



# COMPARATIVE STUDY OF FUTURE FAMILY PLANS AND PERCEIVED STRESS FACTORS AMONG HUNGARIAN STUDENTS IN HIGHER EDUCATION

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## Summary

**Aim.** Nowadays in Hungarian society we face the problem of unfavourable demographic trends. We also face the conflicts of family and work-related roles of healthcare workers. The aims of our surveys were: (1) to acknowledge future plans related to having children of medical, nursing and health visitor students, in relation to stress factors in their lives, (2) to compare examined variables with the results of non health sciences students.

**Material and methods.** Full-time medical, nursing, health visitor students and police cadets were invited to our quantitative sociological researches. They participated in training programmes of higher education institutions in Budapest, 282 people gave valuable answers (total response rate: 71,3%).

**Results.** 93,0% of the students would like to have a child, there was no statistically significant difference between the answers of the students of different training programmes ( $p = 0.657$ ). In respect of their own future prospects 44,8% of the female students were optimistic ( $p = 0.231\%$ ). The optimistic/pessimistic future prospects showed correlation with the proposed number of children ( $p < 0.001$ ). The majority of indicated stress-factors were different in each type of student training programme. On the other hand the existing stress factors and the proposed number of children were unrelated.

**Conclusions.** Concerning students' plans of having children we can establish that the students have definite concept about the issue of having children. The pessimistic future prospects negatively influence the plans of having children while the stress factors of the students' current life do not have this effect.

Key words: female students, family plans, stress-factors, future prospects

## INTRODUCTION

According to international comparative researches Hungarian women express more conservative values regarding the role of women. Especially mothers attach a high value to family and are socially conservative in regard to family functioning (Pongrácz, T.-né, 2001).

In spite of this fact the Hungarian demographic trends indicate well-prognosticated social problems resulting from the low fertility rate. According to the report of the Hungarian Central Statistical Office (HCSO) Hungarian population declined under 10 million in 2010 (on the basis of 2010' interim information supplied of the HCSO). In 2010 the number of natural increase was -4,0.

The unfavourably low fertility rate is related to the increasing number of relationships alternative to marriage and the high proportion of divorce incidences. In 2010 the number of marriages was 35.520 while the number of divorces was 23.820 (on the basis of 2010' annual information supplied of the HCISO).

Research on the changing nature of women's roles in family and work has been well documented in the past few decades (Nordenmark, 2004; Jansen, Kant, Kristensen & Nijhuis, 2003; Greenhaus, Collins & Shaw, 2003; Huang, Hammer, Neal & Perrin, 2004). The research emerged as a result a growing number of women in the labour market (Cotter, Hermsen & Vanneman, 2001), and because of the rapidly spreading model (Byron, 2005) of the dual wage-earning couple (Haddock, Zimmerman, Ziemba & Lyness, 2006). In the health care, the majority of studies on these topics examined the incompatibility of family and work-related roles, specifically the conflicts arising from this incompatibility (Swanson & Power, 1999; Gjerberg, 2003; Demir, Ulusoy & Ulusoy, 2003; Heiligers & Hingstman, 2000), and additionally psychic and somatic symptoms which may occur as a result (Stewart, Ahmad, Cheung, Bergman & Dell, 2000; Artazcoz, Borrell & Benach, 2001; McGrath, Reid & Boore, 2003; Firth-Cozens, 2003).

As far as we know there are few studies that have explored the future expectations of students studying in health colleges and at medical universities, and particularly the way that this fact affects their family and career plans. Hungarian researches concerned the health behaviour, mental/physical health and socialization. According to the results the mental well being of the students is not optimal already during the higher education studies. (Csatlós, I.-né 2004, Sima, Pikó, Simon 2004)

#### AIMS OF THE RESEARCH

The aim of the presented study was to gain an objective evaluation of female full-time medical, nursing, health visitor students' and cadets' future family expectations and plans in the context of stress factors in their life.

There were two important reasons for choosing students of Police College in our surveys (1). Similarly to health workers, police officers are generally employed in the public sector, frequently in unsatisfactory working conditions (2). The other reason was to compare the family plans of the students who choose traditionally feminine professions (nurse, health visitor) with those of the students (cadets) who study a traditionally masculine profession. One of our main hypotheses was that the female students who study traditionally masculine profession are less family orientated.

Sufficient number of female cadets at Police College made it possible to invite them to participate in our research in spite of the fact that this profession is considered to be masculine.

#### RESEARCH METHOD AND SAMPLE

Full-time female medical, nursing, and health visitor students were invited to our quantitative, questionnaire-

based sociological research. Our survey was carried out in Budapest, at the Semmelweis University. The response rate stated 68,08% (N = 201).

Students of the Police College in Budapest served as a control group. As it was a comparative survey we invited only female students in our research. 81 female cadets answered our questionnaire in the control group (response rate 77,0%). The total number of respondents was 282. Questionnaires were selected for analysis only if respondents answered at least 90% of all questions.

Questions included demographic characteristics of the respondents and items related to family and career plans, traditional female roles, present stress factors and future fears of students. Cronbach's alpha internal reliability coefficient was applied to scales in the questionnaire. Alpha coefficients ranged between 0.70 and 0.83. We only took into consideration the variables, which could be related to the aims of our study.

Completed questionnaires were checked for the overall accuracy, which was followed by the coding of the answers to the open questions. Data from the questionnaires were entered into the SPSS Data Entry. In addition to distribution tests, the Pearson's chi-squared test was applied to measure bivariate relationships between categorical variables ( $p < 0.05$ ).

## RESULTS

### Characteristics of the Respondents

The students' average age was 22.9 years, 68.2% of the respondents were 23 years old or younger, the majority lived in an urban area (79.0%). The age of cadets was statistically different from the age of the other students; the cadets were statistically significantly younger ( $p < 0.001$ ). The majority came from a two-child family (average number of siblings: 1.28), there was no statistically significant difference between the student groups in this respect ( $p = 0.387$ ). The majority (91.1%) was single, only 24.4% of them lived in a marriage or a common-law marriage. The female nursing students reported the lowest rate of the common-law marriage or marriage. Most of the BSc students were first-generation students, but the majority of female medical students (MSc students) had one or two college/university-educated parents (fathers who have college/university degree: 65.8%; mothers who have college/university degree: 60.3%). In this respect, a statistically significant difference between the student groups occurred ( $p < 0.001$ ).

### THE COMPARISON OF THE PLANS TO HAVE CHILDREN

Most of the respondents (80.8%) attached a high value to families, because they thought that having a child was an indispensable part of a full and happy life. The female medical students indicated the highest ratio (87.2%), the cadets indicated the lowest ratio (76.5%). In spite of the mentioned difference there was no statistically significant difference ( $p = 0.368$ ). Nevertheless, almost half of the students (40.9%) were convinced that

a single mother could live a full life without a husband. The number of students who agreed with this statement was the highest among cadets (49,4%) and the lowest among medical students (35.9%), but there was no statistically significant difference between the two variables ( $p = 0.261$ ). Consequently, not having any children precludes living a full life more than being a single mother.

The overwhelming majority of childless students reported that they wanted to become mothers in the future (93.0%). In the total sample only 7 people (2.6%) were not planning to give birth to a child, and 12 people (4.4%) were not completely determined. There was no statistically significant difference ( $p = 0.657$ ) between the answers of the students groups. 96.1% of the medical students, 92.5% of the health visitor students, 91.4% of the cadets and 91.7% of the nursing students were planning to have at least one child. Most of them were planning two (33.3%) or three children (33.0%). The average planned number of children was 2.4 children.

The health visitors were planning 3 or more children in the highest ratio (74.4%) and only 21.% of the cadets were planning the same. There was statistically significant difference ( $p < 0.001$ ) between the answers of the students groups (fig. 1).

The overwhelming majority of respondents were planning to give birth to the first baby before their 30th birthday (mean: 27.0), but there was a slight statistically significant difference between the answers of student groups ( $p = 0.079$ ). The health visitor students were planning to give birth to the first child at a younger age than other students. The time of the first child's birth and the planned number of children were related ( $p < 0.001$ ).

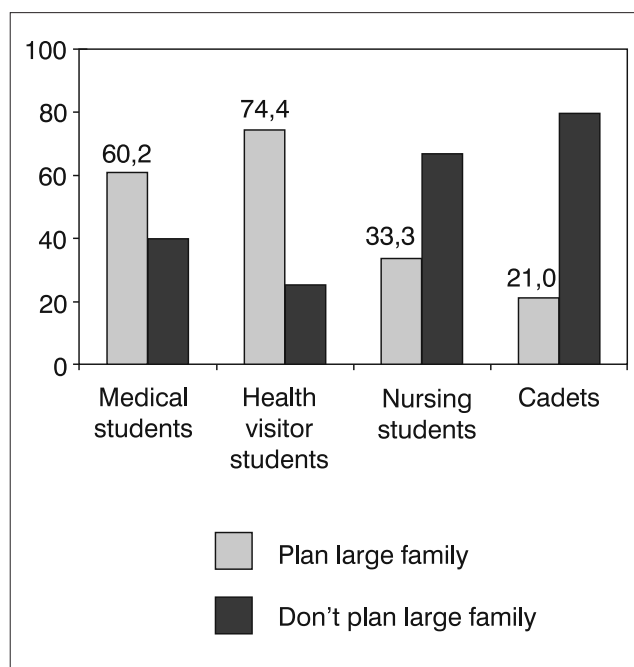


Fig. 1. Percentage distribution of students who plan or do not plan three or more children (N = 279).

#### STUDENTS' FUTURE PROSPECTS, FEARS, PERCEIVED STRESS FACTORS IN CONNECTION WITH FAMILY PLANS

In respect of the future prospects 44.8% of the students were optimistic, 4,0% were pessimistic and 51,2% of the respondents were both optimistic and pessimistic. The cadets were the most optimistic (53.8%) medical students were the least optimistic (34.6%). The health visitor and nursing students indicated optimism approximately in the same proportion (44.2% and 47.6%). Although there were slight differences between the students' answers there was no statistically significant difference ( $p = 0.231$ ). The age of the students and "future prospects" variable were not related ( $p = 0.818$ ).

Out of the six listed stress factors (see table 1) the Problems related to studies/exams was mentioned the most frequently (85.3%). The second most common problem was lack of time (63.8%). 37.3% regarded future fears as a stress-factor. 36.6% indicated financial difficulties. Nearly one fourth of students mentioned stress related to family conflicts (25.4%) and related to problems of finding a partner (24.7%).

Most of the stress factors and types of student training programmes, age of students, future prospects, planned number of children were not unrelated (tab. 1).

In the answers of all four student groups the leading stress-factors were problems related to study/exam (nurse: 73.8%; health visitor: 92.5%; medical student: 76.9%; cadets: 92.4%), and the lack of time (nurse: 59.5%; health visitor: 68.8%; medical student: 56.4%; cadets: 68.4%). The financial difficulties were mentioned at the third place by nursing students (52.4%), health visitor students (42.5%), cadets (35.4%), while they were mentioned only at the last place by medical students (23.1% of them). There was a strong statistically significant difference between the nursing students' answers and the other students' answers concerning the questions of problems of finding a partner. While 47.6% of nursing students reported it as a stress factor, only 29.5% of medical students, 21.3% of health visitor students and 11.4% of cadets did the same.

Half of the mentioned stress factors were unrelated to the age of students (tab. 1.). Nevertheless the students who were right before graduation indicated problems of finding a partner, family conflicts in a higher proportion, than the younger students who reported more often stress because of the lack of time (tab. 1).

It can be deduced from the results presented in table 1. that the more pessimistic one's future prospects were the more often she mentioned financial problems, family conflicts and problems of finding a partner as stress factors in the questionnaire.

There was no statistically significant difference between stress factors and the planned number of children. On the other hand the optimistic/pessimistic future prospects and the planned number of children were not unrelated ( $p < 0.001$ ).

Table 1. Statistically significant differences between stress-factors and types of student training programmes, age of students, future prospects, planned number of children (N = 279).

Perceived stress-factors	Student group	Age	Future prospects	Planned number of children
Problems related studies/exams	p = 0.002	p = 0.504	p = 0.126	p = 0.237
Problems of finding a partner	p < 0.001	p = 0.002	p = 0.031	p = 0.462
Financial difficulties	p = 0.080	p = 0.201	p = 0.002	p = 0.800
Family conflicts	p = 0.001	p = 0.042	p = 0.005	p = 0.459
Lack of time	p = 0.292	p = 0.055	p = 0.756	p = 0.205
Future fears	p = 0.224	p = 0.632	p < 0.001	p = 0.263

## DISCUSSION

In our sample the cadet respondents were younger than the other students because of their different training programme. There was no statistically significant difference between the family backgrounds of health sciences and non-health sciences students. On the other hand there was considerable difference between the socioeconomic status of BSc students' parents and MSc students' parents. Most of the BSc students might have to face the problems of first-generation students (Terenzini, Springer, Yaeger, & Pascarella 1996; Pascarella, Pierson, Wolniak & Terenzini 2004) and future financial problems. It may be concluded that most of the female medical students come from a higher social stratum.

According to our survey there was no significant difference between the marital status and the plans of our respondent students and those of the average young Hungarian women (S.Molnár 1999). Only a small percentage of the students lived in common law marriages or marriages at the time of this survey. An insignificant number of students were not planning to have children after graduation. Planned number of children (typically two) resembled to the existing trends of the typical Hungarian one/two-child family model. Several surveys in the last decades have demonstrated that people's planned number of children depends not only on financial reasons. There are other factors such as family and individual aims for the future, especially gaining higher professional ranking in career building. Thus the decrease of birth rate with serious consequences in this country does not indicate the collapse of the traditionally child-centred values of the Hungarian society. When compared with data of other countries the rate of young Hungarians who do not want any children at all is very low. The decrease in birth rate is much more a response to the negative changes in people's living conditions in recent decades and to the increasing number of women with higher education and with subsequent career building (S. Molnár 1999). Motherhood and marriage are not equally emphasised in students' long-term plans. Motherhood is more important than being married, thus our results do not justify results of earlier investigations

(Artazcoz 2001, McGrath, Reid, Boore 2003, Firth-Cozens 2003).

The majority of students were planning to give births to their first child before the age of 30. It was not a surprise that the female medical students were planning to have children later because of the characteristics of long medical training. There might be two reasons for earlier childbearing plans of the health visitor students: (1) their special professional knowledge (health risks of the late first childbearing) and (2) their plans of large family (3 or more planned children).

Surprisingly nursing students' family plans (lower rate of planned number of children) are similar to that of the cadets. A possible explanation can be that the majority of nursing students were single at the time of the survey. We are planning to carry out a research to find out the explanation for the high rate of nursing students without a partner and for the partner finding problems they mentioned.

In consequence of their student status the respondents reported the problems related to studies/exam as a stress factor most frequently however it was unexpected that the health visitor students indicated it in the highest rate.

It was surprising that only less than one in two students were optimistic about their future, the medical students were the least optimistic (among them only every third person had optimistic future prospects). On one hand there was a strong statistically significant difference between the answers to the future prospects and the planned number of children, on the other hand the students' stress-factors did not influence the planned number of children.

It was surprising that financial difficulties as stress-factor had lower prevalence compared to lack of time in both medical and non-medical student groups. We are planning additional quantitative researches on this issue.

Our research result indicated a conservative viewpoint of female students, unfortunately with less optimistic future prospects, and it is essential to devote attention to this point in the higher education. After this pilot study, we are planning further surveys.



## CONCLUSIONS

1. The students have definite family plans already during the higher studies, it seems that these plans are unaffected by arising tensions and problems in the students' life.
2. The students' optimistic/pessimistic future prospects are in correlation with the family plans. The lower rate of students were optimistic about their future
3. There are differences between the family plans of the students in the so-called feminine and masculine professions. □

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