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Research Report

The impact of personal resources and their goal relevance on satisfaction with food-related life among the elderly

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Abstract

The study explored how actual resources, perceived levels of different types of resources and goal relevance of these resources affect older people's satisfaction with food-related life using a survey in eight European countries, where 3291 participants above 65 years of age and living in their own homes took part. Satisfaction with food-related life was measured using Satisfaction With Food-related Life (SWFL) scale developed by Grunert, Raats, Dean, Nielsen, Lumbers and The Food in Later Life Team. [(2007). A measure of satisfaction with food-related life. *Appetite*, 49, 486–493]. Results showed that older people rated the resources that they believed to have plentiful of as being highly relevant to achieve their goals. The individuals who rated the relevance and their level of different resources as high were also more satisfied with their food-related quality of life. Further, satisfaction with food-related life, as was expected, was predicted by income, health measures and living circumstances. However, the study also showed that perceived levels of other resources such as support of family and friends, food knowledge, storage facilities also added to the individuals' satisfaction with food-related life. In addition, the congruence between perceived level and relevance of a resource was also shown to add to people's satisfaction with food-related life, implying that older people's satisfaction with food-related life depends not only on the level of resources they think they have but also on their goals and how important they think these resources are to achieving their goals.

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Introduction

In analysing the process of ageing, there is a growing recognition for a need to focus on subjective goals and individual perceptions of the “good life”. While ageing can be characterised as a process of progressive and irreversible biological changes resulting in a growing risk of chronic disease, cognitive and functional impairment, and an increased likelihood of dying (Khaw, 1997), there has recently been a move away from considering old age to be a

problem in itself and the focus has shifted towards older people's capacity to improve their own quality of their life. Successful ageing has been described as decreasing the risk of diseases and disease-related disability whilst maintaining physical and mental functioning and being actively engaged with life, with “active” referring to continued physical, economic and societal participation (Rowe & Kahn, 1998). The key concepts of productive ageing (i.e. the ability to contribute directly and indirectly in older age) and healthy ageing (i.e. the ability to remain physically and mentally fit) were identified and brought together in the World Health Organization's (2002) active ageing policy framework. Healthy ageing is thus the ideal situation in which disability and morbidity are compressed into a relatively brief period of time before death, preceded by a long period in which people age with

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¹The whole Food in Later Life Project Team comprises research scientists, interviewers, technicians, administrative staff and managers who made the study possible.

their vigour and functional independence intact (Campion, 1998).

In order to pursue this goal of healthy ageing, it has been recognised that there is a need for public health policies to focus on maximising the quality of life and not just the number of years that people live (Drewnowski et al., 2003). For this reason, subjective concepts like quality of life that have emerged since the 1960s (Veenhoven, 2002) are now a recognised and widely accepted part of the scientific and political debate. However, this growing recognition of the need to focus on personal goals and individual perceptions of the “good life” has not yet sparked research in the area of food and nutrition in relation to older people’s quality of life, in spite of the major importance that the food domain can be expected to have for older people’s quality of life.

As people age their food and energy intake tend to decrease (Morley, 1997) for a number of both physiological and practical reasons including reduced activity (immobility), reduced muscle tissue, lower resting metabolic rate and smaller meals (MacIntosh, Morley, & Chapman, 2000). This reduced energy intake also known as “anorexia of ageing” is a potential health risk because although food intake is reduced with age, the need for most nutrients does not decrease with age. Secondly, ageing affects the ability to taste and smell. Seniors are less sensitive to all the basic tastes and particularly smells. Declining ability with age to detect tastes and smells and their intensity has been suggested to in part be responsible for the reduced intake of foods (Rolls, 1999). Such objective physiological effects of ageing on health are quite well described in the literature (e.g. Bowling & Ebrahim, 2001; Khaw, 1997; Verbrugge & Jette, 1994) and measures can be taken to counteract these consequences of ageing through new product development, nutritional programmes, campaigns and other social policy measures. What is still not researched are possible other factors contributing to older people’s quality of life, their subjective well-being in the area of foods. Factors that have been discussed relate to people’s living circumstances and to changes in their social networks; other possible factors are supply of and access to suitable products, cooking skills, facilities in the home, etc.

As people age their living circumstances may alter. For example, as people retire their level of income and their social network may reduce. As health fails access to shops and amenities may become a problem. As people lose their living companions due to death of spouse or children leaving home, cooking and eating circumstances may change. All these factors compound as people get older affecting older people’s relationship with food and in turn their satisfaction with food-related life. By identifying which of these resources are important and what can be improved, it may be possible to increase older people’s satisfaction with food. It is for example well known that social factors and the eating environment are significant determinants of food intake (de Castro & de Castro, 1989; Meiselman, 1996).

For many older people loss of social networks is a consequence of ageing. It appears that older people’s living circumstances are changing, with people being less likely to live with other family members or unrelated individuals and more likely to live alone and thus an increased probability of eating alone (Iacovou, 2000). There is also evidence that older people living alone are more likely to enter an institution than those living with at least one other person. Even where institutionalisation does not take place, older people who live alone are more likely to require inputs of care from the state, in the form of home helps and other social services, than those who live with others (e.g. Iacovou, 2000). Such changes can be expected to have an effect on food-related quality of life.

The role of resources and their relevance to goals

Researchers on subjective well-being and life satisfaction have looked at the role of various resources in attaining life satisfaction (Cambell, Converse, & Rogers, 1976; Diener & Diener, 1993). These have included a variety of material resources (e.g. income), personal resources (e.g. skills) and social resources (e.g. family and friends) that an individual can use to achieve his or her personal goals. In a large number of studies the influences of various resources on life satisfaction have been examined to show that within more affluent countries, income has a small but positive effect on life satisfaction (see Veenhoven, 1984), objective physician-rated health a weak effect on life satisfaction whereas self-rated health quite a strong effect (e.g. Schneider, 2004). Individuals who are employed were found to be significantly more satisfied with their lives than unemployed individuals (Di Tella, Macculloch, & Andrew, 2001), and age had no effect on life satisfaction (Pinquart, 1998; Shmotkin, 1990; Veenhoven, 1984). Married people were found to be more satisfied with their lives than those who never married, were divorced, separated or widowed (e.g. Haring-Hidore, Stock, Okun, & Witter, 1985). Further, educated people tend to be more satisfied with their lives than less educated ones (Witter, Okun, Stock, & Haring, 1984). For a review of the correlates of satisfaction with life, see Diener, Suh, Lucas, and Smith (1999).

Resources correlating with life satisfaction can also be explained in terms of means end chain theory. An individual’s resources can be seen as means that is at the individual’s disposal which he/she can use to work towards achieving his most important goals to make him/her satisfied with his/her life. As people get older their goals change, and their available resources in terms of health, social networks, income and skills also change.

Studies (Diener & Diener, 1993; Veehoven, 1991) have shown that resources vary in relevance to subjective well-being depending on the values, needs and goals of the people involved. Diener et al. (1999) argues that most resources are not strong predictors of subjective well-being because there are so many different resources that covary with each other so any particular resource is often not that

crucial to a person's achievement of a goal as there are so many other relevant resources. For example, if the goal of an individual is to eat a healthy diet, a single product may contribute to achieving this end, but it is unlikely that a person would consider the intake of just one healthy food product as sufficient or even decisive to fulfil this goal. In Diener and Fujita's (1995) study when the resources are summed they predict more variance in subjective well-being. It is argued that when resources are examined in an idiographic way it was found that the importance of a particular resource depended on its relevance to what the individual was typically trying to accomplish.

Diener and Fujita (1995) also found that people tend to have goals that are relevant to their strongest resources. Also, people who have the most congruent goals and resources, that is, resources that are relevant to their goals/strivings, exhibit the highest subjective well-being (Cantor & Sanderson, 1999). Diener and Fujita (1995) argue that successful adaptation is likely to depend on choosing goals that can be accomplished with the resources one possesses. Alternatively, it could be suggested that people with high subjective well-being are better able to cultivate the resources they need to obtain their goals. Extrapolating from this to older people whose resources are diminishing, it could be suggested that those with goal-related resources would have a high level of satisfaction with life compared to those whose resources are not relevant to their goals or those who lack the resources to achieve their goals.

The previous studies (Cantor & Sanderson, 1999; Diener & Fujita, 1995) have looked at how people's goals and resource congruence affect their subjective well-being. Similar concepts may be applied to satisfaction with food-related life to see how food-related goals and resources of older people influence older people's satisfaction with food-related life. By identifying older people's food-related goals, the level of resources they possess and the relevance of these resources in achieving their goals we can investigate the relationships between food-related goals, resources and satisfaction with food-related life. The main objectives of this study are to explore how level of resources and goal relevance affect satisfaction with food-related life. This was done by testing the following hypotheses:

Hypothesis 1. People select goals for which they have adequate resources. That is, there is a high correlation between a resource level and its perceived relevance to achieving goals.

Hypothesis 2. The higher the correlation between resource level and the relevance of these resources to achieve goals (congruence), the greater the satisfaction with food-related life.

Hypothesis 3. Sum of resources and congruence between level and relevance of resources both independently contribute to older people's SWFL.

Hypothesis 4. Resource–goal congruence and perceived level of resources predict satisfaction with food-related life over and above what is predicted by actual resources.

Methods

Participants and procedure

A survey was conducted in eight European countries: Poland, Portugal, United Kingdom, Germany, Sweden, Denmark, Italy and Spain. Questionnaires were administered face to face by trained interviewers. The questionnaire was developed in English, translated and back-translated before it was piloted in each country.

Data collection took place in the autumn of 2005 where 3291 participants above 65 years of age and living in their own homes were sampled. At least 400 participants from each country were sampled from at least three sampling points in each country. The sample was a quota sample, dividing the sample into eight groups of approximately 50 in each country, based on gender, age and living circumstances (living alone versus living with a partner). The sample reflected the diversity of each of the national population based on education, income and urbanisation of living environment urban/suburban/rural. The sample was taken from at least three geographical locations/sampling points in each country.

Measures

A selection process of resources and food-related goals potentially relevant for seniors' satisfaction with their food-related life was initiated based on the analysis of 80 in-depth interviews with seniors (10 participants from each of the above eight quota groups) in each of the eight countries. The most frequently named food-related resources and goals were collected from these qualitative data in each of the eight countries which resulted in the extraction of 11 different goals (Table 2) and 22 different resources (Table 3) which were included in the survey questionnaire. The 10 food-related goals were rated on a five-point scale from 1 (not important) to 5 (extremely important). This was primarily done to prompt respondents to think about their own food-related goals and daily strivings.

After rating the importance of food-related goals, respondents were asked two questions relating to each of the 22 resources, one relating to the participant's perceived level of the resource and the second to the perceived importance of the resource for attaining food-related goals. The first question about resource level was phrased: *Do you agree or disagree that you have a good (resource name)?* The second question about the goal relevance of the resource was phrased like: *To achieve your goals in relation to food and meals how important is it to have a good (resource name).*

Satisfaction with food-related life was measured by the 5 item Satisfaction With Food-related Life (SWFL, $\alpha = 0.85$) scale developed by Grunert et al. (2007). Other measures included those of physical and mental health as measured by the SF8 Health Survey (Ware, Kosinski, Dewey, & Gandek, 2001) ($\alpha = 0.91$), monthly income (in Euros) and car availability. Responses to SF8 items were split into two, physical (PCS8) and mental (MCS8) and a score for each was computed for every individual.

Results

A principal component analysis of the five items measuring satisfaction with food-related life revealed one factor accounting for 62% of the variance. A composite score was computed for each individual using the mean value of all five items (Cronbach $\alpha = 0.85$). See Table 1 for the mean values of the items used. In terms of goals older people rated enjoying food and meals as their most important goal with regard to food and choosing convenient food as their least important goal (Table 2).

The means and standard deviations for each of the 22 resources and their goal relevance are shown in Table 3. Respondents viewed themselves as well resourced in having good storage facilities, access to good transport and kitchen appliances. Also they viewed themselves as receiving good support from their family and being able to smell and taste (Table 3). However, the participants viewed themselves as being low on receiving formal financial and practical support.

The resources regarded as most relevant to achieving their goals included good storage facilities, good health, good dental health, mobility, ability to smell and taste and family support (Table 3). Access to a good service provider was seen as least relevant.

Correlations between actual and perceived resources showed that living circumstances was highly negatively correlated with sharing meals with others ($r = -0.61$; $p < 0.01$), such that those who lived with a partner shared more meals with others than those who lived alone. Perceived good health was highly correlated with physical health ($r = 0.58$; $p < 0.01$) and mental health ($r = 0.41$; $p < 0.01$) measures. In addition, physical health correlated

Table 2
Mean and standard deviation of goal importance

Food-related goals	Importance	
	Mean	S.D.
Choose food products and dishes that you enjoy eating	3.87	0.83
Eat a healthy diet	3.77	0.93
Vary your menu and have a wide range of foods and dishes	3.65	0.91
Eat your daily meals in nice surroundings	3.64	0.97
Arrange shopping and preparation of meals so that you do not need help from others	3.41	1.26
Keep your expenditures on food as low as possible	3.22	1.21
Eat your meals in the company of other people	3.15	1.30
Maintain the cultural traditions of your country or region in relation to food and meals	3.09	1.31
Control your weight through your choice of food	2.95	1.26
Be able to cook meals for others	2.72	1.33
Choose food products and dishes that are quick and easy to prepare	2.71	1.25

Scale: 1–5; 1: low importance; 5: high importance.

highly with mobility ($r = 0.53$; $p < 0.01$) such that those who were in better physical health were mobile and vice versa. Perceived level of income was also found to be associated with actual monthly income ($r = 0.53$; $p < 0.01$). These results suggest that older people's perceived levels of resources are a good reflection of their actual levels of resources.

Hypotheses 1 and 2: relationship between perceived level of resources, their relevance to goals and satisfaction with food-related life

To investigate how people's perceived level of resources and their relevance to achieve their goals affect satisfaction with food-related life, several analyses similar to those undertaken by Diener and Fujita (1995) were carried out.

In order to check whether people selected goals for which they had adequate resource, for each participant a correlation coefficient between each level of resource and their goal relevance was computed for the 22 resources. The mean within subject correlation was 0.49 where 94% of the correlations were positive, whereas only 6% were negative. This suggests that most respondents selected goals for which they had relevant resources.

In order to check whether the congruence of goals with available resources was a predictor of satisfaction with food-related life for each individual, the correlation between resource relevance and level of resource was correlated with their satisfaction with food-related life score. Results ($r = 0.20$; $p < 0.001$) showed that the greater the congruence between a person's goals and the resources he or she has, the higher the satisfaction with food-related life that person experiences. This implies that people who have relatively more of their resources in the areas that are relevant to their personal goals have greater satisfaction with their food-related life. Those who have their highest

Table 1
Mean and standard deviation of satisfaction with food-related quality of life items

SWFL items	Importance	
	Mean	S.D.
Food and meals are very positive elements in my life	3.82	0.79
I am very pleased with my food	3.96	0.72
My life in relation to food and meals is close to ideal	3.59	0.87
With regard to food the conditions of my life are excellent	3.62	0.87
Food and meals give me a lot of satisfaction on daily life	3.75	0.79

Scale: 1–5; 1: low importance; 5: high importance.

Table 3
Mean and standard deviation of resources and their goal relevance and the correlation between the two

Resources	Level of agreement ^a		Relevance ^b		Correlation between level and relevance	Correlation between level and satisfaction with food related life
	Mean	S.D.	Mean	S.D.		
Being able to taste and smell well	4.21	0.76	4.12	0.71	0.47	0.21
Access to food that is quick and easy to prepare	3.67	0.98	2.88	1.22	0.33	−0.02 (ns)
Access to convenient means of public or private transportation	4.00	0.97	3.76	1.10	0.28	0.19
Access to good food service providers, for example a day centre or meals on wheels	2.54	1.45	2.29	1.40	0.45	−0.12
Access to high quality food products and brands	3.84	0.91	3.41	1.06	0.43	0.28
Access to new and different types of food products	3.68	1.00	2.90	1.20	0.43	0.16
Access to organic food	3.37	1.19	2.68	1.34	0.30	0.18
A good general knowledge about food and nutrition	3.62	0.95	3.61	0.93	0.55	0.24
Being able to receive support from authorities or private organizations	1.87	1.18	2.57	1.46	0.38	−0.02 (ns)
A good appetite for food	3.93	0.86	3.74	0.85	0.38	0.37
Good cooking skills	3.61	1.15	3.52	1.06	0.63	0.14
Good dental health	3.66	1.14	4.13	0.71	0.20	0.26
Good food storage facilities, for example a freezer, refrigerator or cupboards	4.39	0.65	4.29	0.66	0.49	0.20
Being in good health	3.43	1.09	4.04	0.72	0.17	0.30
Adequate income	3.23	1.12	3.92	0.78	−0.06	0.27
Appropriate kitchen appliances and equipment to make cooking easier	4.02	0.81	3.76	0.94	0.57	0.23
Access to food at low prices	3.56	1.06	3.39	1.13	0.19	0.17
Being able to get around on foot	3.96	1.06	4.04	0.91	0.28	0.11
Sharing your meals with other people (including your partner or spouse)	3.55	1.31	3.42	1.24	0.68	0.23
A short distance to your normal food shops	3.89	1.02	3.88	0.97	0.38	0.04
Having members of your family who will help you when you need it	4.06	1.05	4.00	1.07	0.50	−0.03
Having a neighbour or close friend who will help you when you need it	3.64	1.16	3.58	1.21	0.50	0.15

^aLevel was measured on a five-point scale (1: strongly disagree; 5: strongly agree).

^bRelevance on a five-point scale (1: not important; 5: extremely important).

resources in areas that are less relevant to their goals have lower satisfaction with their food-related life.

These data were further tested at the aggregate level. First the correlation between perceived mean level of resources and satisfaction with food-related life was computed and transformed into *z*-scores. Pearson correlations between the mean goal relevance ratings and the transformed correlations were performed to check the relationship between the relevance of the resource to goals and relation of the resources to satisfaction with food-related life for the group as a whole. These correlations were computed across the 22 resources for satisfaction with food-related life. The correlation ($n = 22$) with satisfaction with food-related life was positive and significant (0.44; $p < 0.05$) suggesting that the greater the relevance a particular resource was on average to the goals, the greater

the correlation between the resource and satisfaction with food-related life

Hypothesis 3: Sum of resources and resource–goal congruence as predictors of older people's satisfaction with food-related life

In order to investigate what predicts satisfaction with food-related life a regression analysis of satisfaction with food-related life on the sum of resource levels and on the within person correlation between a respondent's resource level and relevance was performed. Both variables were found to predict satisfaction with food-related life [$F(2,3266) = 417.4$; $p < 0.001$: summed resources $\beta = 0.41$; $p < 0.001$, congruence $\beta = 0.14$; $p < 0.001$; multiple- $R = 0.45$]. This demonstrates that resource–goal

congruence predicts satisfaction with food-related life over and above the influence of one's total amount of resources [$F_{\text{change}}(1,3266) = 75.16; p < 0.001; R^2 \text{ change} = 1.8\%$].

Next, the effect of the congruence between goal relevance and level of resource on satisfaction with food-related life was investigated for each of the 22 resources. First the 22 goal relevance ratings were standardised within each participant so that the relative difference in goal relevance could be examined. Thus, each individual had an average standardised relevance rating of 0 and a standard deviation of 1. For each resource the participants were divided at the median into low and high relevance group. Across the 22 resources the mean correlation between the unstandardised level of each resource and satisfaction with food-related life was 0.16 for the less relevant group and 0.24 for the more relevant group. A paired sample *t*-test of these two correlations was significant [$t(21) = 5.47; p < 0.001$]. Thus, although there was a correlation between resources and satisfaction with food-related life for less relevant resources, the mean correlation was higher between more relevant resources and satisfaction with food-related life. The biggest difference was found for the resource of access to new and different products. For the less relevant group the correlation between this resource and the satisfaction with food-related life was only 0.07 compared with a correlation of 0.29 for those whom the resource was viewed as more relevant for their personal goals ($p < 0.001$).

Finally to see whether perceived level of resources and relevance of these resources to the perceived goals predict more than the actual level of resources, a hierarchical multiple regression analysis was performed on satisfaction with food-related life where actual resources were added in the first step and summed perceived resources and correlation between level and relevance was added in the second step.

The first step in the multiple regression (Table 4) of participants' satisfaction with food-related life on their actual resources [adjusted- $R^2 = 0.17; F(5,2680) = 107.5; p < 0.001$] revealed significant independent effects for MCS8 ($\beta = 0.24, p < 0.001$), monthly income ($\beta = 0.17, p < 0.001$), living circumstances ($\beta = -0.10, p < 0.001$), and PCS8 ($\beta = 0.11, p < 0.001$) but not for car availability ($\beta = -0.01, \text{ns}$). This implies that older people who are in good physical and mental health, who have a high monthly income and live with a partner are more satisfied with their food-related life compared to those in poor physical and mental health, who live alone and have a lower monthly income. Whether or not older people have access to a car does not seem to have an effect on their satisfaction with food-related quality of life.

In the second step the multiple regression of satisfaction with food-related life on PCS8, MCS8, living circumstances, monthly income, sum of perceived resources and correlation between level and relevance [adjusted- $R^2 = 0.26; F(7,2678) = 133.3; p < 0.0001$] revealed significant independent effects for MCS8 ($\beta = 0.19, p < 0.001$),

Table 4

Hierarchical multiple regressions of satisfaction with food-related life on actual resources (living circumstances, PCS8, MCS8, monthly income and car availability) perceived sum of resources and congruence between level and relevance of resources ($n = 2686$)

	<i>B</i>	S.E. <i>B</i>	β	<i>p</i> <
Step 1				
Constant	2.62	0.09		
PCS8	0.01	0.00	0.11	0.001
MCS8	0.02	0.00	0.24	0.001
Living circumstances	-0.13	0.02	-0.10	0.001
Monthly income	0.04	0.00	0.17	0.001
Car in household	-0.02	0.03	-0.01	ns
Step 2				
Constant	10.25			
PCS8	0.00	0.03	0.00	ns
MCS8	0.01	0.00	0.19	0.001
Living circumstances	-0.11	0.02	-0.08	0.001
Monthly income	0.02	0.00	0.10	0.001
Car in household	0.02	0.00	0.02	ns
Sum of resources	0.02	0.00	0.32	0.001
Correlation between level and relevance	0.23	0.04	0.10	0.001

Adjusted- $R^2 = 0.26$.

living circumstances ($\beta = -0.08, p < 0.001$), income ($\beta = 0.10, p < 0.001$), sum of resources ($\beta = 0.32, p < 0.001$) and correlation between level and relevance ($\beta = 0.10, p < 0.001$) but not for PCS8 ($\beta = 0.03, \text{ns}$) or car availability ($\beta = 0.02, \text{ns}$). The increment in explained variance (change in R^2) from the first to second stage revealed it was significant ($p < 0.0001$) for satisfaction with food-related life (9%). This showed that sum of perceived resources and congruence between level and relevance significantly increased prediction of satisfaction with food-related life over and above actual resources.

Discussion

Results indicate that for this group of older people, enjoying food and meals that were healthy and varied were goal priorities. To achieve these goals older people saw good dental and overall health, mobility, ability to taste and smell, good storage facilities and family support as relevant resources. Out of the given list of resources they perceived themselves as having good storage and kitchen facilities, good family support, access to good transport and the ability to taste and smell. This shows that for older people food-related goals are not only linked with health matters but also relate to the enjoyment of food in terms of variety, social networks and surroundings. In terms of resources, the study showed that not only personal resources such as mobility and ability to taste and smell but social resources such as family support and material resources such as storage facilities were also deemed important to achieve the desired goals. This lends support to Cantor and Sanderson's (1999) conceptualisation of relevance of different types of resources necessary for

improving quality of life. The study also found that this group of older people perceived themselves as having good material resources in terms of good transport and good storage facilities, good social resources in terms of family support and good personal resources such as ability to taste and smell.

This study also showed that people rated the goal relevance of resources that they believed to have plentiful as higher. The individuals who rated the relevance and their level of different resources as high were also more satisfied with their food-related quality of life. That is, those who were high on certain resources also saw these resources as being more relevant to achieving their goals. In addition, those who saw their resources as more relevant were also more satisfied with their food-related life than those who saw them as less relevant. This is in line with Diener et al.'s finding where similar relations between people's level of resources, their rating of relevance of these resources and their happiness levels were found on three different happiness scales. This implies that either people see resources they possess as being highly relevant to achieve their goals or set goals only in areas where they perceived themselves to be highly resourced. Either way those who perceived themselves as having high level of resources that are also goal relevant were very satisfied with their food-related quality of life.

The correlation between level and goals relevance for the 22 resources showed that older people saw a small negative association between perceived personal level and relevance for the resource of *income*. This suggests that those who perceived themselves as having a low income perceived income to be more relevant than who viewed themselves as having a high income. Although this effect is small it is still statistically significant suggesting that those who do not have money see it as being more relevant than those who have as these may take money for granted and so may appreciate its importance to achieving their goals. For the rest of the 21 resources there was a significant positive association between perceived level and perceived relevance to goals. The study also showed that those who perceived high relevance were more satisfied than those who perceived less relevance. This implies that if one is unsatisfied with one's food-related quality of life a possible way of improve this would be to change one's goals to ones that related to the individual on which the person perceive they are highly resourced.

The resource *access to new and different products* produced the greatest difference in the correlation between level and satisfaction with food-related life between those who saw this as high in relevance as opposed to those who saw this resource as low in relevance in achieving their goals. This is not surprising as one of the important goals identified by this group of older people was eating a varied diet. To be able to eat a varied diet one needs to have access to new and different products. Thus for those who saw this resource as being highly relevant, having good access (high level) led to high satisfaction.

One of the main differences between Diener and Fujita's (1995) study and ours is that in theirs the level of resources of the individual was assessed by people close to the participants in contrast to our study where the level of resources of the participant was measured as perceived by the participant him/herself. The relationship between participants' perceived level on some of the resources and actual resources showed that they were highly correlated demonstrating that people's perception were closely linked to their actual living circumstances.

In this study, satisfaction with food-related life, as was expected, was predicted by income, health measures and living circumstances. However, the study showed that other resources such as support of family and friends, food knowledge, storage facilities also added to the individuals' satisfaction with food-related life. In addition, the congruence between perceived level and relevance was also shown to add to people's satisfaction with food-related life, implying that older people's satisfaction with food-related life depends not only on the level of resources they have but also on their goals and how important they perceive these resources are to achieving their goals.

These findings may provide a point of departure for designing measures to increase older people's satisfaction with food-related quality of life. In order to do this, first methods that will easily identify individual's own goals and relevant resources need to be developed and tested. Using these methods, older people's goals and relevant resources could be identified and older people encouraged to think of ways of obtaining more congruence between the two variables. For example, they could be encouraged to come up with alternative goals that match the resources they are high on, or encouraged to identify alternative resources that would help them achieve their desired goals. By obtaining better congruence between goals and resources older people could improve their satisfaction with food-related quality of life. However, intervention studies need to be conducted to test the ease with which older people are able and willing to change their goals to match their resources and also how easy it would be for them to identify alternative resources that can be used to achieve the same goals. Further, the effect of these interventions on the level of increase in people's satisfaction with food-related life needs to be studied.

The results showed how the goals older people have in relation to their food-related life interact with the different resources available to them through resource relevance to influence their level of satisfaction. These findings should be tested in groups other than the elderly before any firm conclusions on how goals influence satisfaction can be reached. Also, in this study older people were asked to rate the importance of goals elicited from previous work, and then asked to state on a given list of resources their perceived level and the resource relevance to achieving these goals. Different methods of eliciting participant's resources and goals should be tried and tested. Finally, this study investigated relationships between goals and

resources and their contribution to satisfaction in the food domain. These findings can be transposed to other life domains such as employment and health where satisfaction in these domains can be further investigated by looking at the contribution of goals and resources.

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