

Expectations of gains in the second half of life: a study of personal conceptions of enrichment in a lifespan perspective

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ABSTRACT

This research focuses on cognitive representations of the personal future during the second half of life. To investigate the developmental perspectives of people growing older, the anticipation of possible gains is studied. The participants of this study took part in the German Aging Survey and the sample comprises 2,934 subjects aged 40–85 years. To assess their anticipated ‘gains’, we selected the future-related items from the SELE-questionnaire, a sentence completion instrument administered for the Survey. We assumed that many would anticipate further enrichment by new social and societal activities in retirement, but the most frequently-mentioned gains referred to changes in life style and leisure activities, especially travelling. Plans and wishes feature a predominantly leisure-oriented life style. Among the anticipations, those concerned with generativity – caring for others, societal commitment, vocational ambitions – substantially decrease at about the age of 50 years. It was hypothesised that age, gender, living in the former East or West Germany, health, education, income, and perceived control would influence the cognitive representation of the future. To examine the effects of these personal and situational factors on gain anticipations, multiple regression analyses were performed. With respect to all independent variables, differences in the kinds of expected gains were found. The outcomes are discussed with reference to lifespan developmental theory and the role of older people in society.

KEY WORDS – developmental gains, future expectations, retirement, activities, Germany.

Introduction

Increasing life expectancy and extra years of young old age have resulted in a ‘fresh map of life’ (Laslett 1989). Much of this map, among other

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things a closer understanding of developmental gains in later life, has been uncharted territory up to now. It is true that lifespan psychologists currently agree that gains occur at all stages of life (Baltes 1987, 1997). But what gains do people expect in the second half of life? Little is known about personal ideas and plans for further development. Pre-established opportunities for development in societal tasks and roles diminish, but when people retire they can expect to stay active and healthy for on average 15 years. How do they want to fill this 'late freedom'?

What people do or intend to do seems to be an important part of their self-concept. If people are asked for self-definitions, they often start by reporting activities (Freund 1995), therefore one's developmental space is likely to be strongly interconnected with one's projects or activities. In the framework of action theory, lifespan development is seen as a process regulated largely by the intentions and plans of the person concerned. Throughout their lives, individuals construct representations and internal working models of future possible selves, based on their experiences in their physical, social and symbolic environments (Cross and Markus 1991; Dittmann-Kohli 1995). The 'intentional world' is therefore an important exploratory category for research on lifespan development (Brandtstädter and Lerner 1999).

Circumstances and ideas can change, but in general cognitive scenarios function as strong guidelines for activities and self-development. Human striving is generally directed towards the optimisation of life conditions (Klinger 1994); so personal intentions and expectations of positive change can reveal what people expect as future gains. What people growing older expect as future gains is an essential basis for the concept of developmental gains in later life. To elaborate the concept of gains in a lifespan perspective, our study therefore investigates personal expectations among people in the second half of life.

In contrast to 'gains', 'goals' have been studied widely (for a review see Austin and Vancouver 1996). Examples of goal concepts are 'possible selves' (Cross and Markus 1991), 'personal projects' (Little 1999), 'personal strivings' (Emmons 1986), and 'identity goals' (Gollwitzer *et al.* 1999; Brunstein, Schultheiss and Maier 1999). Concepts of goals include expected and hoped-for gains, but they also include desired maintenance and avoidance of losses. Thus, the concept of goals is wider. We define, in accordance with Dixon (1999), expected and hoped-for 'gains' as goals people themselves perceive as improvement and enrichment.

For the conceptualisation of expected gains in the second half of life, traditional lifespan theories can provide relevant notions. According to these theories the step-by-step attainment of abilities and the solution of tasks result in successive attainments of developmental gains. Havighurst

(1972) and Erikson, Erikson and Kivnick (1986) regard lifespan development as a sequence of stages typified by psycho-social tasks. Important developmental tasks in the second half of life mentioned by Havighurst are: caring for children and ailing parents; adopting citizen's responsibilities; adjusting to decreasing physical strength and health, to retirement and reduced income, and to the death of a spouse; and adopting and adapting societal roles in a flexible way. In Erikson's theory, middle adulthood is characterised by the developmental task of generativity, such as being productive for the benefit of others and for external purposes. The developmental task of old age refers to attaining ego-integrity, which means accepting one's personal past as important, meaningful and satisfying. In Havighurst and Erikson's concepts, however, developmental gains are defined by the authors: it is not known whether the subjects themselves perceived the fulfilment of certain developmental tasks as gains.

In contrast to these concepts, the lifespan theories of Levinson (1990) and Bühler (1975) focus on self-directed changes and self-defined gains. Levinson's concept of lifespan development includes periodical appraisals of self and life. When individuals perceive their current state of life as deficient and unsatisfactory they strive to restore the balance and to improve their life circumstances. Bühler stated that lifespan development is characterised by self-defined goals generated by four basic tendencies: the fulfilment of basic needs, adjustment to the life context, keeping one's internal balance, and creative expansion. The last concern, which Bühler particularly found among young adults, by definition refers to gains. Creative expansion thus means carrying out activities which result in improvement or enrichment for the benefit of oneself or for the benefit of others, and includes personal exploration as well as generativity, productivity and inventiveness.

Hypothesised relationships between personal characteristics and expected gains

Taking into account this new 'third age' of life, Erikson in his last publications (*e.g.* Erikson, Erikson and Kivnick 1986) assumed 'vital involvement in old age' and continued striving for generativity until one's physiological resilience is seriously affected. In consequence, we hypothesise that people look for new opportunities of generativity after having finished vocational and family tasks, possibly in voluntary work or in second careers. We now explain the more detailed hypotheses to be examined.

Age

Cross and Markus (1991) notice that the number of possible selves in a person's cognitive system decreases with increasing age, which goes hand in hand with an increase in already completed life projects. Concurrently the 'budget of future time' for further projects or possible selves diminishes. As a consequence of the decreasing time horizon, we assume that the expectations of future gains will also decrease with age. In addition to this quantitative hypothesis, a qualitative supplementary was formulated. In the course of time, social tasks change and the energy level decreases, so it is expected that age is related to the type of gains.

Gender

Gender is a relevant influence upon life experiences and for life planning. Because traditional gender roles have been widely adhered to in the present later life cohorts, men and women have had remarkably different lives. Taking on certain obligations and activities always leads to the exclusion of other activities: one therefore expects that men and women will have different wishes to make up for earlier missed chances. With respect to gender, only a qualitative hypothesis is formulated: it is proposed that men and women expect different developmental gains.

Region of residence

People's experiences throughout their lives are substantially shaped by the political, economic, and cultural situation in the country of residence. The different histories of the former West and East Germany produced strong differences in socialisation, life constructions and experiences. We will test two related qualitative hypotheses, that perceived future gains are different in West and East Germany, and that wishes to travel in western countries will be unusually frequent in East Germany because of its restriction before reunification.

Health and education

Enrichment of life is to a great extent dependent upon physical activities, but the ability to be active depends on one's state of health. In consequence, we formulate a quantitative hypothesis, that those in poorer health will expect fewer gains in their future lives. A precondition of enriching projects is a knowledge of the opportunities and possibilities, which will generally be related to the level of education. It is therefore expected that more highly-educated people will mention more expected future gains.

Income and control beliefs

A large part of the second half of life comprises leisure time, especially in retirement, but many leisure activities are not cost free: they entail admission charges and require equipment to be bought. The range of possible enriching activities is therefore likely to depend on income and wealth. It is therefore hypothesised that income is related to the number of expected gains. Recent research indicates that taking up new activities in later life is associated with a person having a well-developed sense or belief in their ability to control their life (Steverink and Kempen 1998). As new activities are considered to be important developmental gains, the level of 'control belief' may affect the number of expected gains.

Method*Participants*

The analysis used data from the 1996 German Aging Survey of the life conditions and conceptions of people in the second half of life (Dittmann-Kohli, Bode and Westerhof 2001). With the help of many local authorities, a national probability sample was constructed and stratified by age (40–54, 55–69 and 70–85 years), gender and region of usual residence. Only people living in their own homes were chosen. Of those contacted, 50 per cent were willing to participate. The subjects were interviewed at home, and asked to self-complete a questionnaire that was collected by the interviewer two weeks later. The response rate for the self-completion questionnaire was 83.4 per cent. Refusal to participate and non-response to the drop-off were slightly higher among women, older people and West Germans. The respondent sample was compared with the non-responders through logistic regression. Age, gender, region of residence, education, and health explained only one per cent of the variance (Infas 1997). So the achieved sample does not show substantial biases compared with the original sample. For our study a representative sub-sample of 2,934 respondents was investigated (Table 1).

Material

Prior to the interview about their life circumstances and standard of living, the respondents were given a sentence-completion questionnaire 'SELE', which was especially adapted for the German Aging Survey (Dittmann-Kohli 1995; Dittmann-Kohli and Westerhof 2000; Bode, Westerhof and Dittmann-Kohli 2001). It was completed in the

TABLE I. *Original and content analysed samples of the German Aging Survey*

Attribute	Original sample		Content analysed sample	
	Number	Percentage	Number	Percentage
Age				
40–54 years	2,208	45.7	1,339	45.7
55–69 years	1,758	36.3	1,065	36.3
70–85 years	872	18.0	716	18.0
Gender				
Male	2,326	48.1	1,411	48.1
Female	2,512	51.9	1,523	51.9
Region of residence				
Old federal states (West)	3,914	80.9	2,372	80.8
New federal states (East)	925	19.1	562	19.2
Total	4,838	100.0	2,934	100.0

presence of the interviewer. SELE elicits the expression of self- and life-conceptions in a non-directive manner, and enables the respondents to respond in their own words and in accordance with their personal priorities. The SELE comprises 28 sentence stems that invite spontaneous and individual completion. Anticipated gains are particularly elicited by the sentence stems ‘In the years to come ...’, ‘I plan to ...’, ‘Later when I am older ...’, and ‘I intend to ...’. The phrases that completed these four stems were analysed in this study.¹

The content analysis was founded on the coding of the semantic contents which had been carried out for the German Aging Survey. The circa 300 numerical codes were hierarchically ordered according to themes and sub-themes, *e.g.* activities, work, paid work. The structure facilitates both fine differentiation and the agglomeration or collapse of the codes. Content coding was carried out by seven trained research assistants. Due to the multitude of codings, inter-rater reliability, measured by percentage agreement, was closely monitored and attained an average of 81.5 per cent.

The independent variables for health, education, income, and control beliefs were generated from the responses to the structured questionnaires. Additional differentiation of age groups, while retaining comparability with other analyses of the German Aging Survey data, was achieved by splitting each of its three standard age groups (to give age groups 40–46, 47–54, 55–61, 62–69, 70–76 and 77–85 years). The health variable is based on one item that asks the subjects to assess their state of health on a five-point scale. As 53 per cent assessed their health as ‘very good’ or ‘good’, and 47 per cent as ‘less than good’, a dichotomous health variable, coded

'good' and 'not good', was derived. Level of education was divided into three categories: 'high', 'middle', and 'low'. Income was computed as equivalence income and classified as 'high', 'middle' and 'low' (Motel 2000). The control beliefs variable was derived from a four-point scale developed for the Aging Survey (Bode, Westerhof and Dittmann-Kohli 2001). It includes seven items that refer to perceived influence on seven domains of life. Factor analysis of the items yielded one interpretable 'control beliefs' factor that accounted for 44.1 per cent of the variance (Timmer 2000).² The items were summarised and the measure divided into three equal groups of the sense of control: 'high', 'middle' and 'low'.

Statistical procedures

The frequencies of the statements that anticipated future gains were counted. Additionally, absolute and relative frequencies of the content areas of gains were calculated. The effects of age, gender, region of residence, health, education, income and control beliefs on the number of gain anticipations were analysed by linear regression. To control for the influence of the other factors, multiple regression analysis was carried out, using 'block entry' of the independent variables. No hypotheses were formulated about interaction effects, but in trial analyses that controlled for interaction effects, none were found. Finally, for each theme binary logistic regression analysis was applied in order to examine differences in the probability of mentioning a topic in relation to the contextual factors or variables. Because of missing values on some variables, especially education, income and control beliefs, the regression analyses were carried out on a final sample of 2,132 people.

The contents of gain expectations

In total, 6,518 anticipated gains were reported, and the frequencies of their content areas and themes are presented in Tables 2 and 3. The most frequent areas were: 'positive changes in the way of life', 'new projects and experiences', 'social relationships', 'personality development' and 'work'. The secondary domains referred to 'hobbies and sports', 'improved health or health behaviour', and 'housing'.

Statements that anticipated *changes in the way of life* emerged most frequently (24.1%). They particularly refer to having more time for oneself or considering one's own concerns more thoroughly, having more rest, enjoying life or retirement, and making the day worthwhile. Another

TABLE 2. *Content areas and themes of gain anticipations*

Content area	Frequency	
	Number	Percentage
Positive changes in the way of life	1,570	24.1
New projects and experiences	1,484	22.8
Social relationships	824	12.6
Personality development	688	10.6
Work and achievement	624	9.6
Hobbies, sports and walking	583	8.9
Improvement of health or health behaviour	427	6.6
Other, e.g. housing, property	318	4.9
Total	6,518	100.0

content area with frequent mentions (22.8%) concerned new leisure projects and experiences, especially travelling. Thirdly, 12.6 per cent of the expected gains refer to social relationships, predominantly in connection with spending time on activities for the benefit of loved ones. Plans to invest time in the wider society, as in volunteer work in community movements, associations, clubs or groups, accounted for only one fifth of the sentence completions about social relationships. Work was mentioned fairly infrequently (9.6%) as compared with expectations of leisure-oriented activities, while personality development was mentioned by more respondents (10.6% of the expected gains).

So our first hypothesis, about the content of gain anticipations, was not confirmed. We supposed that people look for new opportunities of generativity after having finished vocational and family tasks, possibly in voluntary work or in second careers, but the respondents infrequently expressed plans for such contributions or for investment in their generative capacities. The evidence suggests that generative plans in social commitment play a more minor role in the second half of life than anticipated changes in personal life style and pleasure. Among the plans and hopes of Germans aged 40–85 years, aspects of an easier lifestyle and leisure time pursuits rank first. Often they are mentioned in combination with the advantages of retirement (Table 3). Paid or unpaid work ranks relatively low among future anticipations. Social commitment, in the sense of generativity, is mentioned more often than commitment to work. Such statements mainly refer to spending more time in the ‘inner circle’ of social relationships, and social commitments beyond this micro-context have only a marginal role. Time is to be invested in the private sphere – in individual or family activities. Public or civic commitments in retirement are rarely represented in the anticipations of people in the second half of life.

TABLE 3. *Topics of gain anticipations*

Content areas and topics	% ¹	Examples of statements
1. Positive changes in the way of life		
(a) More time, more concern for oneself	24.6	In the years to come ... I would like to have more time for myself; I'll look after myself better.
(b) More rest in life	19.8	Later when I am older ... I want to have more rest and relaxation.
(c) Enjoying life, enjoying retirement	19.2	Later when I am older ... I'll enjoy retirement; I want to get more fun out of my life.
(d) Being more aware of how to live	9.7	Later when I am older ... I'll be more aware of how I live. I intend to ... live a more intensive life.
(e) Expected change of the life situation	9.6	Later when I am older ... I hope life circumstances will improve; things will be better.
(f) Intended change of the life situation	9.2	I intend to ... reorganize my life. In the years to come ... I plan important changes.
2. New projects and experiences		
(a) Travel	65.2	Later when I am older ... I'll travel more often; I'll travel around a lot in my caravan.
(b) Planning activities in general	15.0	Later when I am older ... I'll go out very often. I intend to ... do new things when I'm retired.
(c) Educational and cultural participation	10.2	I intend to ... go to cultural events much more often; get my grandson to help me to become more knowledgeable about computers.
(d) New experiences	9.6	In the years to come ... I want to have new experiences.
3. Social relationships		
(a) Commitment to family and friends	51.4	In the years to come ... I want to participate in raising my children; I'll spend more time with my family, devote more time to my family. Later when I am older ... I want to be there for my grandchildren in order to let them profit from my knowledge; I'll help my children.
(b) Socialising	28.3	In the years to come ... I'll have parties and invite friends.
(c) Public commitment	20.2	I intend to ... do volunteer work with the disabled; do volunteer work on the integration of minorities; support sport events; help elderly people cope with their paper work. In the years to come ... I'll commit myself more to the protection of the environment.
4. Personality development		
(a) More calmness and composure	44.0	I intend to ... react less hot-headedly. Later when I am older ... I hope for more calmness.
(b) Getting along better with others	20.5	I intend to ... say 'no' more often; to be friendly.
(c) General personality development	19.7	Later when I am older ... I want to be wise as my father is.
(d) Other, e.g. positive attitudes	15.8	
5. Work and achievement		
(a) Doing, starting a job	51.0	In the years to come ... I'll find a new job; I intend to ... look for new perspectives in my job.
(b) Achievement	49.0	I plan to ... become the head of a primary school; still to accomplish a lot.
6. Hobbies, sports, walking		Later when I am older ... I'll play the piano more often; I'll take up playing golf.
7. Improvement of health/health behaviour		In the years to come ... I hope my health will improve. I intend to ... lose weight; to stop smoking.
8. Other (e.g. housing, properties)		I intend to ... renovate my house.

¹ Percentage of expressed gains in the content area.

TABLE 4. *Effects of contextual factors on anticipations of gains: multiple linear regression results*

Contextual factors	B	Standard error	Beta
Age	-0.04	0.00	-0.42***
Gender (m=0, f=1)	0.04	0.05	0.02
Region (West=0, East=1)	0.29	0.05	0.12***
Health	0.07	0.05	0.03
Level of education	0.04	0.04	0.02
Income	0.01	0.01	0.04*
Control beliefs	0.11	0.03	0.03***
Constant	4.16	0.19	
Adjusted R ² =0.22			

Significance: * $p < 0.05$, *** $p < 0.001$; N=2,132.

Associations with background factors

The quantitative hypotheses were first tested. As shown in Table 4, we found a strong association between a subject's age and the number of declared gain expectations. With increasing age, cognitive representations of future gains clearly diminish, in accordance with our hypothesis. The hypothesised association between 'sense of control' and the number of expected gains was also supported: the stronger an individual's sense of control of their life (higher belief of control), the greater the number of anticipated gains. The same is true for the hypothesised effect of income (but the relationship was significant at only 95 per cent). Education and health did not significantly associate with the reported number of anticipated gains, so the hypothesised effects were not confirmed. Unexpectedly, the region of residence turned out to have an effect, for those living in East Germany expressed more anticipated gains. When the various effects are compared by the beta values, the effect of age is the strongest.

Differences in the type of expected gains

Different preferences or types of future gains were found in association with all the contextual influences that were examined, and all the hypotheses about such qualitative differences have been confirmed. The prevalent kinds of gain expectations differ according to age, gender, region of residence, health, education, income and control beliefs. Table 5 presents the results of the binary logistic regression analyses for each of these factors. Since many tests of significance imply a chance of Type 1 errors, and given the relatively large samples, we generally use

the one per cent level of significance ($p < 0.01$). Additionally, however, surprising non-effects are reported.

Age

Almost every main type of expected gain showed significant age effects. The older the respondent, the less frequently the various fields or themes were mentioned. There were, however, four themes that were no less frequently mentioned by the older age groups: anticipations of enjoying life or retirement (Table 5, row 1c), being more aware of how to live (1d), taking part in educational activities and cultural events (2c), and socialising (3b). Additionally, in the realm of personality development, working towards more calmness and composure (4a) concerned both younger and older respondents, while efforts to broaden general personality development (4c) were most important to the youngest group (40–46 years).

Not surprisingly, anticipated gains connected with work (5a) became less prevalent with increasing age: they were quite frequently mentioned by 40–54-year-olds, but from the age of 62 years they were rarely mentioned. Cognitions about achievement and career (5b) diminished considerably from the youngest to the second youngest age group (47–54 years). Plans to travel (2a) were less often mentioned among the youngest and the oldest age groups compared with those in the fifties and sixties (although the differences are significant only at $p = 0.05$). New experiences (2d) were particularly anticipated by the pre-retirement age group (55–61 years). Strikingly, having more time for oneself and one's own concerns (1a) were particularly important to 40–54 year olds, the age group still engaged in multiple tasks.

Gender

Having more time for oneself and one's own concerns was much more frequently expressed by women than men. In addition, women were more inclined to plan educational and cultural activities. In the domain of social relations, socialising (3b) is more often mentioned by women, as one might expect, but the difference was significant only at $p = 0.05$. The most frequently mentioned topic in this content area, commitment to others (3a), was not as central to women as men.

Region of residence

Contrary to the hypothesis, we did not find more plans for travel among the East German than the West German respondents, but other differences

TABLE 5. *Effects of contextual factors on the topics mentioned: odds ratios in binary logistic regression analyses*

Themes	Age groups (years)					Gender	Region	Health	Education		Income		Control beliefs	
	47-54	55-61	62-69	70-76	77-85				Female	East ¹	Not good	Medium	High	Medium
1. Positive changes in the way of life														
(a) More time for one's own concerns	1.01	0.64	0.41**	0.16***	0.61**	2.29***	0.40***	1.00	1.16	1.48	1.39	1.27	1.11	1.08
(b) More rest in life	1.10	1.14	1.02	0.67	0.49*	0.82	1.19	1.00	0.55*	0.39**	1.01	0.91	0.96	1.08
(c) Enjoying life, enjoying retirement	1.30	1.29	0.78	0.63	0.64	0.99	1.04	0.80	0.69	0.53*	1.07	0.88	1.15	0.98
(d) Being more aware of how to live	1.52*	0.90	0.88	1.05	1.00	1.22	1.04	1.19	0.98	1.97**	1.35	1.56	1.26	1.05
(e) Change of the life situation (expected)	0.64	0.50*	0.63	0.30**	0.14**	1.43	0.91	2.28**	1.72	1.48	0.67	0.62	0.93	0.81
(f) Changing the life situation (intended)	0.65	0.68	0.19**	0.15**	0.11**	0.82	0.49*	1.36	1.19	1.95	0.99	1.52	0.60	0.80
2. New projects and experiences														
(a) Travel	1.52*	1.26	1.39	1.03	0.65*	0.98	1.27	0.65***	1.14	1.05	1.27*	1.21	1.07	1.23
(b) Planning activities in general	0.63	1.18	1.09	0.49*	0.34*	1.22	1.15	0.74	1.17	0.89	1.22	1.42	0.87	1.13
(c) Educational and cultural participation	1.06	0.90	0.62	0.62	0.40	1.77*	0.78	0.83	3.89*	7.57**	0.71	1.12	1.83*	1.87*
(d) New experiences	1.31	1.94*	1.53	1.43	0.43*	0.79	1.11	0.95	1.14	1.43	1.47	1.69**	1.05	2.05**
3. Social relationships														
(a) Commitment to family and friends	0.70	0.63*	0.52**	0.56**	0.45**	0.86	1.80***	0.89	0.61	0.81	1.11	0.90	1.47	1.40*
(b) Socialising	1.27	1.20	1.65	1.10	1.26	1.65*	1.58*	0.96	0.75	0.69	1.00	1.39	0.85	0.70
(c) Public commitment	0.77	1.83**	1.35*	1.93*	0.91	1.27	1.28	1.04	1.66	2.97**	0.92	1.19	1.25	1.31
4. Personality development														
(a) More calmness and composure	1.02	1.27	1.13	0.62	0.54	1.06	1.15	1.27	1.38	1.11	0.89	0.83	0.93	1.21
(b) Getting along better with others	1.25	0.75	0.79	1.00	0.41	1.23	0.50**	0.95	1.70	2.20*	1.05	1.06	1.28	0.81
(c) General personality development	0.55**	0.28*	0.33*	0.24**	0.34*	1.27	0.73	1.06	0.88	0.66	0.74	0.76	0.76	0.77
5. Work and achievement														
(a) Work	1.25	1.33	0.29**	0.26**	0.25**	1.22	1.93**	0.72	0.98	0.65	0.65*	0.62*	1.20	1.19
(b) Achievement	0.57**	0.28**	0.15**	0.06***	0.04***	0.61	1.24	0.98	1.11	1.21	0.85	0.90	1.69*	2.01*

Notes: The reference categories for each set of categories are: age group (40-46 years), gender (male), region (West), health (good), education (low), income (low), control beliefs (low). 1. East Germany. N = 2,132.

Significance: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

emerged. Expectations of more time for one's own concerns (1a), of changing one's life situation by one's own action (1f), and of getting along better with others (4b) were more frequently expressed by West Germans. Anticipated commitments to family and friends (3a) and socialising were however more prominent among people in East Germany. Work (5a) was twice as important in the future plans of East than West Germans.

Health and education

Variations in self-rated health were mainly associated with improvement of the general life situation (1e), which was mostly expected by those who reported poor health, and with travel plans (2a), which associated with good health. As regards the effect of the level of education, it was those with lower education, who mainly reported having more rest in life (1b) and enjoying life or retirement (1c), while, by contrast, intentions to be more aware of how to live (1d) mainly occurred among the more highly educated. Future gains in the domain of education and culture (2c) and anticipations of societal commitments (3c) were predominant among the more highly educated. Turning to the effects of income, it was found that expectations of new experiences (2d) were positively related to income, while by contrast, gains related to work (5a) were more often expressed by those with relatively low income.

Income and control beliefs

Expectations of new experiences and plans of educational and cultural participation (2c) were associated with high control beliefs. Interestingly, plans to invest time in commitments to close relationships (3a) were also associated with strong control beliefs (but the significance was only $p = 0.05$). Furthermore, stronger control beliefs were associated with more frequent anticipations of future achievement (5b).

Discussion

This study's aim has been to contribute to a richer conceptualisation of 'developmental gains in the second half of life'. It has produced insights into the perceptions of future gains among a representative sample of nearly 3,000 people in Germany aged 40–85 years. An analysis of future gain scenarios has found that differences are related to age and other personal and situational factors. As a first hypothesis, we assumed that

among the expectations, intentions and plans of people for the second half of life, generative tasks linked to paid or unpaid work would play an important role. The hypothesis was based on Erikson, Erikson and Kivnick's (1986) finding that, as a consequence of increased longevity and health, people remain concerned with future generative projects up to their seventies. This hypothesis has not been supported by our results. The majority of gain anticipations refer to making day-to-day life more enjoyable, to planning new projects such as travelling; to intensifying social relationships; and to self-development. Although many of the subjects were of normal working age, plans involving work were rare compared to plans for leisure. Most expressions of plans concerning work and achievement were made by the youngest group (aged 40–46 years). Among those aged 62 years and above, work, even non-paid work, was hardly mentioned in their ideas about future activities.

Plans concerning commitments in the social sphere were mentioned relatively frequently but referred only to the micro-context of family and friends. It appears that commitments to the wider society are not prominent among older Germans when they are contemplating their future and ways to enrich their lives. These outcomes conflict with Erikson's assumption that generativity is a prominent developmental goal for people into their seventies. The findings do not support optimistic models of 'productive ageing', which are based on the expectation that active older people will search for new roles and public responsibilities. Our findings suggest that personal plans to become involved in public commitments and volunteer work are a function of the level of education. As successive cohorts will be more highly educated, interest in public commitment in later life may increase, but ideas about enriching one's life presently include few challenging new tasks and responsibilities. On the contrary, freedom from obligations and personal space for a private life are the preferred 'developmental space' for the second half of life.

Age effects

In accordance with our second hypothesis, age showed a strong effect on the expectation of future gains. It was found that anticipated gains in all but a few content areas clearly diminished with age. The most frequently mentioned topic was travel; but it was not as prevalent in the oldest age group's expressions as among those of the 'young old', aged 55–70 years. Nor was travel high among the anticipations of the youngest group, aged 40–46 years, for they were still engaged in issues of generativity, *e.g.* plans linked to family support and work. The 47–54 years age group did

however display many plans for retirement, and these often involved travel – it is distinctively associated with the ‘third age’. In the oldest age group (76–85 years), many of whom are entering the fourth age, the importance of such projects decreases regardless of the state of health. It is worth emphasising that ‘personality development’ as an expected gain is still relevant to older people. While personal growth in general is only occasionally mentioned by subjects older than 46 years, the improvement of functional capacities and the development of positive attitudes was found to be independent of age – especially in the sense of striving for calm.

Gender effects

Although the anticipated number of gains did not vary by gender, a few topics or types of gain had different centrality. Women’s future scenarios contained more references to socialising, perhaps reflecting women’s traditional roles of being more involved in close relationships and having more family care responsibilities, although no gender difference was found regarding intended commitments to and support for close relationships. The findings show that many men want to make up for things they have missed in life: particularly time for and with loved ones. Strikingly, in women’s future expectations, ‘having more time for one’s own concerns’ was significantly more central than in men’s. This can be explained as a reaction to women’s complex caring roles and tasks. The ‘sandwich generation’ of midlife women has many cares both children and ailing parents besides other responsibilities.

Region of residence effects

The fact that people in East Germany anticipated more gains than in West Germany arose from the greater number of activities that they mentioned in the social relationship domain. The differential in the importance of social relationships may be a reflection of cultural differences. As a concomitant of the growing individualism in western countries, the value attached to collectivism has decreased in West Germany, and shared self-definitions of the group have been replaced by individualistic self-interest (Beck 1986). The totalitarian systems in the Eastern Bloc countries that prevailed until the late 1980s explicitly stressed the value of collectivism and, moreover, close relational ties helped marshal the material and mental support that was required to withstand the difficult living conditions (Diewald 1995). While most topics related to social relationships were more frequently represented in the East, ‘getting along better with

others' was of more concern in West Germany. Perhaps social relationships are a lesser problem in the East because of the inheritance of more collective habits and life conceptions. 'More time for one's own concerns' and 'taking action in order to improve one's life situation' was mentioned twice as often in West than East Germany, which is consistent with the greater value placed on individual decisions and actions in the West.

Health status effects

On the whole, health was not found to influence the number of gain anticipations, for even those in poor health reported various positive expectations. They referred, however, less to activities than to expectations that their situation would improve.

Level of education effects

The level of education was not associated with the total number of gain expectations, but was related to the expected content. Looking forward to 'more rest in life' and 'enjoying life or retirement' was mostly a concern of less-educated subjects. Apparently the less educated are little interested in future activities but consider rest to be a particularly valuable gain: for them, 'freedom from' is more important than 'freedom to'. Clear differences also came to the surface in the readiness for societal commitment, which was particularly mentioned by more highly educated subjects. On the basis of these findings, we cannot explain whether the wish for 'freedom from' among the less highly educated is caused by lack of stimulation, by exhausting physical work in blue-collar occupations, by tiring, low-power positions, or by other influences.

Income and control belief effects

The prospect of a rich and varied future requires a well-lined purse, because projects and new activities require money. This may be why people on low incomes had fewer expectations of new experiences and enterprises in general. But it is also possible that people who have relatively high incomes are more inclined towards new activities and an enterprising lifestyle. Turning to *control beliefs*, planning activities and actions seems to require a certain level of confidence in one's own ability or potential to control one's own life. The relationships between control belief and expected gains manifested in ideas about achievement and new experiences, and in plans to assist others and support loved ones. The

belief that one can be useful seems to be a prerequisite for the readiness to help.

The contribution to lifespan theory

On the basis of our findings, the freedom to make choices must be seen as an essential precondition for actualising the concept of 'developmental gains in the second half of life'. The young old predominantly anticipate the growth and multiplication of hedonistic pursuits. This image is clearly revealed in our profile of gain anticipations.

Freedom from obligations, which is at the same time freedom for new aspects of self-development in later life, is not however included in the traditional lifespan theories. Havighurst stressed the value of mastering challenges which are imposed by biology and society, but which largely neglect personal intentions and choices about developmental enrichment. Erikson's theory of identity development assumes only two developmental stages in middle and later life, the first characterised by the developmental gain of generativity, the latter by that of ego-integrity. Among our respondents, generativity, actualised in work and dedication to other people, is central only for the youngest age group (40–46 years).

What is perceived as a developmental gain dramatically shifts in the 47–53 years age group, to hedonistic goals, the distinctive opportunities of the third age. The institutionalisation of the lifecourse provides freedom for personal development in the 'third age', for it is almost free of societal roles and responsibilities (Riley, Kahn and Foner 1994). Several unfulfilled developmental goals and wishes can still be achieved in this late stage of life. Our findings suggest that people do indeed use the third age to develop personal aims and preferences that they could not pay enough attention to in younger years. These results support those of a study of older people enrolling in university courses to fulfil lifelong wishes (Timmer 1992, 1994). They also confirm the postulate of self-completion theory, that the pursuit of identity goals is an enduring process (Gollwitzer and Kirchhof 1998). This striving is not taken into account in the theories of Havighurst and Erikson.

All kinds of gain pursuits mentioned by the respondents are however included in Bühler's (1975) concept of 'creative expansion', a basic tendency in human development and personal growth. Whereas Bühler found the concept predominantly among young adults, our findings suggest that creative expansion plays an important role among the middle aged and young old; but tends to decrease at older ages. So

her concept, developed decades ago, has turned out to be an adequate model for the developmental needs and expectations of today's older people. 'Creative expansion' appears to be a fundamental component of the strive for self-completion and self-complexity. Self-complexity, as a diverse and multifocal structure of personal projects and identity goals, can be gradually and sequentially attained during the whole lifecourse (Linville 1987). The anticipation of freedom for personal concerns also refers to Levinson's concept of 'structure changing' as described above. The individual's recurrent experience is that their present existence (life structure) no longer meets his or her developmental needs. In consequence, the individual changes their life structure and enters a new stage of life. These expectations are clearly reflected in the respondents' statements.

To conclude, apparently the young old have a concept of developmental gains for the *third age* which is based on social freedom and physical vitality and includes the expansion of activities. Moulded perhaps by the current societal structure and cultural patterns, those activities feature hedonistic goals not achieved before. With regard to the *fourth age*, however, the concept of gains differs. Among the oldest respondents, short-term projects which enrich everyday life are most prominent, such as making the day worthwhile, just enjoying life, and socialising. Their concept of gains first and foremost concerns the improvement of attitudes and habits rather than the expansion of activities. The findings demonstrate that the psychological phenomenon of developmental gains is inseparably intertwined with the context and circumstances of life. People expect gains according to the societal structure of the lifespan and according to their perception of the time left to live. Expectations are clearly embedded in the developmental niches that society provides for certain age groups, in spite of the great variety of choices in our individualised society.

Limitations of the study and suggestions for further research

A study based on one measure has its weaknesses. In particular, time effects cannot be excluded. Furthermore, the age effects found in this study show differences between cohorts but not across the developmental stages of a single person. More longitudinal research containing qualitative analyses of personal perceptions as well as large representative samples may provide the opportunity to compare the personal expectations of people in the second half of life at different times and in different circumstances.

The effects of the examined contextual factors explained 22 per cent of the variance, so they can be assumed to be important determinants, but there must be other influential factors, which need further research. Given the large number of effects we computed, the possible impact of Type 1 errors has to be taken into account, which led us to focus mainly on the highly significant results. To deepen our understanding of the important concept of developmental gains, more research, especially that which draws on interdisciplinary approaches to examine additional personal and situational factors will be invaluable.

The differences between those living in the former West and East Germany that were found appear to be associated with the different centrality of social relationships. It will be interesting to discover in future research whether the changes in life circumstances in East Germany since 1989 give rise to changes of social attitudes, and in particular reduce the central position of social relations and promotes a convergence with the highly individualised lifestyle in West Germany.

In the years to come, the successive cohorts of older people will be more highly educated. This may encourage retired people to maintain or develop their contributions to society. Particularly with reference to the breakdown of differentiated gendered roles during the later 20th century, the lives of future cohorts will have been characterised more by role variety and flexibility, which might produce more diverse individual roles and societal participation among older people. If so, future research may reveal among people in later life less need for freedom from obligations and more readiness for societal contributions.

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NOTES

- 1 All positive statements which expressed something that went beyond the status quo were coded as a gain 'g'. They included intended and desired changes as well as intended and desired new events. In an independent coding of 230 random sentences by the first author as coder 1 and two further people acting as coders 2 and 3, the following inter-rater agreements were achieved: Coder 1 with 2,

- Cohen's kappa = 0.90; Coder 1 with 3, Cohen's kappa = 0.91; Coder 2 with 3, Cohen's kappa = 0.88.
- 2 Cronbach's alpha for the internal consistency of the items was 0.78, and the inter-item correlation was +0.34.

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