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LEARNING PROJECTS AND THEIR BACKGROUND MOTIVATIONS

Relationships with Mental Health in Midlife and Later Life

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Human development is a life-long, complex process accompanied by gains and losses. Among the difficulties of adult development, midlife calls for special attention, for, during the long transition from youth to old age, one has to face several losses, and, as a result of that, the special psychological tasks of accommodating to new circumstances. The purpose of the study was to explore the relationship between projects – especially projects concerning learning – and indicators of psychological and physical health in midlife and later life. We hypothesised that individuals who are experiencing crises in the second half of their lives would be more open towards educational programmes on physical and mental health. We also expected that individuals with intrinsic goal motivation would be more motivated for self-developing learning, and that intrapersonal goals would be connected with a greater openness to training programmes on mental health. The sample consisted of 585 people (M = 50.6, SD = 8.5). For further analysis the sample was divided into six age groups on the basis of Levinson's classification. The results confirmed that the middle-age and the old-age generations are open to educational programs that develop self-directing functions. Contrarily to our hypothesis, it is not a crisis linked with decreased physical and mental health that makes one open to such programmes, but good physical health and new life situations presented by stressful life events. Besides, the need to participate in educational programmes aimed at self-development is stronger in the case of individuals whose motivational system is dominated by intrinsic goals (goals related to basic psychological needs).

Keywords: aging, midlife, personal projects, learning projects, psychological well-being, andragogy

Der motivationale Hintergrund von Lernzielen und sein Zusammenhang mit der mentalen Gesundheit bei Personen im mittleren und hohen Alter: Die Entwicklung des Menschen ist

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ein mit Gewinnen und Verlusten verbundener, komplexer, lebenslanger Prozess. Von den unterschiedlichen Schwierigkeiten der Entwicklung im Erwachsenenalter verdienen die Probleme der mittleren Lebensphase besondere Aufmerksamkeit, weil Menschen während des langen Übergangs von der Jugend in ein höheres Alter mit zahlreichen Verlusten kämpfen haben und dabei mit besonderen psychischen Aufgaben der Anpassung an neue Situationen konfrontiert sind. Die Zielsetzung unserer Forschungsarbeit ist, den Zusammenhang zwischen Zielen – insbesondere Lernzielen – und den Parametern der psychischen und physiologischen Gesundheit in den mittleren und höheren Lebensjahren zu erschließen. Unserer Hypothese nach stehen Personen, die in der zweiten Lebenshälfte eine Krise durchgemacht haben, Schulungen im Bereich der körperlichen und mentalen Gesundheit offener gegenüber. Ebenso gingen wir davon aus, dass Personen mit einer intrinsischen Zielmotivation eher zu ihrer Persönlichkeitsentwicklung dienendem Lernen motiviert sind. Des Weiteren nahmen wir an, dass ein Zusammenhang zwischen dem Vorhandensein intrapersonaler Ziele und einer Offenheit gegenüber Trainings zur mentalen Gesundheit besteht. Die von uns untersuchte Stichprobe bestand aus 585 Personen (Durchschnittsalter 50,6 Jahre, Streuung 8,5). Auf der Grundlage der Klassifizierung nach Levinson haben wir die Probanden in sechs Altersgruppen eingeteilt. Unsere Ergebnisse bestätigen, dass Personen im mittleren und höheren Alter gegenüber Ausbildungsprogrammen im Bereich der Entwicklung der Selbststeuerungsfunktionen offen sind. Im Widerspruch zu unserer Hypothese entsteht diese Offenheit nicht als Konsequenz einer Krise durch nachlassende körperliche und mentale Gesundheit, sondern infolge durch belastende Lebensereignisse bei guter körperlicher Gesundheit ausgelöste neue Lebenssituationen. Darüber hinaus war das Bedürfnis nach Schulungen im Bereich der Persönlichkeitsentwicklung ausgeprägter bei Personen, in deren Motivationssystem intrinsische (im Zusammenhang mit grundlegenden psychologischen Bedürfnissen stehende) Ziele überwiegen.

Schlüsselbegriffe: Altern, mittlere Lebensphase, persönliche Ziele, Lernziele, psychologisches Wohlbefinden, Andragogie

1. Introduction

Human development is a life-long, complex process accompanied by gains and losses. In various phases of life the human being has to answer the challenge of specific developmental tasks, and the requirements of adjustment linked to these tasks. One of the components of development is learning how to adjust oneself to these new situations. Certain life events provoke crises because the forms of problem solving used up to that point cannot provide enough help for successful coping. In the course of adult developmental crises, the individual is faced with the fact that he/she has to acquire new adjustment styles. Moreover, the growing speed of scientific, technical, and economic changes makes it obvious that continuous adult learning is a necessary part of life. It is often emphasised in andragogical literature that the world's constant change demands constant adjustment on the part of the individual, thus the requirements of life-long learning include not only the continuous increase of professional knowledge but a widening of knowledge in all aspects of life (Szabóné Molnár 2009). For holding on in different stages of life and for solving possible crises creatively subject knowledge alone is not enough, no matter how wide it is. For coping with problems of life several competences of the personality are needed: emotional

coping, problem-solving thinking, creativity. In coping with a crisis most people draw on what they have learnt in their family of origin and in the culture of the broader society. A general survey in Hungary suggests that problem solving does not have adaptive means alone. Destructive forms of crisis solving are present on a large scale: alcoholism, drug abuse, suicide, psychosomatic illnesses (Kopp et al. 2006b). Adult education should therefore engage in the caring for and the development of the personality as a whole (Durkó 1999; Maróti 2005; Miller 2000). This attention to the personality would be very much needed because learning successful adjustment that requires intense self-reflection represents an unknown, foreign, and anxiety-filled road for many people.

Among the difficulties of adult development, midlife calls for special attention, for during the long transition from youth to old age, one has to face several losses, and as a result of that, special psychological challenges. This confrontation is made more difficult by the anxiety that is rooted in the helplessness of society concerning its own ageing. According to estimations, 30% of the total population in the European Union will be above 65 by 2015.[1] The insolvability of the problem of ageing provokes prejudice (Szabóné Molnár 2009) and anxiety on the level of both the individual and the society. Society does not have the financial resources for caring for the growing number of old people, and, regarding the problems of the second part of life, does not have models of coping that would be valid for everyone and could be used in all circumstances of the changing world. Thus, in many cases, middle-aged people are already left alone with their problems, and react to the fact of approaching old age with developmental stagnation, or even with crisis.

It seems evident that adult education should present answers for the question of how to learn to adapt, since many people seek psychological help only in times of deep crises. However, it is a fact that, although in andragogy the idea of life-long learning refers to the development of the whole person, in practice it often serves only the grounding of professional achievements, and the concern for personality development and education in a broader sense remains in the background (Maróti 2002). There are hardly any helping programs specialising in the developmental problems of different adult age groups, and this is especially true in the case of the middle generation.

To fill this gap, we have aimed at exploring the factors that influence the life, the psychological well-being, and the difficulties of middle-aged people, and at uniting and using research results and means of andragogy and psychology within the framework of an interdisciplinary study, for the specific purpose of handling the particular problems of middle-aged people. For mapping the developmental and thus possibly the learning needs of the second phase of life, the study of the motivational level of the personality seems to be adequate. McAdams (2009) describes motives as the second level of the personality. Previous research has also proved that the indi-

[1] Benedek, A. (2009) 'Kihívások, kérdések és feladatok a magyar felnőttképzésben' (UNESCO CONFINTEA VI. Conference, Pécs).

vidual's personality can be well grasped through defining his/her goals and projects. Goals express one's needs, and also reflect his/her system of values. Moreover, they reveal the individual's level of integration and can thus serve as a base for predicting successful adaptation (MARTOS 2009). Personal projects can also be linked with LEVINSON's (1978) personality development theory as expressions of Dream.

2. Aims of the study

The purpose of the study was to explore the relationship between personal projects, especially projects concerning learning, and psychological well-being in midlife and later life. The study was part of a larger research that aimed to map the specific psychological needs of the second phase of life, in order to develop an adult education program that can help solving the age-related developmental tasks effectively, and strengthen the adaptive and stress managing capacities to cope with the challenges of midlife.

2.1. Hypotheses

1. a) Points of crises in the second half of life are indicated by the decrease in psychological well-being and in the self-rating of physical health.
1. b) In such periods individuals are more open towards educational programmes on physical and mental health.
2. a) Individuals with intrinsic goal motivation (concerning basic psychological needs) are more motivated for self-development learning.
2. b) Within that group, the appearance of intrapersonal goals (inner, concerning the self) is connected with a greater openness to training programmes on mental health.

3. Method

3.1. Participants

Participation was voluntary and anonymous. Participants had to be older than 37. The sample was a convenience sample, recruited by snowball method. The sample consisted of 585 people, 431 women (74%) and 154 men (26%). The mean age of the participants was 50.6 (SD = 8.5), the youngest participant was 37, the oldest 78, and data was missing in ten cases. For further analysis the sample was divided into six age groups on the basis of LEVINSON's (1978) classification (*Table 1*).

Table 1
Distribution of the sample according to age groups and gender

Age groups	Men	Women	Total
1) 37–44 years (midlife transition)	33 (22.6%)	113 (77.4%)	146
2) 45–49 years (early midlife period)	28 (22.6%)	96 (77.4%)	124
3) 50–54 years (age fifty transition)	36 (28.3%)	91 (71.7%)	127
4) 55–59 years (late midlife period)	23 (29.9%)	54 (70.1%)	77
5) 60–64 years (late adult transition)	20 (34.5%)	38 (65.5%)	58
6) 65 years and above (late adulthood)	12 (27.9%)	31 (72.1%)	43
Total	152 (26.43%)	423 (73.57%)	575

(Data missing in 10 cases)

Regarding the educational level in the sample, three people had eight or less classes of basic education, 19 had vocational training, 137 graduated from high school, and 427 had BA or MA degrees.

3.2. Measures

Data was gathered with the help of a self-administered questionnaire. The questionnaire consisted of scales assessing well-being, personal projects, and learning goals.

3.2.1. Assessment of well-being

Psychological well-being was measured by the short version of the WHO Well-Being Scale. This 4-point Likert scale consists of five items and has been validated through Hungarian samples (Susánszky et al. 2006).

Physical health was assessed by the self-rating health scale used in the national

representative study of HungaroStudy (KOPP et al. 2008). Participants had to answer the question 'How would you rate your overall physical health?' Possible answers ranged from 1 (very bad) to 5 (excellent).

Life events that might adversely influence well-being were assessed with the help of the short version of the Life Events Scale (SZABÓ 2008), consisting of 20 items, each naming a stressful life event. Data analysis was based on the number of 'yes' answers by respondents to occurrences of events.

3.2.2. Assessment of projects

Personal project assessment was conducted in three steps using the procedure by LITTLE (1983), adopted into Hungarian and used in Hungarian samples by Martos and colleagues (e.g. MARTOS 2007; MARTOS et al. 2011). First, participants were asked to write a list of their current personal projects which were defined as follows: 'Your personal projects are the goals which you are already taking steps to achieve'. As a second step, participants were asked to select the five projects that are 'the most characteristic/most present in your everyday life'. Finally, participants were asked to evaluate each of these five projects against a series of predefined aspects that were intended to map different motivations for the project. These were introduced by the question: 'Why are you working on this project?' Eight possible motivational reasons were provided: 1. *meaning in life*, 2. *well-being*, 3. *improving relationships*, 4. *financial safety*, 5. *respect from others*, 6. *personal development*, 7. *transcendental orientation*, 8. *improving family relationships.* Participants rated their projects on a 5-point Likert scale with the anchor points of 'strongly disagree' and 'strongly agree'. Personal projects were analysed also on the basis of their content. Based on the Wheel of Wellness Model by MYERS, SWEENEY and WITMER (2001), nine categories were created representing life tasks that are necessary for the healthy functioning of the personality:

1. spirituality (e.g. spiritual growth, relationship with God, meaning of life);
2. goals focusing on the self/self-related goals (e.g. personal development, interests, hobbies);
3. health (e.g. healthy lifestyle, avoiding illness, recovering from an illness);
4. material wealth (e.g. money, apartment, car, possessions);
5. work (e.g. keeping one's job, professional tasks);
6. friendship, human relationships (e.g. relationship with friends, relationship with groups and communities);
7. love, marriage, family;
8. children (e.g. the education of one's children, programs with grandchildren);
9. learning.

Each project listed by the participants was assigned to one of these categories. This data provided information on the life tasks the different age groups

were working on. Within the category of goals focusing on the self, or self-related goals, the subgroup of intrapersonal goals was separated for projects aiming on the inner development of the self (e.g. personal growth, to become wiser). According to the literature, such goals indicate that the person focuses on himself/herself and is working on his/her inner development (LITTLE 1993). It can be a sign of crisis, inner conflicts, but also of the process of creatively discovering oneself (MARTOS 2007). Each of these can signify an intense developmental process in adulthood. Thus intrapersonal goals can indicate openness to possibilities of self-development and learning.

Learning projects and their motivational background were assessed with the same method as personal projects. In this case participants could rate their learning objectives using a 5-point scale for the following 10 motivational aspects: 1. *financial growth*, 2. *keeping one's job*, 3. *interesting work*, 4. *keeping intellectually fit*, 5. *interesting knowledge*, 6. *finding one's way in the world*, 7. *spending one's free time well*, 8. *getting to know people*, 9. *harmony of private life,* 10. *renewal*. These motivational aspects have been established on the basis of the most frequent learning motives described in the andragogy research literature (e.g. RADNAI 1967; BOSHIER 1991). The ten motivational aspects described above were divided into the following two categories:

1. *extrinsic motives* (focusing on external incentives: financial growth, keeping one's job);
2. *intrinsic motives* (focusing on internal incentives: free time, harmony of private life, relationships, intellectual fitness, interesting knowledge, renewal).

For analysing learning projects on the basis of their content, five categories were created:

1. *professional* (e.g. degree, computer skills);
2. *hobby* (e.g. pottery, horse riding);
3. *health* (e.g. healthy diets);
4. *other self-development* (e.g. relationships, meditation);
5. *foreign language*.

3.3. Data analysis

Gender, age, psychological well-being, the number of critical life events, and self-rated health were included in the data analysis as independent variables. It was not possible to include educational level as an independent variable because most of the participants had a BA degree or more.

For the statistical analysis of the variables, to detect differences between groups – in case the condition of normal distribution was met – the independent samples T-test for comparing data of two groups, and variance analysis (ANOVA) as well as its various Post Hoc tests for comparing several groups were used. (In case of statistical matching of the variances of the variables, the Tukey B test, in case of statistical difference of the

variables, Dunnett's T3 test was used.) In case the examined data did not follow normal distribution, the analysis was performed with the non-parametric versions of the above tests, the Mann-Whitney and Kruskal-Wallis tests. To identify the relationship between the variables, in case the condition of normal distribution was met, Pearson correlation was calculated, in case it was not met, Spearman's rho was calculated.

4. Results

4.1. Participants' psychological well-being and self-rated physical health

In our sample there was no gender difference regarding the results of the WHO Well-Being Scale (M = 1.67 in the case of men and M = 1.68 in the case of women, t = –0.341, p = 0.733).

Regarding age groups, the lowest level of psychological well-being was found in the group aged 55–59, whereas the highest level was shown by those aged 60–64. However, statistically significant difference was not found between the age groups (F = 1.661, p = 0.142) (*Figure 1*).

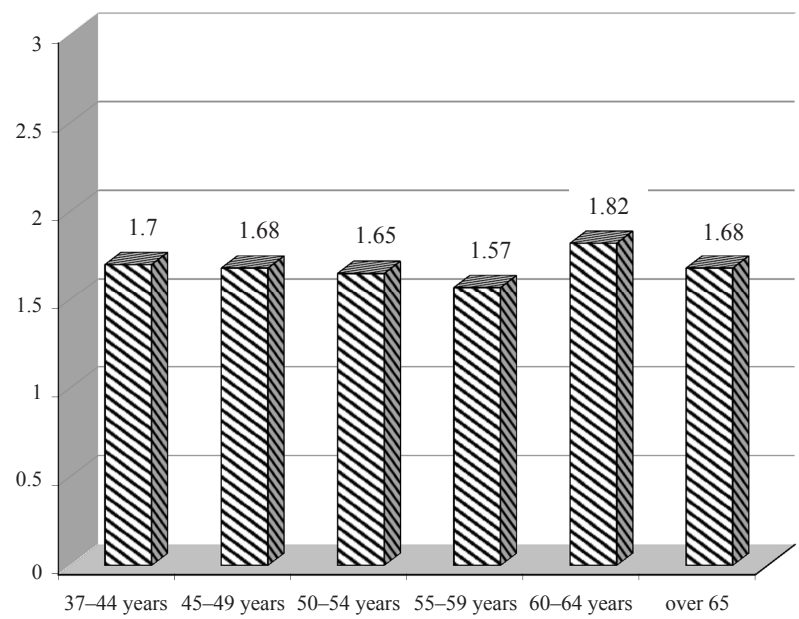

Figure 1
Relationship between psychological well-being and age

There was no gender difference either regarding self-rated health status (M = 3.57 in the case of men and M = 3.62 in the case of women, Z = –0.841, p = 0.400).

The highest level of self-rated health was found in the youngest age group. The group of 55 to 59-year-olds scored significantly lower in the self-rated health scale than the group of 37–44, and lower also than the two older age groups (F = 3.052, p = 0.01) (*Figure 2*).

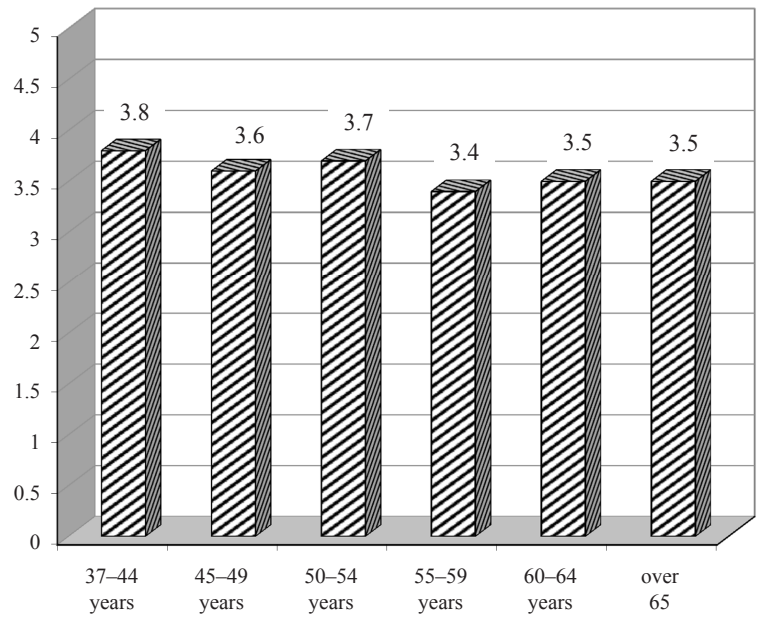

Figure 2
Relationship between self-rated physical health and age

According to the results of the variance analysis, there was a significant positive relationship between psychological well-being and self-rated health (F = 27.967, p = 0.00) (*Figure 3*).

There was a significant negative relationship between the number of stressful life events and the degree of psychological well-being (rho = –0.091, p = 0.028), that is, an increased number of stressful life events was linked with a decrease in psychological well-being. The relationship between self-rated physical health and the number of stressful life events was also significantly negative (rho = –0.151, p = 0.00).

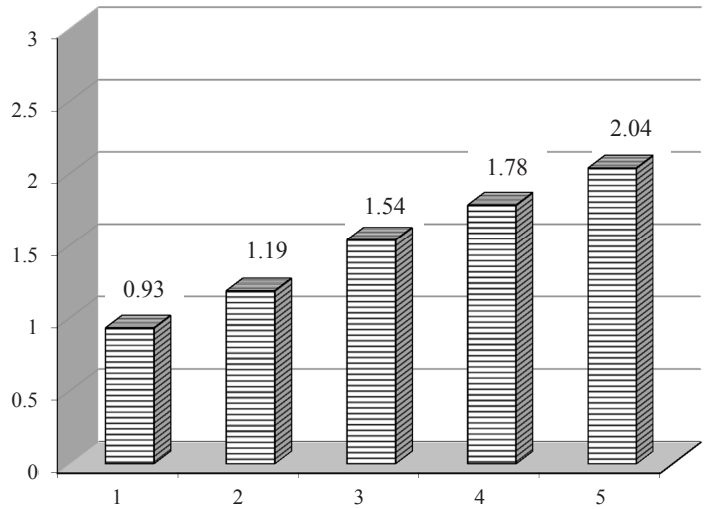

Figure 3
Relationship between psychological well-being and self-rated physical health

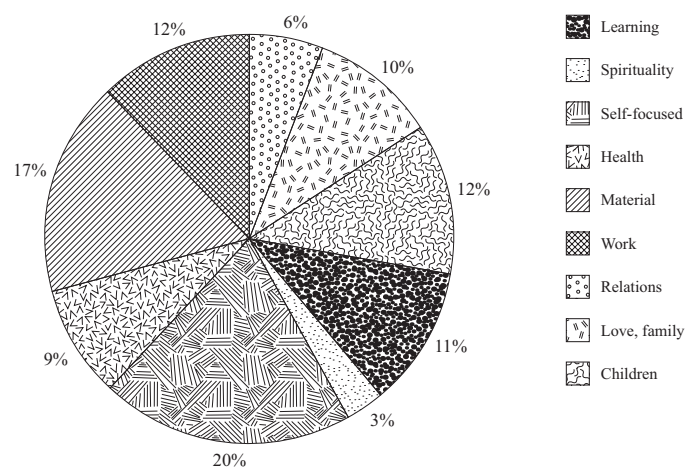

Figure 4
Distribution of personal projects in the full sample

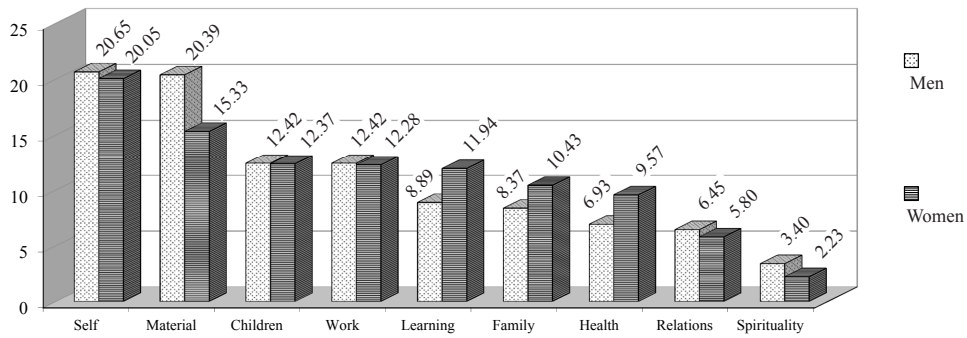

Figure 5

Distribution of personal projects according to categories

4.2. The content of personal projects

Personal projects listed by the participants were assigned to one of the nine categories representing important life tasks. In our sample the category that had the largest number of projects assigned to it was goals focusing on the self/self-related goals, followed by material wealth, children, learning, love-marriage-family, health, relationships, and spirituality (*Figure 4*). Almost all the categories included goals that could, in some aspect, be described as learning goals. However, the main interest of this study are the projects that can be classified as learning and focusing on the self/self-related goals, for these are the projects that can – according to our hypothesis – motivate self-development and learning, and thus, participation in adult education. In our sample the projects that included learning explicitly constituted 11.2% of all the projects, and 20% of all the projects described goals focusing on the self. Thus almost one third of the projects were related to learning.

Regarding gender differences in the content of the projects, men and women differed significantly in four of the categories: the women listed more learning projects ($Z = –3.022$, $p = 0.003$), family-related projects ($Z = –2.081$, $p = 0.037$), and health-related projects ($Z = –2.759$, $p = 0.006$) than the men. The difference is the most significant in the case of the projects concerning health. The men listed more projects focusing on material wealth ($Z = –2.118$, $p = 0.034$) than the women (*Figure 5*).

Analysis of the distribution of projects in the nine categories in the different age groups showed significant differences in three categories: the number of self-related goals increased significantly with age ($\chi^2 = 5.542$, $p = 0.008$), similarly to the number of goals focusing on friends and relationships, which was outstandingly high in the two oldest age groups ($\chi^2 = 14.178$, $p = 0.015$). The number of learning projects decreased significantly until 64 years of age ($\chi^2 = 36.901$, $p = 0.00$). 17% of the projects refer to learning in the group of 37–44, whereas it is only 6.8% in the group of 60 to 64-year-olds (*Figure 6*).

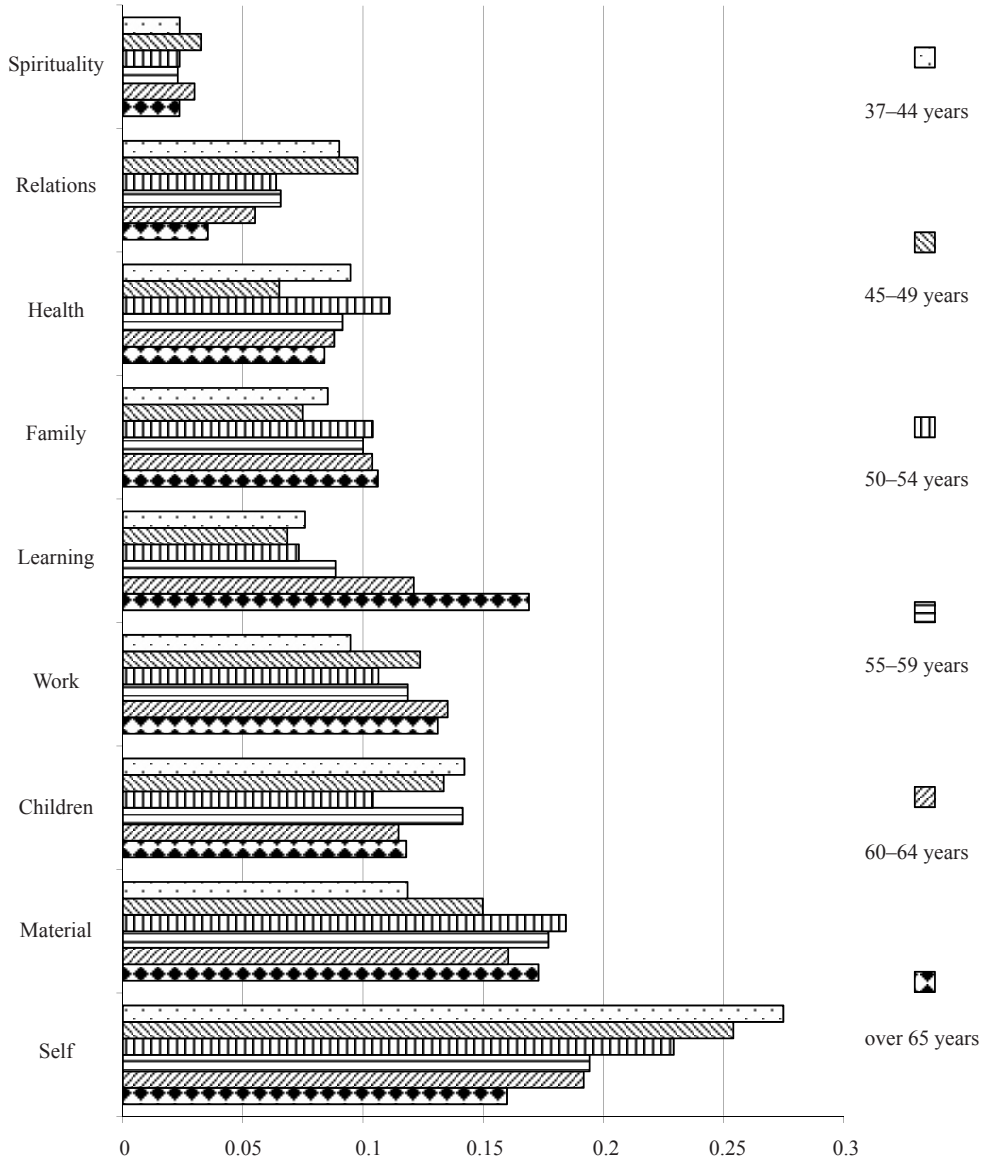

Figure 6
Distribution of personal projects according to age groups

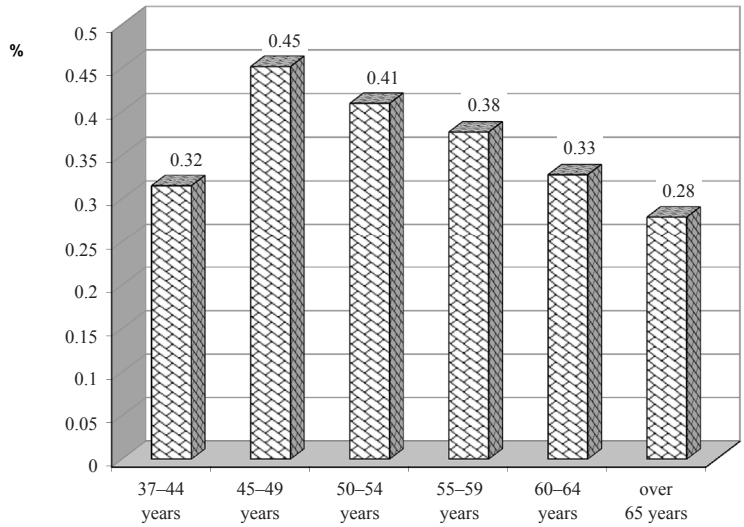

Figure 7

Relative occurrence of intrapersonal projects in the age groups

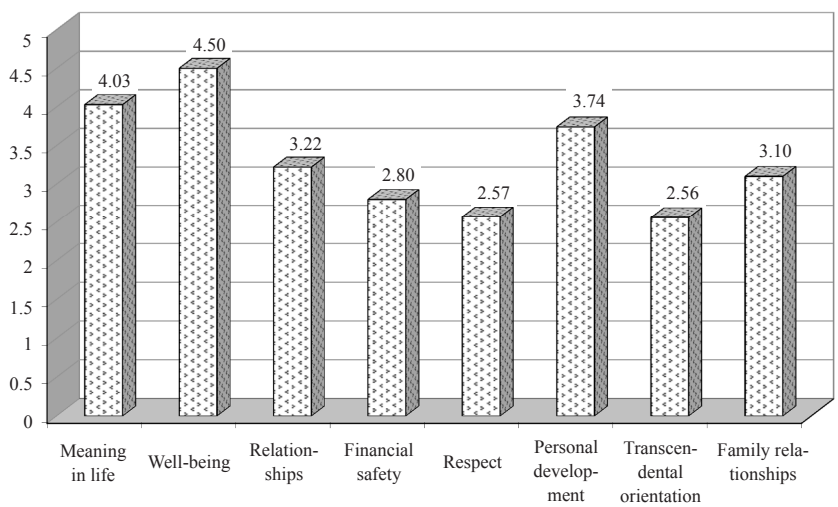

Figure 8

Average values of motives for personal projects in the full sample

7.08% of the overall projects were classified as intrapersonal goals – the subgroup separated within the category of goals focusing on the self, or self-related goals, for projects aiming on the inner development of the self. The lowest number of intrapersonal goals was found in the group of 37 to 44-year-olds, and highest number in the group of 45 to 54-year-olds (*Figure 7*). Intrapersonal projects were significantly positively related to self-developmental learning goals (see 4.5, rho = 0.212, p = 0.00).

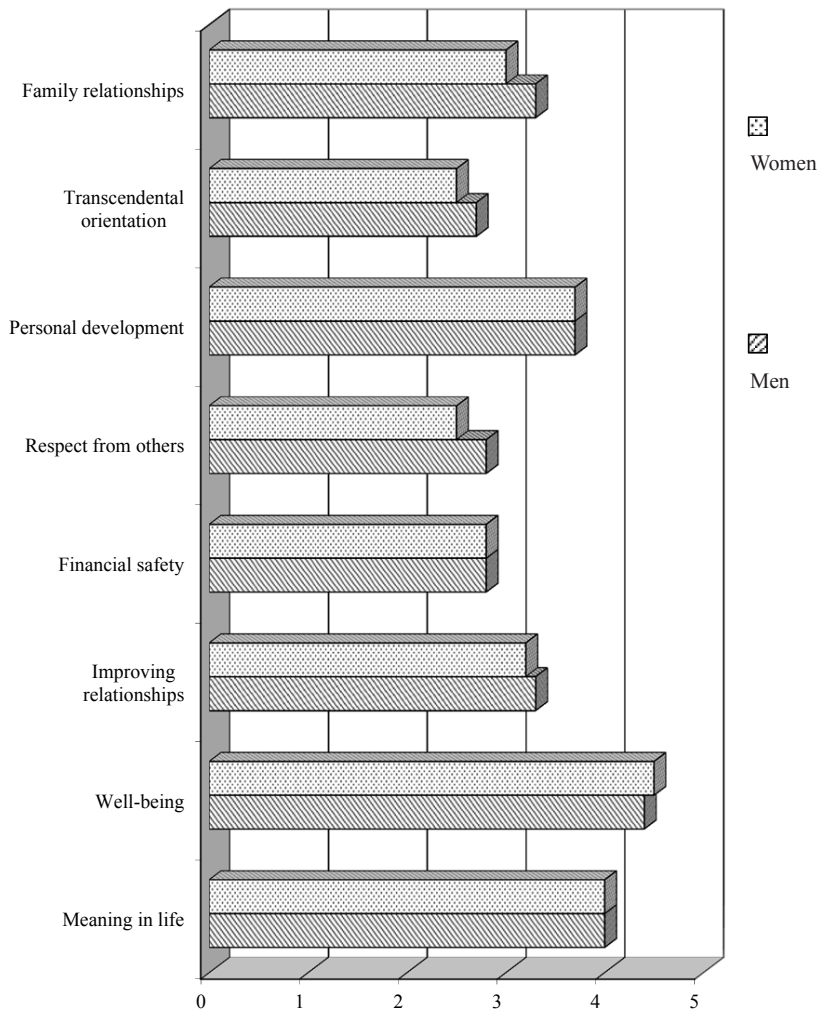

Figure 9

Comparison of the motivational background of personal projects according to gender

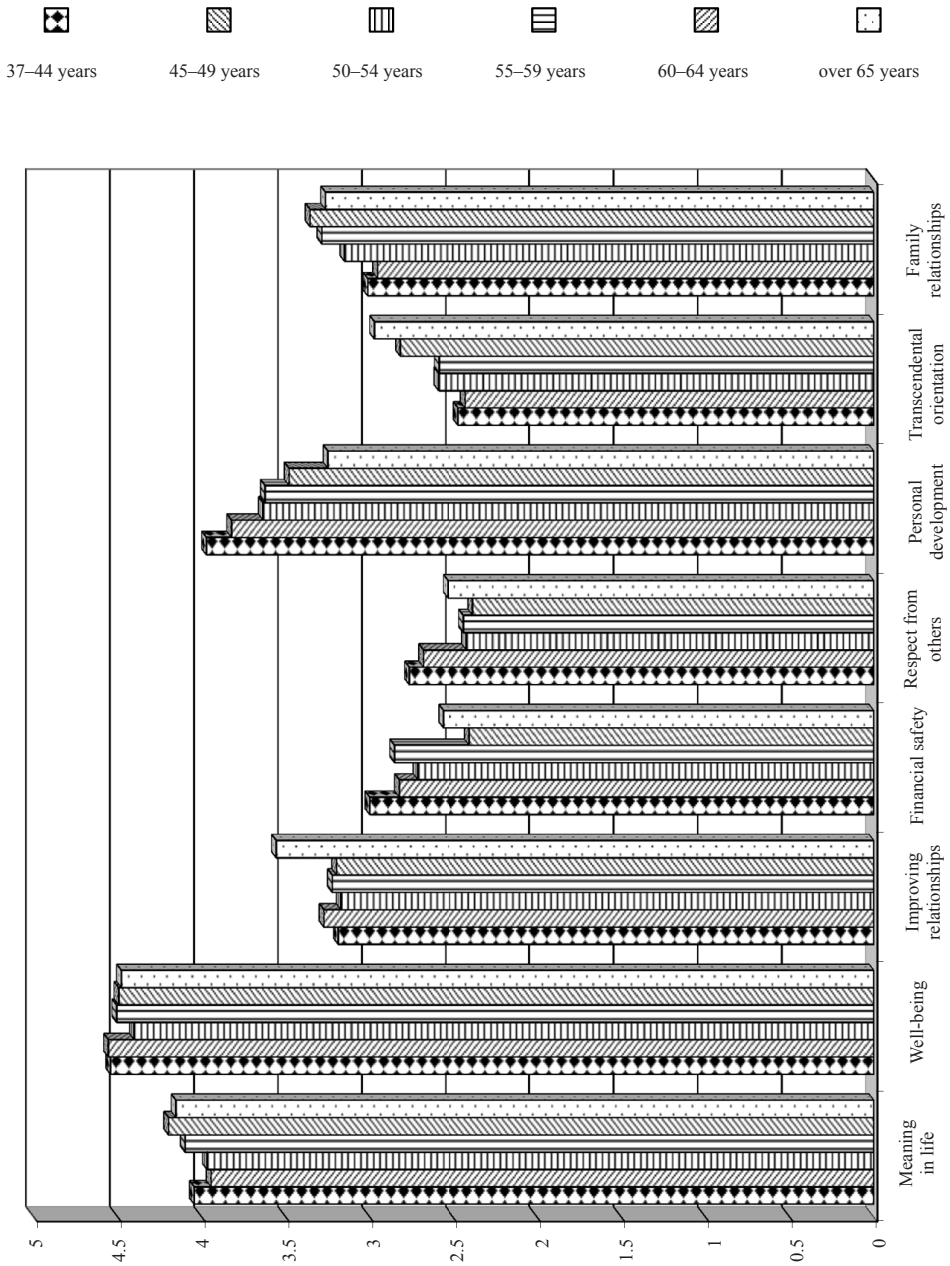

Figure 10

Comparison of the motivational background of personal projects according to age groups

4.3. The motivational background of personal projects

Regarding the motivational background of personal projects, the highest scoring motivational aspects were well-being, meaning in life, and personal development (*Figure 8*).

Men and women differed in two of the motivational aspects of the personal projects: it was a significantly more important motivational aspect for men to be respected by others ($Z = –2.566$, $p = 0.01$), and their projects were also more strongly motivated by the desire to improve family relationships than it was for women, although the difference was only coming close to statistical significance ($Z = –1.954$, $p = 0.051$) (*Figure 9*).

Regarding the analysis of the motivational background of personal projects in the various age groups, statistically significant difference was found in the motivation for personal development: the older a person is, the less he or she is motivated with reasons of personal development ($\chi^2 = 14.982$, $p = 0.01$) (*Figure 10*).

4.4. Openness to participation in trainings in one's personal projects

Participants were also asked whether they would take part in a training or course in the area of their listed personal projects. Men would take part in trainings in about 42% of their projects (data missing in 39 cases), whereas women would join courses in 51.15% of their projects (data missing in 121 cases). This means that women were significantly more open to taking part in courses and other forms of formal education concerning their projects than men ($Z = –2.047$, $p = 0.041$).

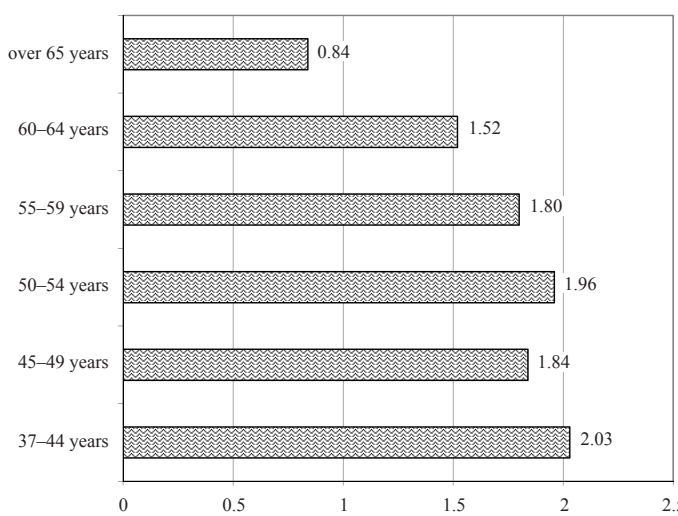

Figure 11

Average number of listed learning projects according to age groups

4.5. The content of the learning projects

The average number of listed learning projects was 1.79 in the case of men, and 1.81 in the case of women. The difference is not statistically significant. The highest number of learning projects was given by the youngest age group, that is, by those aged 37 to 44 (M = 2.03). In the group of those older than 65 the average number of listed learning projects is less than one (*Figure 11*).

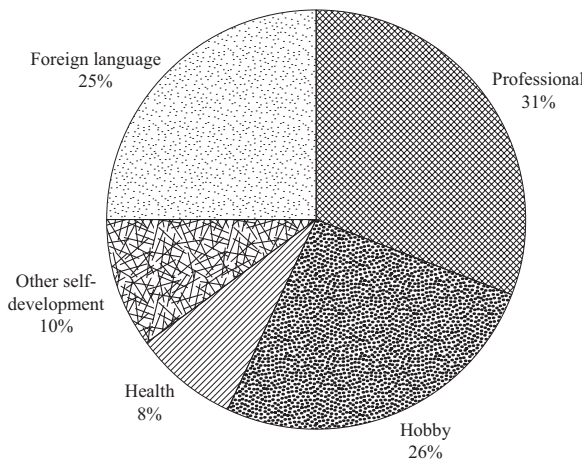

Figure 12
Distribution of learning projects according to categories in the full sample

According to our data, the number of learning projects listed by each participant was positively related to the self-rated physical health (rho = 0.088, p = 0.037), and to the number of stressful life events (rho = 0.113, p = 0.006). There was no significant relationship between the number of learning projects and psychological well-being (rho = 0.066, p = 0.112). This means that individuals who have better physical health and are faced with a higher number of stressful life events are more willing to learn.

Regarding the content of the learning projects, the most frequent content categories were professional (31.2%), hobby-related (26.1%), and foreign language-related (25.3%) learning goals. The proportion of health and self-developmental learning projects was found to be much smaller, 17.4% altogether (*Figure 12*).

In our data, men listed more learning projects related to profession, hobby, and self-development than women, whereas women seemed to be more open to learning foreign languages and about health. However, the difference was not significant in either case, not even in the case of learning projects on health (Z = –1.1882, p = 0.06) (*Figure 13*).

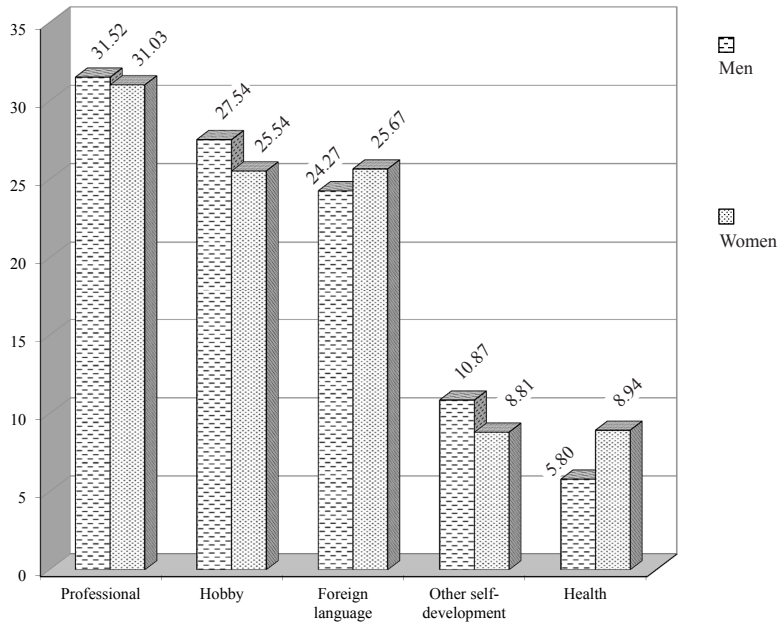

Figure 13
Distribution of learning projects according to gender

According to the statistical analysis, the number of professional and foreign language learning projects decreased significantly with age ($\chi^2 = 26.336$, $p = 0.00$, and $\chi^2 = 23.818$, $p = 0.00$, respectively). The largest number of professional learning projects was listed by those in the two youngest age groups. The number of hobby-related learning goals, on the other hand, increased with age, except for the group of 45 to 49 years who listed more professional and fewer hobby-related learning projects. Those in the group of 55–59-year-olds listed the highest number of health-related, and the lowest number of self-development-related learning projects. Learning projects concerning self-development were mentioned the most often by participants in the oldest age group (*Figure 14*).

4.6. The motivational background of the learning projects

In the total sample the mean level of extrinsic motivation for learning projects was 2.47, and 3.54 for intrinsic motivation. There was a significant positive correlation between extrinsic and intrinsic motivation for learning projects (rho = 0.284, p = 0.00). Gender difference was not found in this aspect: the mean level of extrinsic motivation was 2.50 for men and 2.46 for women; the difference is statistically not

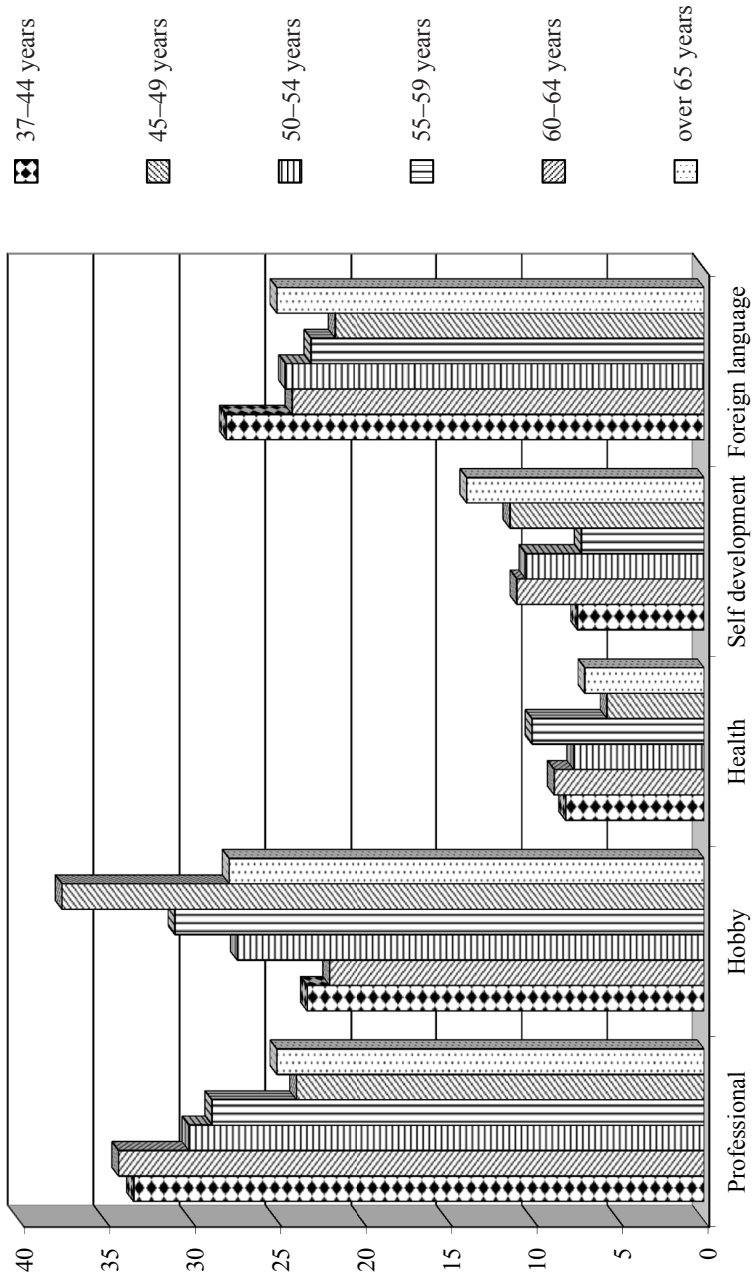

Figure 14
Distribution of learning projects according to age groups

significant (Z = –0.295, p = 0.768). The mean level of intrinsic motivation was 3.64 for men and 3.51 for women; the difference is statistically not significant (t = 1.521, p = 0.129). In our sample the importance of extrinsic motives for learning projects decreased significantly with age (χ^2 = 43.84, p = 0.00). The difference in the importance of intrinsic motives was also significant among the age groups (F = 2.883, p = 0.014), but not with a straight decreasing tendency (*Figure 15*).

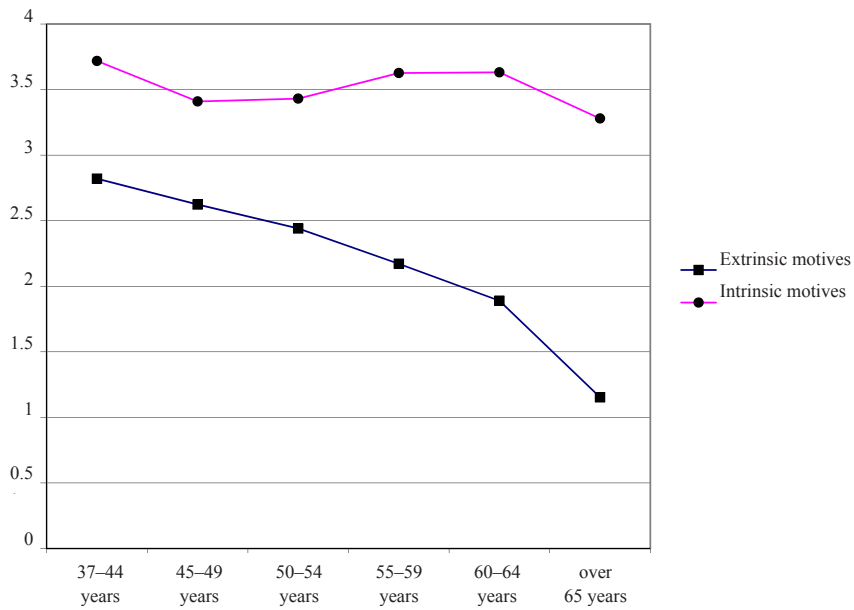

Figure 15

Occurence of extrinsic and intrinsic motives for learning projects according to age groups

Regarding the ten given motivational categories, no difference was found between men and women in the motivational pattern of the learning projects. Significant differences were found among the age groups regarding the motivational background of the learning projects (*Figure 16*).

The level of financial motives for learning decreased with age, and it was significantly higher among the 37 to 44-year-olds than in the other age groups, except for the 45 to 49-year-olds (χ^2 = 36.129, p = 0.00). Finding an interesting job also had the tendency to be a weaker motivation for learning in the older age groups; the difference between age groups was significant (χ^2 = 42.215, p = 0.00). The importance of keeping one's job also decreased with age, with significant differences between the age groups (χ^2 = 36.393, p = 0.00).

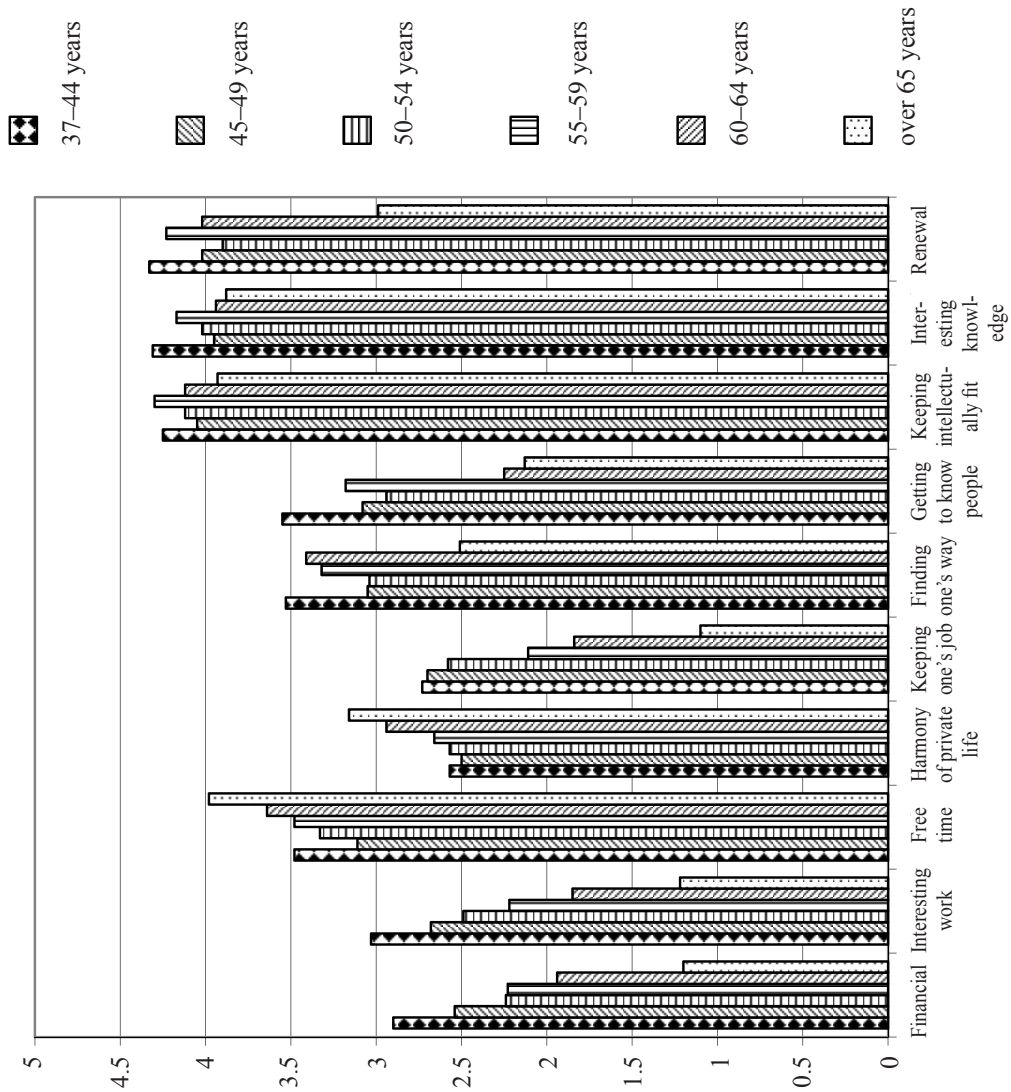

Figure 16
Occurrence of motives for learning projects according to age groups

The highest level in the motive named 'finding one's way in the world' was found in the age groups 37 to 44 and 55 to 59, whereas the lowest level was shown by the oldest age group. The difference between these groups is significant (χ^2 = 19.47, p = 0.002). Getting to know people as a motive for learning also weakened

with age – there was a significant difference between the oldest age group and the rest of the groups in this aspect ($\chi^2 = 22.470$, $p = 0.00$). Similarly, renewal as a motive for learning was found to be important in all the age groups, except for the oldest one ($\chi^2 = 18.295$, $p = 0.003$). Keeping intellectually fit and acquiring interesting knowledge remained a strong motivation for learning in all the age groups. The wish to spend free time well and the need for harmony of private life have a tendency of becoming more important with age, but the differences were not significant. Regarding intrinsic motivations for learning, free time and harmony of private life showed the highest level in the oldest age group, whereas the same age group was less motivated by getting to know other people, finding one's way in the world, and renewal as reasons for learning. However, the importance of keeping intellectually fit and acquiring interesting knowledge seemed to remain a strong motivational force for them.

5. Discussion

The purpose of the study was to explore the relationship between projects, especially projects concerning learning, and indicators of psychological and physical health in midlife and later life. First, we hypothesised that in periods of crises, indicated by the decrease of psychological well-being and self-rating of physical health, individuals would be more open towards educational programmes in these fields. Second, we expected that intrinsic goal motivation would be associated with motivation for learning aimed at self-development, and intrapersonal goals would be linked with a greater openness to training programmes on mental health.

In our sample, the indicators of psychological well-being did not show any tendency that could be linked to the hypothesis of development theories, namely that in the early 40s the stability of the person would be temporarily upset. Our data also seem to contradict the results of the HungaroStudy research, where a strong decrease in the feeling of well-being with age was recorded (Kopp et al. 2006a). Though we did not analyse data for younger generations, and therefore our results can only identify limited tendencies, in our sample, the measure of well-being did not decrease with age, in fact, it increased in the early 60s.

The relationship between health status and age seemed to be complex. Our results only partially coincided with findings of the other research on self-rated physical health and levels of depression for the whole Hungarian middle-aged population (Kovács & Jeszenszky 2006). The decreasing tendency of self-rated physical health was not continuous in our sample. Again, those aged 55 to 59 showed the lowest level of self-rated physical health, as was also the case with the indicator for psychological well-being. A possible explanation for the lower values of those aged 55 to 59 is that they reflect the problems related to retiring, and the higher psychological well-being in the age of 60 to 64 indicate the liberating experience of the first pension years.

According to our results, if there is at all a crisis linked with an age group, then,

in our sample in 2009, those were the indicators of the age group 55–59 that implied a 'worst phase', characterised by decreased psychological well-being and physical health. However, contrary to our hypothesis, this age group was also characterised by an increased proportion of extrinsic goals, and a lower number of self-development-related learning goals. This age group is probably experiencing an identity crisis rooted in carreer loss, and, according to our results, they are looking for answers not in developing the coping capacities of the personality but in efforts aiming at changing the environment. Thus the above result does not support our hypothesis that crisis would make people open to educational programmes.

Our results showed that the individuals who reported better physical health, or were faced with more challenging/stressful life situations were the ones who were more prepared to learn. This result indicates that in stressful life situations people seek help through learning; learning is a kind of problem-focused coping. In this interpretation, learning is a creative solution to crisis. According to our data, the number of self-related goals increased with age. This tendency is in line with the key findings of developmental theories on middle and old age, namely, that towards old age the individual invests less and less energy into accommodation to external requirements, and turns inwards instead, spending his/her energy to develop the neglected parts of his/her personality. In line with the above, the number of the goals aiming at improving relationships also increased with age, and showed the highest level in the two oldest age groups. This result supports the theory that with age the individual puts more and more emphasis on intimate relationships (Carstensen 1999).

At the same time, the analysis of motives underlying the projects showed a significant difference in the motives of personal development among the various age groups: surprisingly, the older the person, the less motivated he/she was to list projects supporting personal development. This result seems like a contradiction if we compare it with the increasing number of self-related goals with age. This tendency may be explained in two ways. Ageing people might be aiming at carefree self-realisation, where they want to just 'be' rather than make efforts. At the same time, it may be that in the later years individuals do not regard the tendency of turning inwards, contemplation, or working on integration as self-development.

It is important to note that the motives underlying the projects showed a significant difference between men and women regarding family relationships. Men were more strongly motivated to improve their family relationships than women. This data, on the one hand, reflects the tendency of middle-aged men to turn to their families, described by literature (Tamir 1982). On the other hand, it confirms our hypothesis that middle-aged men try to compensate their uncertain self-esteem by strengthening their family relationships. This result seems to contradict the data found earlier that women mentioned family-related topics significantly more frequently among their projects. It seems as if men's tendency to turn to their families is more likely to appear on the motivational level, and is not reflected explicitly in the specific projects.

We also expected that intrinsic goal motivation would be associated with mo-

tivation for learning aimed at self-development, and intrapersonal goals (that is, projects aiming on the inner development of the self) would be linked with a greater openness to training programmes on mental health. Both hypotheses were confirmed: learning motives aimed at self-development, as well as intrapersonal projects representing 7.08% of the overall projects, were significantly positively related to self-developmental learning goals. The training programmes on personal development will probably be attended by this small group of people.

6. Summary and conclusions

The empirical study proved that the middle-age and the old-age generations are open to educational programs that develop self-directing functions. Contrarily to our hypothesis, it is not a crisis linked with decreased physical and mental health that makes one open to such programmes, but good physical health and new life situations presented by stressful life events. Besides, the need to participate in educational programmes aimed at self-development is stronger in the case of individuals whose motivational system is dominated by intrinsic goals (goals related to basic psychological needs).

The results also suggest that it is not only the explicitly declared educational needs that have to be taken into account when adult learning programmes are developed, but also the hidden motivations of the individuals. However, it is important to emphasise that the sample in our study is not representative, thus it is not possible to generalise the results. A second limitation rooted in the sample is the uneven distribution of the participants in the different age groups, which also puts restrictions on statistical analysis.

There are two possible and important directions to continue the research. On the one hand, it would be possible to obtain results that are more suitable for generalisation through a representative sample including all layers of the society. However, there is an apprehension that there would be fewer people in the enlarged sample who would show interest in the topic of learning, thus the answers would not serve the assessment of educational needs well. Another possible direction for further research would be a comparative study extended to the whole of the adult life course, regarding learning goals and preferences of learning methods.

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