My main lesson from this example is to show how important it is to have confidence in people in personal networks to get a shared definition of delicate situations when there is help or support available. Thus, delicate harmful situations can be avoided by a shared definition with a confidant who has knowledge or resources to master the situation, reducing harmful risks and promoting health and longevity.

Reduction of ordinary anxiety by conversations

Everyday anxiety is related to what an individual worries about. According to the Thomas theorem, an individual worries about what he or she believes to be true [22]. These beliefs often have the characteristics of a narrative, a told story. An authentic example from working with home helpers was told by a home helper:

One morning when a home helper, Anna, came to Ulla, a client who had service from home helpers several times a day, she found Ulla sitting in her armchair sobbing. She was dressed in the same

clothes as the day before. When Anna asked her what was up, Ulla cried and said that she was so upset because she had to move out of her rented flat, and that she had not slept at all during the night. When Anna asked why she had to move, Ulla got angry and said:

U: You ought to know! It is the home help who has decided that I have to leave.

A: I have not heard of it. Where did you get this idea?

U: It was the new girl who was here yesterday evening.

A: Yes, Karin was here. What did she say?

U: She said that my flat was so good. It suited her well and she would like to live here. So now I have to move.

A: Oh—that's good. You know that was just her way of expressing her appreciation of your nice flat. She is not moving in here.

U: Are you sure?

A: Yes, that's just the way she said it. She has a nice flat of her own.

U: So I do not have to move then?

A: No, you are perfectly safe here in your flat.

This is a general way to reduce everyday anxiety. The technique is to get the person to tell a story about what is worrying him or her, and then together tell a new story with which the person can live with a comfortable level of anxiety. A central point is that these stories, when it comes to more personal and serious troubles, often remain untold if there is no conversational partner to confide in. If Ulla in the example above had had a confidant friend to call by telephone the night before, that friend would probably have done the same conversational work to reduce Ulla's anxiety. In my interpretation, it is clear that sitting up all night worrying and sobbing without sleeping is such a highly stressful situation that is harmful for health. There are of course situations when conversations can arouse anxiety, for example, when conversations spread rumours and in relationships where the partners act harmfully towards each other. Even so, I hold to my interpretation that one of the ways confidants promote health and longevity is through reduction of everyday anxiety.

Decision making in conversations

A function of conversations, more salient with confidants, is support when making decisions. This function often embeds the definition of the situation. It is not at all uncommon in elderly care that the client has alarm equipment, often on the wrist, to get help in serious situations. The problem is to define when a situation becomes serious. An example:

Ulla falls out of her armchair and cannot get to her feet. She manages to reach her telephone by pulling the cord. She calls on her neighbour Arne to come to help her. Arne comes and tells her that this is so serious she ought to press her alarm button. Ulla accepts this definition and presses the alarm. An alarm operator sends an ambulance to assist Ulla. The ambulance staff decide that Ulla should be transported to an acute ward.

This example illustrates the importance of having support in defining a situation when needing to make a decision. It is common that clients in elderly care call their confidants, often their children, before they define the situation as so serious that it is appropriate to press the alarm. This could be handled by the operators of the alarm service. If they interact enough in everyday life with clients to be let into clients' confidence, then clients could press the alarm to get support to define the situation. It can be accomplished by the operators if they take opportunities to celebrate birthdays, inform clients about local activities, and so on. That is, the operators could acquire a status as confidant in these matters and thereby become a resource to define the situations. In my interpretation, it is the lack of such support that is harmful to health and longevity.

The function of supporting decisions is not restricted to elderly citizens. It is common in everyday life. I have studied conversational analyses and carried out observations based on these experiences early in my professional life. This example comes from listening to a series of telephone conversations between two women:

- Hello, how are you?
- (*There were silences between the utterances when my colleague was listening marked ...*)
- I am fine but he has started to talk about having our holiday fishing in Lapponia. ...
- Yes, you know how awful I think that is. ...
- The sad thing is that we had decided to have our holiday on Cyprus.
- ...
- Yes, we had decided to go to Cyprus. ...
- Do you really think that I can just book a charter flight? ...
- Yes, we had decided to go to Cyprus. ...
- Well, you have been to Cyprus, where is it best to stay? ...
- Aha, Ayanapa. ...
- Well let's see what I can do. ...

Some days later:

- Hello, how are you? ...
- I am fine. You know I booked a tour to Ayanapa? ...
- He didn't say anything about Laponia. He was pleased with the arrangements. ...
- Yes, funny isn't it. He seems to have forgotten Laponia and fishing.
...
- But, as you have been there in Ayanapa, do you think that I can wear my old bathing suit or shall I buy a new one? ...

Many of us typically use ordinary conversations to make decisions. These range from planning one's life course to deciding which coffee to use. The harder it is to make the decision and the greater its importance, the more the other person's opinions, advice or support is needed. This is especially important for those who lack energy or initiative. They have to discuss whether this is the day to clean the house, go shopping, take a walk, go to church or visit a friend. Then, when they have made up their mind about that, they have to decide what to wear. Thus, it is very important for many people to have confidants so they can decide on matters that engage them in daily activities that provide basic physical training to keep or enhance fitness. This kind of function turns lethargy into activity and thus health.

Training of attention and brain functions by conversations

Conversational analyses by ethnomethodology reveal several conversational structures including turn taking, openings, closings, changes of subject, invitations, etc. These rules are part of the pragmatics of a language.

The rules of turn taking are often simple. The first speaker keeps the turn until he or she stops. This can happen at special slots that are possible stop points. The actual stop point is often announced by a shift in the utterance, like changing tone or speed. The next speaker is the one who starts first, or is selected by the preceding utterance. Sometimes the next speaker is chosen, for instance by a question or by a request. Thus, the participants have to attend to the speakers and to be prepared to say something that should be an adequate response. As an example, it is much easier for a listener to lose focus or even fall asleep during a lecture than during a conversation. At the lecture there is no risk of being addressed and prompted for a response, so it is safe to daydream or even snooze for a while. Thus, people's mental faculties are exposed to a functional load when they engage in conversations.

However, there are other even greater challenges than turn taking when engaging in conversations. To promote a common understanding, the participants often have to engage, even in unprompted utterances. It has been shown that misunderstandings that are not discovered during the first or second turn after the misunderstood item will persist during the rest of the conversation [25, 26]. Participants engage in these second and third turns with fine tuning so that they are perceived as competent persons. This takes attention and awareness. It is an important mental challenge to take part in conversations, and this is more important for the section of the population that is isolated from ordinary conversations. The members of the ageing population are at higher risk of such isolation, and with their decreasing reserve capacities they are at greater need of functional load from conversations.

I have observed communication styles that produce inactivity in nursing homes. For example, I observed a man sitting in a shrunken body position in a corridor at a somatic ward in a nursing home. A nurse came walking by at a high speed, saying in a continuous utterance: "Good morning Mr Person. How are you today? Fine, I reckon." Mr Person sat still during this passage and did not even raise his head. This was emphasized when I visited a psychogeriatric ward at a nursing home. As my guide, I had a senior nurse who had keys to all psychogeriatric wards at the home. As we entered the ward, we saw a man with a shrunken body position standing in the corridor who was occupied in repeatedly opening a door a few centimetres and closing it again. As he spotted us, he raised his body position, turned to us and said: "They are all smoking. Come, I shall show you where they are." Then he led us to a room, which was not easily found, and we thanked him for his guidance. The staff asked us how we found the smokers, and we told them that that man had told us where they were and showed us how to find them. Then they said: "That's peculiar. He never talks to us."

In my interpretation, there are communicative styles in elderly care that do not draw the clients into conversations. It is of no use to scan the speech flow of a nurse for prompts to engage in a conversation. In the last example, it was obvious to me that when the man recognized us as people who did not share the conversational culture of the ward, then there was a point in engaging in conversations. Obviously he had very few experiences of conversations at that ward. I have numerous similar examples. These communication styles do not create functional load and training of the residents' brains.

Memory training by conversations

When I discuss memory functions here, they relate to people who have weak memory capacities but do not have morbidities like dementia that harm the memory. During ageing, the memory functions decline, but not to such an extent that people lose their capacity to remember what is needed to orient themselves in time and space. In addition, lonely people often complain of bad memory capacity. They say that they remember distant episodes well, but have difficulty remembering recent episodes.

In my experience, the main cause of this complaint is that nothing worth remembering has happened: today is similar to yesterday, which was similar to the day before, and so on. What is there to remember, if the last remarkable thing that happened was the change of curtains at Easter?

To get a memory of an episode, something worth remembering should have occurred. When such an event has occurred, most of us enter such events as topics in conversations with people in our social network. This consolidates the memory. It is much easier to remember an episode that we have expressed in our own words. (That is one of the reasons why some students take notes during lectures. They express what they have perceived and thus remember it more easily.) In addition, conversations have another consolidating function: the next time we speak, the opposite party asks about the matter at this later point of time. By this, the memory is revisited and expressed once more and thus strengthened. These kinds of memories are often told and stored as stories. To have this training, people need a network in which they can tell and retell stories. In delicate matters, they need confidants to do this [27–29].

Nursing homes are often places where nothing significant happens, or nothing significant is brought to the attention of the clients. At one nursing home where I observed, they interpreted the Swedish law of confidentiality of information about their clients so rigidly that they would never tell one client any information about another client. This was also applied when a client died. The other clients were not told about the death. If a client asked a staff member: “I have not seen Johan lately. Do you know where he is?” the response could be “There is no Johan living here.” Under such circumstances, it is not strange that clients complain of poor memory capacities. I am not proposing that carers should kill clients to have something to talk about, but they should take all opportunities to use events, bad or good, to engage in conversations about these events.

Identity construction and maintenance by story-telling in conversations

An individual's identity is transformed during life, and this is often at least partly accomplished through ordinary story-telling. One such experience is falling in love, with its possible consequences of retelling personal history, actual everyday plans and plans for the future [30]. The general structure is that the couple's living conditions and interactions, especially with confidants, are changed, and they engage in conversations about: 1) what you or we have become now, especially in our relationship, 2) what brought you or us to this status, and 3) what will be your or our future relationship and lives? It is of special importance to have access to a confidant, as this person has a function as a significant other. It is the identity that provides the foundation of activities in everyday life. During ageing, it is normal to pass through several such identity constructions. A person's identity is one part of health and one of the fundamentals for actions. As such, identity construction by conversations is salutogenic.

Formulation of dreams in conversations

Workers in social services for the aged population know that there are always inactive individuals who are bored and complain that there is nothing to do. It is common for home helpers to suggest things to do, but these suggestions are rarely or never accepted. In my interpretation, these clients are lacking an aspect of consciousness that most people have, in that we are present in the situation where we are, but we also wish to be somewhere else or to do something else. We can listen seriously to instructions from our boss and at the same time make plans for the party we are going to give next Saturday. It is these beliefs about what will happen in the future that motivate us. It is our beliefs about what our vacation on Mallorca will be like that motivate us to pay for the holiday journey in advance. I call this kind of beliefs "dreams".

What bored inactive old clients lack are dreams of what they would like to do. The situation where clients have no dreams about something to do (in their minds) and there is nothing to do (in the world) is a typical nomic situation: a fit between mind and reality. This situation is unfortunately stable, keeping the person inactive, which is devastating to health. The method of managing it is to introduce a seed of anomie, the dream, eventually turning the resulting anomic situation into a nomic situation through the effort to fulfil the dream. This is an important force of motivation that produces actions that put load on physiological and psychological functions, giving the needed training and thus promoting health and longevity.

In my work with home helpers I have explained this situation and assigned a task to them: they shall, by everyday conversations, help clients to formulate their dreams. When the clients have formulated their dreams, the helpers will put the responsibility back on the clients and ask them how they will accomplish those goals. Then they must keep talking with clients about all the obstacles that prevent them from achieving what they are dreaming of and at the same time assure the clients that, when they have decided on what, how and when to do something, they are entitled to get suitable assistance to reach that dream. What is done by this simple matter is to get clients to:

- 1) decide to take a risk to accomplish something that is of importance to them, the dream,
- 2) make an agreement with the home helper about under what circumstances such behaviour should be judged as a success, and
- 3) get the response from the home helper who—after all the talk about the difficulties and how they should be solved—is a competent judge of the endeavour.

I have considerable experience of how this process works. In most cases, the dreams are formulated in terms of ordinary daily living, like being able to get out of the building when the springtime sun starts to shine. On the other hand, there have also been more challenging objectives. A woman with both legs amputated at the knee wanted to ride a horse once more in her life. With the assistance from the home help, this was accomplished in cooperation with a riding school that specialized in riding for disabled people.

There is one important theoretical consequence of these conversations. It is the demonstration of the qualitative variation in personal meaningfulness. Home helpers sometimes have inactive clients who are complaining about their boredom. They are bored and they say that there is nothing to do. The home helpers' standard response is to suggest something to do. These suggestions are almost always turned down. This is partly because they are suggestions from the home helper, chosen from what the home helper believes to be of interest to the client. It is very difficult and verges on impossible for the home helper to find out what actions are meaningful for the client. The qualitative variation is so great that it has to be the clients who formulate what is meaningful to them.

Conversations and social networks

Maintenance of social networks

It is hard to imagine a social network without communication. In everyday life, conversations are the most common form of communication. Conversations are thus important for initiating and maintaining social networks. Other forms of communication are also important, but up to now, conversations are regarded as fundamental. Other forms can be supportive, as in this example:

A woman, Anna, contacted the home help service and complained about fatigue. A standard question about her social network revealed that she had two close friends. It was hard to detect why Anna was so tired. Anyway, it was decided that Anna should have help from Dagny every second week with tidying up. On one occasion when Dagny was cleaning the flat, she asked Anna about her friends and got the answer that she had not heard from her friends lately. The same occurred a fortnight later: Anna said that she had not heard from them lately. When Dagny got the same response at their third meeting, Dagny exclaimed: "That is odd, you haven't heard from them for over a month." At that point, Anna broke into tears and said that she had not heard anything from them during the past year.

Anna told Dagny that when her husband died 18 months earlier, she mourned deeply and became depressed. The friends phoned but Anna turned down their invitations, referring to her grief. The phone calls became more infrequent and stopped altogether after about six months. As Anna recovered from her depression, she regretted her rejection of her friends' contacts. She felt ashamed and did not dare to call them, deciding instead to call "tomorrow". This situation was repeated, and it was as if there was a wall to climb to re-establish their contacts. With the help of Dagny, Anna invited her friends to lunch. Anna felt insecure, but Dagny was there to ensure that everything was all right. When Dagny came back next time to clean the flat, she was received by Anna in an alert mode, saying that now she had left the fatigue behind, and that she did not need help with cleaning the flat any more.

In my interpretation, it was the re-establishment of her network that helped Anna out of her lethargic situation and produced the alertness and thus was productive for health.

There are other sources of support in social networks

A person's social network comprises other people and the relationships to them. The relationships can be emotionally close (as with family or confidants), less close (as with friends and neighbours), or more distant. Furthermore, relationships can vary in interaction frequency, intensity and geographical distance. There are several more dimensions of social networks, for example, kinship, economic, institutionalized, arenas for interaction, and membership in groups. Interaction also has physical outcomes through the production of hormones, etc. I am not going to present a complete treatment of support; rather, I will just give an example to show that I do not believe that the support provided by conversations gives the whole picture.

To live with a fit partner promotes health in very many respects. First, there is reduction of risk of dangerous or harmful actions like smoking in bed or climbing on unsafe perches to solve an everyday obstacle like changing an electric light bulb. Almost all Swedes who die in fires are bed smokers who live alone. A partner could have put an end to bed smoking or could have ensured that the cigarette was really put out. There is also the already mentioned benefit of having a confidant. Aside from expressed shared definitions of situations or support to make decisions, there are also action habits supported by interaction. One such habit is eating cooked food. It is so much more rewarding to cook and have a meal together than to cook and eat alone. This promotes health by better nutrition and support to be active in the home [31, 32].

Conclusions

Conversations as a key to exploring variation

It is my contention that it is through conversations that we can explore the great variety of human needs, interests, goals and dreams that motivate human activities. I hope that the examples given in this report have shown that the home helpers and I met an unexpected variety during our conversations with the elderly. Thus, I conclude that the most important tool for home helpers is the mundane conversation that they engage in during the time they spend in their clients' homes.

Conversation's salutogenic functions

Conversations prompt activities that generate a functional load resulting in training and maintaining a wide range of human functions. This is accomplished by definition of situations, reduction of ordinary anxiety, decision making, attention training, memory training, identity construction and maintenance, formulation of dreams and maintenance of social networks.

References

1. Durkheim, E., *Suicide, a study in sociology*. 1951, Glencoe, Ill.,: Free Press. 405 p.
2. Berkman, L.F., et al., *From social integration to health: Durkheim in the new millennium*. *Social Science & Medicine*, 2000. **51**(6): p. 843-857.
3. Eriksson, B.G., et al., *Cross-cultural analysis of longevity among Swedish and American elders: the role of social networks in the Gothenburg and Missouri longitudinal studies compared*. *Archives of Gerontology and Geriatrics*, 1999. **28**(2): p. 131-148.
4. Marmot, M., *Health in an unequal world: social circumstances, biology and disease*. *Clinical Medicine*, 2006. **6**(6): p. 559-572.
5. Lennartsson, C., *Social ties and health among the very old in Sweden*. *Research on Aging*, 1999. **21**(5): p. 657-681.
6. Peat, G., et al., *Social networks and pain interference with daily activities in middle and old age*. *Pain*, 2004. **112**(3): p. 397-405.

7. Ostberg, V. and C. Lennartsson, *Getting by with a little help: The importance of various types of social support for health problems*. Scandinavian Journal of Public Health, 2007. **35**(2): p. 197-204.
8. Eriksson, B.G., D. Mellström, and A. Svanborg, *Medical-social intervention in a 70-year-old Swedish population. A general presentation of methodological experience*. Compr Gerontol C, 1987. **1**: p. 49-56.
9. Aniansson, A., et al., *Effect of a training programme for pensioners on condition and muscular strength*. Arch Gerontol Geriatr, 1984. **3**(3): p. 229-41.
10. Grimby, G., *Physical activity and muscle training in the elderly*. Acta Med Scand Suppl, 1986. **711**: p. 233-7.
11. Frändin, K., K. Johannesson, and G. Grimby, *Physical activity as part of an intervention program for elderly persons in Göteborg*. Scand J Med Sci Sports, 1992(2): p. 218-224.
12. Frändin, K., et al., *A life span perspective on patterns of physical activity and functional*. Gerontology, 1995. **41**(2): p. 109-20.
13. King, A.C., *Role of exercise counselling in health promotion*. British Journal of Sports Medicine, 2000. **34**(2): p. 80-81.
14. Hardman, A.E. and D.J. Stensel, *Physical activity and health : the evidence explained*. 2003, London ; New York: Routledge. xxvii, 289 p.
15. Mattiasson Nilo, I., et al., *Domestic activities and walking in the elderly: evaluation from a 30-hour*. Aging Milano, 1990. **2**(2): p. 191-8.
16. Lichtenstein, P. and N.L. Pedersen, *Social Relationships, Stressful Life Events, and Self-Reported Physical Health - Genetic and Environmental-Influences*. Psychology & Health, 1995. **10**(4): p. 295-319.
17. Weinstein, M., et al., *Social linkages to biological markers of health among the elderly*. Journal of Biosocial Science, 2003. **35**(3): p. 433-453.
18. Eriksson, B.G., *Ordinal dispersion of ratings of social participation as a function of age from 70 years of age among the H-70 panel, Gothenburg Sweden*. Archives of Gerontology and Geriatrics, 2008. **47**(2): p. 229-239.
19. Rinder, L., et al., *Seventy-year-old people in Gothenburg. A population study in an*. Acta Med Scand, 1975. **198**(5): p. 397-407.
20. Steen, B. and H. Djurfeldt, *The Gerontological and Geriatric Population Studies in Gothenburg, Sweden*. Zeitschrift Fur Gerontologie, 1993. **26**(3): p. 163-169.

21. Svanborg, A., *A Medical-Social Intervention in a 70-Year-Old Swedish Population - Is It Possible to Postpone Functional Decline in Aging*. *Journals of Gerontology*, 1993. **48**: p. 84-88.
22. Thomas, W.I. and D.S. Thomas, *The child in America: Behavior problems and programs*. 1928, New York: Knopf.
23. Lowenthal, M.F. and H. Clayton, *Interaction and Adaptation: Intimacy as a critical variable*. *American Sociological Review*, 1968. **33**(1): p. 20-30.
24. Murphy, E., *Social origins of depression in old age*. *The British Journal of Psychiatry*, 1982. **141**(Aug): p. 135-142.
25. Schegloff, E.A., *Repair after next turn - The last structurally provided defense of intersubjectivity in conversation*. *American Journal of Sociology*, 1992. **97**(5): p. 1295-1345.
26. Schegloff, E.A., *Practices and actions: Boundary cases of other-initiated repair*. *Discourse Processes*, 1997. **23**(3): p. 499-545.
27. Pasupathi, M., T. Weeks, and C. Rice. *Reflecting on life - Remembering as a major process in adult development*. in *9th Meeting of the International Conference on Language and Social Psychology*. 2004. Philadelphia, PA.
28. McLean, K.C. and M. Pasupathi, *Collaborative narration of the past and extraversion*. *Journal of Research in Personality*, 2006. **40**(6): p. 1219-1231.
29. Pasupathi, M. and E. Mansour, *Adult age differences in autobiographical reasoning in narratives*. *Developmental Psychology*, 2006. **42**(5): p. 798-808.
30. Berger, P. and H. Kellner, *Marriage and the Construction of Reality: An Exercise in the Microsociology of Knowledge*. *Diogenes*, 1964. **12**(1): p. 1-24.
31. Brantervik, A.M., et al., *Older hospitalised patients at risk of malnutrition: correlation with quality of life, aid from the social welfare system and length of stay?* *Age and Ageing*, 2005. **34**(5): p. 444-449.
32. Johnson, C.S.J., *Psychosocial correlates of nutritional risk in older adults*. *Canadian Journal of Dietetic Practice and Research*, 2005. **66**(2): p. 95-97.