

# GENDER ROLE ATTITUDES AND CAREER PLANS OF HIGHER EDUCATION STUDENTS IN THE SOCIAL FIELD BASED ON A PILOT STUDY IN HUNGARY

Hajnalka Fényes<sup>ORCID 0000-0002-1509-05341</sup>, Márta Mohácsi<sup>ORCID 0000-0002-3031-2342 2 1</sup>

<sup>1</sup> PhD habil., associate professor

University of Debrecen, Department of Sociology and Social Policy, Debrecen, Hungary

<sup>2</sup> PhD habil., associate professor

University of Debrecen, Department of Sociology and Social Policy, Debrecen, Hungary

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## Abstract

*This study examines a pilot survey on gender role attitudes and career plans among social science students at a Hungarian research university. The paper-based questionnaire was filled by students present in a class for each cohort and programme (N=141). The novelty of this study comes from establishing a relationship between students' career plans and their gender role attitudes. Our main research question asks how students' gender role attitudes influence their understanding of careers, their current and future priorities, and their views on the compatibility of career and family. In our analysis, we used bivariate methods as well as cluster analysis and principal component analysis. During the principal component analysis, we distinguished between traditional, modern and mixed gender role attitudes. In the case of the latter, women are compelled to work for a better living, while family roles mean self-fulfilment for them. In line with the protean career concept and the Kaleidoscope Career Model, we find that students primarily want to fulfil their own expectations in their careers. Delayed family formation is more pronounced among those accepting modern gender roles than those accepting traditional roles. Another significant difference is that students identifying with traditional gender role attitudes perceive a greater conflict between career and family, while those accepting mixed gender role attitudes consider these mostly compatible. The conclusion of this study corresponds to modern career concepts: organisations should adapt to individuals' plans and expectations and take into account students' gender role attitudes as well as their career and family plans.*

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## 1 Introduction

The aim of our research is to examine the career plans of higher education students studying social sciences in light of their gender role attitudes. This aspect has received little attention in previous research, which had its primary focus on gender differences in career (Judge et al. 1995). In this paper, we seek to answer questions about how students understand careers, what their current and future priorities are, how they schedule their careers and family formation, and how

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<sup>1</sup> Corresponding author.  
E-mail address: mohacsi.marta@arts.unideb.hu

they perceive the conflict between career and family. Our background variables include students' gender, age, marital status, social background, as well as their gender role attitudes. Our pilot survey was conducted among social science students at a research university in Hungary. Data were analysed using bivariate methods (cross-tabulation, analysis of variance, and Pearson's correlation analysis) as well as cluster analysis and principal component analysis.

In the theoretical section of the study, we first present modern career concepts, including previous research on young people's understanding of careers in Hungary. We then focus on young people's career and family plans, decisions on how to time career and family formation, and any conflicts between career and family. Further, we present traditional and modern gender role concepts and discuss the gender role attitudes of the adult population and young people in Hungary. After explaining the methodology, the empirical section of the paper presents our findings on students' current priorities, the timing of career and family, and the importance and conflicts of career and family considering background variables. In the summary, we answer our research questions, discuss the limitations of the research, and outline our future research plans. Finally, we discuss our conclusions and policy recommendations.

## **2 Theoretical Background**

### **2.1 Career Definitions**

Career is commonly understood as successful promotion and advancement or as occupation, vocation, and path (Belényesi 2013). In accordance with this, the scientific definition of careers describes an upward vertical movement in one's labour market position within the existing workplace or achieved through changing jobs (Arthur, Khapova and Wilderom 2005). However, traditional linear career paths are not as common as they once were; instead, people often experience career breaks (especially women), career stagnation, or failure, and horizontal shifts or job changes to achieve greater satisfaction and motivation have become more common (Brousseau, Driver, Eneroth and Larson 1996).

In modern career concepts, career also represents a kind of progression linked to individuals' life stages. The first steps of any career path involve the choice of career, occupation, and job (Belényesi 2013). Higher education students in our study are in the stage of career preparation, exploration, and discovery (Super 1984, Dessler, Sutherland and Cole 2005).

Other career models include the self-directed, so-called protean careers, which are based on individuals' values and subjective career interpretation (Hall 1996), and the Kaleidoscope Career Model, whereby individuals decide about their own career, adapting it to changes in their life path and to their own desires (Sullivan and Mainiero 2007).

According to young people in Hungary aged 15–25, the primary definition of careers involves labour market success and a well-paid job (Szondalpsos 2012). However, highly educated young people also emphasised the high prestige of the occupation and high job satisfaction as further aspects of a career. In terms of gender differences, financial considerations were more important for men, while job satisfaction was more important for women. In a study among higher education students, Karcsics (2008) found that students' concept of a career was associated with esteem, prestige, traditional vertical advancement, financial security, and a sense of self-actualisation.

### **2.2 Young People's Career and Family Plans, their Timing and Conflicts**

As discussed above, the Kaleidoscope Career Model presumes that individuals adjust their career plans to the events in their life path. The target group of our study comprises university students, who align their careers primarily to their plans to start a family. Research in Hungary shows that young people put family before career (Feith, Kovácsné and Balázs 2006, Mohácsi and Juhász 2017), but their family formation plans are postponed or often do not go as planned (Kapitány 2002, Engler 2014, Engler 2018, Makay and Domokos 2018). The reason for this postponement is mainly the expansion of higher education and, as a consequence, the longer time spent in education. High educational attainment also increases the ambition of students' career plans, further postponing family formation (Engler 2018, Pusztai, Fényes and Engler 2022). Research among university students shows that students after graduation either plan the timing of

family and career simultaneously (Feith et al. 2006) or wish to focus on their career first and to start a family only later (Mohácsi and Juhász 2017).

While some international studies (Kaufman and Goldscheider 2007, Tucker 2002) suggest that young people's gender does not influence their family and career plans, parents' educational attainment and financial situation appears to have an impact. Research in Hungary shows that students from advantaged backgrounds tend to prioritise their career plans over their family plans, while disadvantaged students are more family-oriented and tend to marry and have children earlier than others (Pusztai et al. 2022, Ceglédi 2018, Engler 2011).

Karcsics (2008) found that higher education students also interpreted career as a form of sacrifice at the expense of family. Due to changing gender roles (see following section), reconciling career and family life can be problematic for both women and men (Acker 1990, Sztáray Kézdy and Drjenovszky 2021, Geszler 2014).

### **2.3 Gender Roles and Gender Role Attitudes in Hungary**

Gender roles comprise the characteristics, norms, rules, and standards of behaviour for men and women in a given society, acquired by individuals through socialisation. Gender role attitudes represent the population's or individuals' perceptions of gender roles and the division of labour within the family (Gregor 2014). In the age of industrialisation, "traditional" gender roles were prevalent, with men being the primary breadwinners and women taking on caring and emotionally supportive roles. Later, women also entered the labour market in large proportions (reflecting modern gender roles), and in many developed countries, women in the workforce have been supported by fathers actively involved in family life (reflecting postmodern gender roles) (Fényes, Pusztai and Engler 2020).

Under socialism in Hungary, the two-earner family model dominated, with most women working full-time, but the majority of the population identified with traditional gender roles. After the fall of socialism, the proportion of women who chose the role of primary caregiver increased, but in addition to accepting traditional roles, the population also agreed with the statement that most women should work to secure the family's livelihood (Pongráczné 2005). After the millennium, slightly more women accepted modern gender roles (Pongráczné and S. Molnár 2011), with a shift in men's and fathers' roles. According to Spéder (2011), Hungarian society expects fathers to fulfil a double role, both as breadwinners and as active participants in parenting. According to Gregor (2014), a significant proportion of the population today still accepts traditional roles, and even those who agree with women's role in the labour market do not necessarily call for fathers' greater involvement at home. According to Takács (2020), it is still difficult for fathers in Hungary to meet the two-fold expectations explained above, in contrast to some Western countries where fathers are better supported in their caregiving role.

A survey by Fényes, Pusztai, and Engler (2020) found that a third of higher education students accepted traditional gender roles, another third identified with the idea of the modern working woman, while a third group accepted both the idea of working women and fathers' increased involvement in the family. As new phenomena, female breadwinner families (Engler 2017, Jurczyk et al. 2019) and fathers in the role of primary caregiver (Neményi and Takács 2016, Sztáray Kézdy and Drjenovszky 2021) have emerged in Hungary, although these are still relatively rare.

## **3 Research Methodology**

### **3.1 Description of the Research Methodology**

Our research is based on a pilot survey ("Young people's career plans" research) conducted in 2022 and 2023 among social science students at the second largest university in Hungary. The paper-based survey had a comprehensive sample: the questionnaire was filled by students present in a class for each cohort and programme (N=141). The survey population consisted of BA students in Sociology and Social Work and MA students in Sociology, with all cohorts surveyed.<sup>2</sup>

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<sup>2</sup> We did not survey MA students in Social Policy, some of whom were older students and were already working. Given the topic of our research, the primary target age group was those aged 18–23.

The response rate was 74.2% of the total population. The sample can be considered probabilistic, as all students present in class at the time of data collection completed the paper-based questionnaire. However, the sample is representative only of students enrolled in social studies at the examined university. Survey data were analysed using the SPSS software package. The methods of analysis included cross-tabulation, analysis of variance, Pearson correlation analysis, cluster analysis, and principal component analysis.

As pilot studies are not suitable for hypothesis testing and are by design exploratory, in this study we formulate the following research questions:

What is the influence of students' gender, age, marital status, social background, and gender role attitudes on:

their understanding of careers,

their current priorities and the timing of career and starting a family,

the importance of family and career, and their views on any conflicts between the two.

### 3.2 Presentation of Explanatory Variables

Among the demographic indicators, we first examined students' gender (80% of the sample was female) and created a binary indicator combining age and marital status (73.8% of the sample was aged 18–23, was unmarried, and had no children). Students' social background was analysed using cluster analysis with seven variables<sup>3</sup>, which resulted in three groups of almost equal size (Table 1). The first group scored below average on all indicators (unfavourable background), the second group scored above average on all indicators (favourable background), whereas those in the third group had parents who mostly did not possess a higher education degree, but their financial background at the individual and family level was still relatively favourable (non-graduate parents but favourable financial background).

Table 1. Cluster centres of social background groups (N=141)<sup>4</sup>

	unfavourable background	favourable background	non-graduate parents but favourable financial background
whether the father has a higher education degree	-0.36	0.82	-0.3
whether the mother has a higher education degree	-0.52	1.5	-0.66
the family's subjective financial situation	-1.02	0.34	0.62
individual subjective financial situation	-0.65	0.27	0.36
the family's objective financial situation	-0.79	0.55	0.28
individual objective financial situation	-0.4	0.37	0.1
settlement type of place of residence	-0.48	0.39	0.12
N	46	40	55

Source: "Young people's career plans" research database (2022, 2023)

<sup>3</sup> Whether the father has a higher education degree (21.6% of fathers in the sample had), whether the mother has a higher education degree (30.5% of mothers had), settlement type of place of residence (county seat or capital 43.3%, smaller town or village 56.7%). Students' subjective financial situation at the family level (M=3.56 SD=0.56) and at the individual level (M=3.09 SD=0.63) was measured on a 4-point scale. Two 8-point objective financial situation indicators measured the possession of durable consumer goods (in the family M=6.21 SD=1.39, and individually M=3.55 SD=1.52)

<sup>4</sup> K-means cluster analysis included standardised background variables with 9 iterations. Data gaps were addressed using pairwise alignment. Pairwise alignment refers to the procedure of addressing missing data by calculating distances between cases based only on variables for which both observations have available values.

Further explanatory variables concerned students' gender role attitudes. Nine statements on gender roles (measured on 4-point Likert scales) were analysed using principal component analysis, with three principal component eigenvalues greater than 1 (Table 2). These corresponded to the traditional gender role attitude, the attitude identifying with the idea of the modern working woman, and the mixed gender role attitude.

The latter had a factor weight of over 0.7 for the statements that women need to support the family and that family tasks are a way of self-actualisation for women, which is in line with the results of Pongráczné (2005) and Pongráczné and Molnár (2011).

*Table 2. Factor weights of principal components regarding gender role attitudes, values above 0.4 in bold (N=141)<sup>5</sup>*

	<b>traditional attitude</b>	<b>modern working woman</b>	<b>mixed attitude</b>
Work is important, but home and children are more important for most women.	<b>0.702</b>	0.000	0.226
For men, work should be more important than family.	<b>0.483</b>	0.068	0.379
Most women today need to work to support their family.	0.12	0.239	<b>0.755</b>
It is not good for the husband to stay at home and raise the children and for the wife to earn money.	<b>0.736</b>	-0.027	-0.030
Being a housewife and raising children can be a way of self-actualisation for women, just as paid employment.	-0.06	-0.372	<b>0.702</b>
The right thing to do is for both the wife and husband to contribute to the family income.	0.156	<b>0.730</b>	-0.149
A working mother is as good a mother to her children as someone who does not work.	-0.336	<b>0.624</b>	0.298
Family life suffers if the wife works full time.	<b>0.477</b>	-0.536	-0.047
The husband should earn more than the wife.	<b>0.763</b>	-0.179	-0.120

Source: "Young people's career plans" research database (2022, 2023)

Analysis of variance showed that the group from a favourable social background disproportionately identified with traditional roles ( $p=0.04$ ), whereas the group with non-graduate parents but favourable financial status accepted the idea of the modern working woman ( $p=0.002$ ). With respect to gender, as expected, women tended to identify with the idea of the modern working woman ( $p=0.000$ ), while men were more likely to be in favour of traditional roles ( $p=0.003$ ). However, attitudes did not differ by students' age and marital status.

Gender role attitudes were further assessed using an indicator measured on a seven-point scale, where 1 denoted traditional roles and 7 modern roles. Overall, students responded in line with relatively modern roles ( $M=5.94$   $SD=1.01$ ). Interestingly, in contrast to the results presented above, responses did not differ by social background. However, unmarried students aged 18–23 with no children were significantly ( $p=0.044$ ) more modern ( $M=6.04$ ,  $SD=0.97$ ) than their older married peers with children ( $M=5.65$ ,  $SD=1.09$ ). Furthermore, as expected, men were less ( $p=0.001$ ) modern ( $M=5.39$ ,  $SD=1.02$ ) than women ( $M=6.07$ ,  $SD=0.93$ ).

<sup>5</sup> Factor loadings indicate the strength and direction of the relationship between the original variables and each principal component. The total variance explained by principal components is 56.23%. The communality of items is above 0.3. The principal component analysis featured varimax rotation and 12 iterations.

## 4 Results

### 4.1 Students' Understanding of Careers

As measured on a scale of 1 to 5, students agreed to a similar extent with the statements that career provides professional recognition ( $M=4.19$ ,  $SD=0.75$ ) and financial well-being ( $M=4.17$ ,  $SD=0.8$ ). Examining the responses according to background variables, women agreed significantly ( $p=0.043$ ) more ( $M=4.25$ ,  $SD=0.74$ ) with the first statement than men ( $M=3.93$ ,  $SD=0.77$ ), indicating that career prestige is more important for female social science students. However, analysis of variance showed that responses did not differ by other background variables.

We also asked students about their understanding of careers in an open-ended question. According to the coding of responses<sup>6</sup>, careers were most often associated with livelihood, work, and financial security (46), but almost as many respondents mentioned professional development and career (44) or self-actualisation (38). Traditional vertical progression was highlighted by far fewer students (10). In contrast to what the responses to closed-ended questions suggest, only 8 respondents emphasised prestige and recognition as a primary characteristic of a career in response to the open-ended question. Analysis of variance revealed that material aspects were significantly more important for those with mixed gender attitudes ( $p=0.017$ ). Responses did not differ by other background variables. As shown in Table 2, those with a mixed attitude thought that women had to work out of necessity, which may be why these respondents associated careers primarily with a secure livelihood.

### 4.2 Current Priorities for Students

In our research, we also wanted to examine students' priorities at the time of the survey. Currently, the most important thing for respondents is to meet their own expectations ( $M=4.68$ ,  $SD=0.51$ ), followed by the goal of obtaining their degree ( $M=4.54$ ,  $SD=0.65$ ). It is also important for them to build professional relationships ( $M=3.94$ ,  $SD=0.95$ ) as well as to have a good time at university ( $M=3.92$ ,  $SD=1.06$ ). It was somewhat less important but still a relevant priority for students to build a career ( $M=3.77$ ,  $SD=1.11$ ), to be with friends ( $M=3.61$ ,  $SD=1.02$ ), and to be involved in the university community ( $M=2.88$ ,  $SD=1.15$ ). Finally, meeting parents' expectations was the least important ( $M=2.46$ ,  $SD=1.18$ ).

When individually examining the statements using analysis of variance, as expected, unmarried students aged 18-23 with no children felt it was important to have a good time at university, to be involved in university life, and to be with friends. An interesting further finding of the correlation analysis was that the acceptance of modern gender roles was positively associated with students' desire to meet their parents' expectations ( $r=0.184$ ,  $p=0.03$ ) and the importance of obtaining a degree ( $r=0.173$ ,  $p=0.041$ ).

Principal component analysis of the eight statements resulted in three distinct attitudes (Table 3): the attitude with career as the priority, the attitude with university life as the priority, and the attitude with the degree as the priority. Importantly, we find that the first principal component combines the relevance of own expectations with the focus on career and professional relationships, which corresponds to the so-called protean, self-directed career concept presented in the theoretical section.

<sup>6</sup> In total, five codes were identified. As there were respondents who mentioned more than one aspect, five binary variables were created to record whether each aspect was mentioned.

*Table 3: Factor weights of principal components regarding current priorities, values above 0.4 in bold (N=141)<sup>7</sup>*

The important thing for me now is to:	<b>career priority</b>	<b>university life priority</b>	<b>degree priority</b>
Get my degree.	0.088	-0.014	<b>0.938</b>
Have fun at university.	-0.075	<b>0.788</b>	0.131
Live up to my parents' expectations.	-0.476	<b>0.47</b>	0.384
Live up to my own expectations.	<b>0.704</b>	0.074	0.151
Build my career.	<b>0.765</b>	0.062	-0.129
Be with my friends.	0.1	<b>0.755</b>	-0.264
Be involved in the university community.	0.277	<b>0.749</b>	0.089
Build professional relationships.	<b>0.783</b>	0.08	0.05

Source: "Young people's career plans" research database (2022, 2023)

We found no differences by gender and social background, but the responses differed by students' marital status ( $p=0.000$ ). As expected, the priority of university life was more important for unmarried respondents aged 18-23 with no children ( $M=0.18$ ,  $SD=0.86$ ) than for others ( $M=-0.53$ ,  $SD=1.19$ ). Correlation analysis also showed that the attitude of prioritising careers was positively associated with the idea of the modern working woman ( $r=0.244$ ,  $sig=0.004$ ), and identifying with modern gender roles (as measured on a 7-point scale) was more common among those prioritising their degree ( $r=0.188$ ,  $sig=0.026$ ).

#### 4.3 Timing of Career and Family

According to the Kaleidoscope Career Model, individuals adjust their careers to events in their life path. We asked university students how they planned to time their career in relation to starting a family (Table 4).

*Table 4: Students' view on the timing of career and family (N=132)*

	<b>Starting a career</b>	<b>Starting a family</b>
20–25 years	13.6%	3.8%
26–30 years	53%	50%
31–35 years	28.8%	43.2%
above 36	4.6%	3.1%

Source: "Young people's career plans" research database (2022, 2023)

The results show that students plan to start their career slightly earlier, with only a third planning to do so in their thirties. In contrast, almost half of students shift their plans to start a family beyond the age of 30, in accordance with the theoretical section. Analysis of variance shows that students with traditional gender attitudes plan to start a family slightly earlier ( $p=0.021$ ), but the timing of career and family does not differ by other background variables.

The survey also considered career and family timing by asking students which they planned to start earlier. As assessed on a five-point Likert scale, students agreed with "building a career first" ( $M=3.31$ ,  $SD=1.32$ ) and disagreed with "starting a family first" ( $M=1.84$ ,  $SD=1.1$ ).

<sup>7</sup> The total variance explained by principal components is 64.68%, item communality is above 0.5, principal component analysis with varimax rotation, 4 iterations.

Correlation analysis showed that earlier career building was positively associated with the principal component of the modern working woman ( $r=0.178$ ,  $\text{sig}=0.035$ ), with a negative correlation between early family formation and the gender role scale ( $r=-0.224$ ,  $\text{sig}=0.008$ ). As expected, students are inclined to start a family earlier when they identify with traditional gender roles.

#### **4.4 The Importance and Conflicts of Career and Family**

In our questionnaire, respondents expressed agreement on a 5-point Likert scale with a further 11 statements about career and family. Overall, family was more important to students than career, despite the fact that, as discussed above, they planned to begin their career earlier than starting a family. Respondents ranked the highest the following statements (all with an average of over 3):<sup>8</sup> the most important thing is one's family; family comes with sacrifices in one's professional life, which one must make; family is more important than career; family is the only way to achieve happiness. Students agreed the least with the following statements (with an average below 2): the only way to achieve happiness is through a career; career is more important than family.

According to the analysis of variance, children of non-graduate parents with favourable financial background disagreed with the statement "career is more important than family" the most ( $M=1.47$ ,  $SD=0.72$ ). They were followed by those from an unfavourable background ( $M=1.85$ ,  $SD=1.03$ ), while students from a favourable background ( $M=1.95$ ,  $SD=1.11$ ) showed the lowest disagreement ( $p=0.034$ ). Correlation analysis revealed that agreement with the statement "family is the only way to achieve happiness" was positively associated with the principal component of traditional roles ( $r=0.185$ ,  $\text{sig}=0.029$ ), and agreement with the statement "the family's psychological well-being can only be ensured by career sacrifices" positively correlated with the principal component of the modern working woman ( $r=0.233$ ,  $\text{sig}=0.008$ ). We also found that modern gender roles (as measured on the gender role scale) were negatively associated with the statement "family and career cannot be reconciled" ( $r=-0.19$ ,  $\text{sig} 0.025$ ), suggesting that students identifying with traditional roles were more pessimistic. We conducted principal component analysis based on the 11 statements, resulting in 4 principal components with eigenvalues above 1 (Table 5): the family-oriented attitude, the career-oriented attitude, the reconciling attitude, and the conflict-centred attitude, which emphasises the conflict between career and family life.

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<sup>8</sup> Detailed data are not presented here due to space limitations.

Table 5: Factor weights of principal components regarding statements about family and career, values above 0.5 in bold (N=141)<sup>9</sup>

	Family-oriented attitude	Career-oriented attitude	Reconciling attitude	Conflict-centred attitude
The most important thing is one's career.	-0.123	<b>0.763</b>	0.048	-0.205
Career is more important than family.	-0.527	<b>0.584</b>	0.155	0.067
The only way to achieve happiness is through a career.	0.072	<b>0.822</b>	0.104	0.219
The most important thing is one's family.	<b>0.750</b>	-0.196	-0.137	-0.089
Family comes with sacrifices in one's professional life, which one must make.	0.159	-0.042	<b>0.737</b>	0.122
Family is more important than career.	<b>0.636</b>	-0.065	-0.014	-0.027
Family is the only way to achieve happiness.	<b>0.810</b>	0.092	-0.090	-0.047
A career comes with sacrifices in one's personal life, which one must make.	-0.29	0.108	<b>0.73</b>	-0.018
Building a career involves family-related sacrifices.	-0.188	0.178	<b>0.631</b>	0.038
Family and career cannot be reconciled.	-0.204	0.083	-0.091	<b>0.782</b>
The family's psychological well-being can only be ensured by career sacrifices.	0.041	-0.057	0.243	<b>0.787</b>

Source: "Young people's career plans" research database (2022, 2023)

Analysis of variance showed no difference by students' gender and marital status. However, significant differences were found by students' social background ( $p=0.05$ ). The reconciling attitude was more prevalent among those from a favourable background ( $M=0.21$ ,  $SD=0.85$ ), followed by those from an unfavourable background ( $M=0.11$ ,  $SD=0.93$ ). This attitude was below average for those with non-graduate parents but favourable financial circumstances ( $M=-0.25$ ,  $SD=1.11$ ). Correlation analysis showed that modern gender roles (as measured on the gender role scale) were negatively associated with the conflict-centred attitude ( $r=-0.248$ ,  $p=0.003$ ), while mixed gender role attitudes were positively correlated with the reconciling attitude ( $r=0.204$ ,  $p=0.016$ ).

As expected, correlation analysis revealed a positive relationship between the principal component of career priority (see Table 3 above) and the career-oriented attitude ( $r=0.224$ ,  $p=0.008$ ), and a negative relationship between degree priority and the conflict-centred attitude ( $r=-0.24$ ,  $p=0.004$ ). Furthermore, analysis of variance showed that students displaying the reconciling attitude perceived the financial aspect of a career as more important ( $p=0.039$ ). For the reconciling and conflict-centred attitudes, the importance of self-actualisation was below average in terms of the understanding of careers ( $p=0.031$ ,  $p=0.019$ ).

## 5 Summary

In our research, we related social science students' career plans to their gender role attitudes through a pilot survey (N=141). Our research questions asked about students' understanding of

<sup>9</sup> The total variance explained by principal components is 61.55%. item communality is above 0.4, principal component analysis with varimax rotation, 4 iterations.

careers, their current priorities, the timing of career and family, the importance of career and family for them, and their perception of any conflict between the two. Gender role attitudes were measured on a seven-point scale (ranging from traditional to modern) and through three principal components (traditional, modern, and mixed attitudes). Additional background variables included students' gender, age, marital status, and social background. In terms of background variables, our results showed that women and young unmarried students adopted more modern roles (in accordance with Pongráczné and S. Molnár 2011, Fényes, Pusztai and Engler 2020), and interestingly, students from a favourable social background adopted more traditional roles. Those with non-graduate parents but from a favourable financial background were more likely to identify with the idea of the modern working woman.

Our first research question asked about students' understanding of careers. Most students associated career with financial security and livelihood, almost as many with professional development and career, and a similar proportion with self-actualisation, in line with Karcsics (2008). This is in accordance with modern career concepts presented in the theoretical section (Hall 1996, Sullivan and Mainiero 2007), with career development and the so-called protean self-directed career at the centre. Traditional vertical promotion and greater social prestige were not considered as important by students in their understanding of careers. The emphasis on material aspects was associated with the acceptance of mixed (traditional and modern) female roles, according to which women have to work out of necessity to support their family, while family responsibilities are also a form of self-actualisation.

Our following research questions concerned students' current priorities and the timing of career and family formation. Consistent with the protean self-directed career concept (Hall 1996) and the Kaleidoscope Career Model (Sullivan and Mainiero 2007), principal component analysis showed that the current priority of building a career and professional relationships was associated with students' desire to meet their own expectations. We also found that prioritising the degree and conforming to parental expectations were associated with the adoption of more modern gender roles, while prioritising career building was associated with the adoption of the idea of the modern working woman.

Regarding the timing of career and family, students tend to focus on their career first and plan to start a family afterwards, as described in the theoretical section (Mohácsi and Juhász 2014). In line with the Kaleidoscope Career Model (Sullivan and Mainiero 2007), it is also true that students align their career with their life stages, including their plans to start a family. It was observed, however, that students who adopt traditional gender roles tend to start their families earlier, while students who identify with the image of the modern working woman tend to start their careers earlier.

Our third research question concerned the importance of family and career and any conflicts between the two. In accordance with the literature (Mohácsi and Juhász 2014, Feith et al. 2006), we observed that students tended to be relatively family-oriented, despite the fact that they planned to start a family later than their career. Principal component analysis revealed four attitudes, namely family-oriented, career-oriented, reconciling, and conflict-centred attitudes. According to the latter, family and career cannot be reconciled and the family's psychological well-being can only be ensured by career sacrifices. Our results showed that the reconciling attitude was more prevalent among those from a favourable social background and students who accepted mixed gender roles. In contrast, acceptance of traditional gender roles was associated with the conflict-centred attitude. In terms of students' current priorities, as expected, prioritising career development was associated with the career-oriented attitude, while prioritising the degree was negatively associated with the conflict-centred attitude. We also found that for the reconciling attitude, the financial aspect of the career was emphasised, and for both the conflict-centred and reconciling attitudes, career as self-fulfilment did not appear to be an important aspect.

The main conclusion of the research is that, while students' career plans are influenced by their plans to start a family, their gender role attitudes have a demonstrable impact on the understanding and timing of their careers as well as on their current and future priorities. Three types of attitudes emerged among students: traditional, modern, and mixed gender role attitudes. Students identifying with traditional roles planned to start a family earlier and felt a stronger conflict between family and career. In contrast, identifying with the idea of the modern working woman was

associated with a current career-building priority, with a significant delay in starting a family. Finally, for the mixed gender role attitude, according to which women work out of necessity, the material aspect of the career was the primary consideration and the attitude of reconciling family and career was prevalent. Overall, in line with the protean concept of career and the prediction of the Kaleidoscope Career Model, organisations should take into account and adapt to students' own career and family plans and gender role attitudes.

## 6 Limitations and directions for further research

A main limitation is that our study is regional (it included students from a research university in Hungary outside the capital) and only considered social science students, so the sample is not suitable for a national generalisation covering all fields of training. However, as three quarters of the social science students of the examined university were surveyed, this population is relatively well represented in our research.

When considering the generalisability of our results, potential sources of bias must be taken into account. For example, wage prospects in the social sector are relatively limited; consequently, in the career interpretations of students enrolled in this field of study, financial considerations may be less salient than factors such as professional commitment and opportunities for personal and professional development. A similar consideration applies to the regional characteristics of the sample, as wage levels in Eastern Hungary are lower than those in the capital city and in the western regions of the country.

Another source of bias stems from the feminisation of the social sector, which is reflected in the overrepresentation of women in the examined sample. As discussed in the literature review, women tend to adopt more modern gender roles than men and identify more readily with the role of the modern working woman. This factor further limits the generalisability of our findings.

Another limitation of the research is that we only conducted bivariate analyses (analysis of variance, correlation analysis, and cross-tabulation) as well as cluster analysis and principal component analysis, so we could not investigate the isolated effect of background variables. This could be done through multivariate regression models, but that is beyond the scope of this study and it may not be appropriate to test a multivariate model based on a pilot survey.

We plan to continue the pilot study among new students, which will allow for comparisons over time, as gender roles and students' career and family plans are changing. In addition, to gain a deeper understanding of the relationships, we plan to conduct qualitative research on the examined issues.

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