# INFLUENCE OF PARENTS' EDUCATION AND PROFESSION ON SELF-ASSESSMENT OF SECONDARY SCHOOL STUDENTS' PREREQUISITES FOR STUDYING

## Dana Vicherková, Josef Malach, & Martin Kolář

University of Ostrava; Faculty of Education, Department of Pedagogy and Andragogy (Czech Republic)

## Abstract

The study is based on the concept of prerequisites for the study, which can be identified and assessed by established assessment tools or subjectively perceived and experienced at the entrance to education and throughout it. The subjective self-assessment of assumptions can be a source of self-confidence, self-efficacy, and proper study motivation, but on the other hand, the cause of study failure and drop-out. The empirical research aimed to determine whether parents' level of education and their profession influences the subjective evaluation of students' prerequisites for secondary school studies. Hypotheses assuming the statistical significance of the relationship between parents' level of education, profession, and subjectively determined level of prerequisites for the study were verified using the data acquired from the answers of 900 respondents who participated in the research. The influences of several moderating variables, i.e., gender, students' age, a field of study, and parent's gender, are also monitored in a more detailed analysis. Research findings can provide a basis for targeted planning and student-friendly strategies to prevent academic failure.

Keywords: Education, profession of parents, student, self-assessment, prerequisites for the study.

#### 1. Introduction

Students' transition from primary to secondary education is a crucial stage in life in terms of later future career, and professional growth. The professional community seeks answers to questions such as "What factors influence a student's choice of a particular secondary school?" or "What is the role of the family in the selection of vocational education?" The results of the society-wide discussion point to the fact that the student's decision for the future profession after completing primary education is an important factor influencing their further satisfaction in the personal and professional field.

#### 2. Career and career decision-making for secondary school studies

Super (1980, p. 282) defined the term career as "a combination and sequence of roles played by an individual throughout their life." Pedagogical Dictionary defines education path as "the path of an individual through different levels and types of schools throughout their life" (Průcha, Walterová, Mareš, 2009, p. 363). Zehringerová (2017, p. 3) states that the period of an individual's transition from ending childhood to late adolescence is a time when "pupils are forced to gradually adopt the norms and responsibilities of the adult world during adolescence." Vágnerová (2012, p. 367) regards 15-year-olds as individuals in a "period of search and reassessment when the individual has to cope with change, achieve an acceptable social status and develop a subjectively satisfying, more mature form of self-identity." Educational systems usually create organisational and personnel conditions for career counselling. According to Gatsby Foundation (quoted by Brabec, Kreislová, Zábranová, undated), it aims to show all young people (regardless of their social and family background) that there are many opportunities, helps to make the right decisions and build a path to a satisfying professional life.

# 3. Factors influencing the choice of secondary school

Factors influencing the student's choice of a technically oriented secondary school field and the choice of their future profession include genetic preconditions (e.g. inherited traits in connection with the specifics of the individual's brain) as well as the family, school, extracurricular environment and their diverse cultures.

The supporting family is a factor helping to shape the growth of self-confidence, responsibility, independence, healthy motivation and development of potential abilities, skills, competencies of the adolescent, influences their fundamental, lifelong values. Rabusicova et al. (2003), in an effort to identify the roles and types of parents in relation to school, found that cooperating parents (social partners) who are interested in children and school but do not have excessive demands on children are evaluated positively. On the contrary, parents without interest in children and their activities at school but overly interested in school issues are evaluated negatively as not cooperating and inadequately active. An interesting finding was that the factor of "parents as social partners" is very clearly defined, but in reality, it includes only a tiny percentage of parents. Pulišová (2016) found that dissatisfied parents who only "silently" complain to other parents and acquaintances and demonstrate dissatisfaction with the school only by their behaviour are perceived as problematic. Vincent and Martin (2000) pointed out a particular influence of parents (as individuals) in connection with parents' relations with schools and the so-called role of parents' discussion forums. However, the orientation of adolescents towards future occupations is also influenced by the environment and the people an individual spends free time with. The institutional level of adolescent socialisation is represented by targeted activities or unintended influences of specific organisations, i.e., school institutions, through which the individual opens their way to the profession. Several other factors can complicate or positively support the processes of technically oriented professional socialisation in adolescents. New trends and requirements for education in connection with the training of individuals for employment during the 4<sup>th</sup> Industrial Revolution (characterised by robotisation, automation and digitisation) also play a role in the selection of technical education. Roe and Lunneborg (1990) pointed out the relationship between a specific area of interest and work activities leading to a professional decision.

# 4. Research on career maturity before starting career education

Career maturity can be viewed from many aspects. Super (1955) defined career maturity as the maturity of an individual in individual developmental stages. Babarovič and Šverko (2016) confirmed that career maturity increases with increasing age. Katrňák (2006) monitored the factors influencing the creation of educational aspirations and found that students from nuclear families have higher educational ambitions on average. Creed, Prideaux, Patton (2005) focused on longitudinal career aspects of the 8<sup>th</sup> and 10<sup>th</sup>-year students, and their findings note that "women were more and more undecided, although still undecided men were more satisfied and used maladaptive strategies more frequently than women (p. 397). Otto (2000) examined the attitudes and behaviours of 362 secondary school students toward their career development and parents' assistance in career decision making. He found that students turned to mothers for help. Knotková (2019) investigated the relationship between the father's care and its influence on the child's choice of occupation and the relationship between individuals (parents and non-parents) helping children with the occupational choice.

#### 5. Research methodology

The research was carried out within the TAČR project at the Faculty of Education of the University of Ostrava. The data were collected using an author's questionnaire, which contained 29 items (20 closed and nine open or semi-open). Five items and their results are presented in this paper. Data collection was carried out from September 2020 to February 2021 on a deliberately selected research sample of 907 respondents (students of 6 technical secondary schools) in the Moravian-Silesian Region of the Czech Republic. The majority in the research group consisted of boys (884, i.e., 97.46%), and only 21 (2.32%) respondents were girls. Three quarters (630, i.e., 69.40%) of respondents studied a four-year engineering field completed with a school-leaving examination, only a third of 266 (29.33%) respondents studied another field of study (non-engineering).

#### 6. Results

Question 7: "Do you think that you have the prerequisites for the selected (technical) profession?" More than half (545, 60.09%) of the respondents answered that they think they have the prerequisites for the selected (technical) profession, 358 (39.47%) respondents answered they do not think (or do not know) they have the prerequisites for the chosen (technical) profession and four respondents did not answer (0.44%).

Question 8: "Your mother's education level is: (primary, apprenticeship - no school-leaving examination, secondary with the school-leaving examination, higher vocational and university examination)." The answers: more than half of respondents (593, 65.38%) stated that their mother's education level is a secondary school with a school-leaving examination and higher, and a third of respondents (306, 33.74%) answered that their mother's highest educational attainment is primary or secondary without a school-leaving examination (apprenticeship).



Graph 1. Mother's education level.

Students' answers to item 10: "Your father's education level is: (primary, apprenticeship - no school-leaving examination, secondary with the school-leaving examination, higher vocational and university)" it was found that more than half of the respondents (471, 51.93%) have a father with a secondary school diploma or other higher education and 417 (45.98%) respondents have a father with a primary or secondary education without a school-leaving examination.



The research also focused on finding out the relationships between selected variables - subjectively

assessed preconditions for study, education of both parents, gender of students and field of study. Hypothesis H1 expressed the relationship between subjectively assessed preconditions for study

and mother's education as follows: "Students who think that they have preconditions for the selected profession more frequently have a mother with a high school diploma or higher than students who do not think so."

Table 1. Detected and expected frequencies to H1.

Pearson's chi-square = 2,946447	degree of freedom	= 1 significance p= (	significance p= 0,086067		
Question 7	Question 8 (secondary education with school- leaving exam or higher)	Question 8 (primary/apprenticeship)	Line totals		
yes	370 (358,11)	172 (183,89)	542		
no / I don't know	222 (233,89)	132 (120,11)	354		
Column totals	592	304	896		

As the calculated chi-square value is less than the test criterion value and the significance value is greater than the selected significance level of 0.05, no statistically significant relationship was confirmed between the examined variables. The formulated hypothesis was not confirmed. Thus, it cannot be concluded that the self-assessment of study prerequisites is related to the education of students' mothers.

Hypothesis H2 expressed the relationship between subjectively assessed preconditions for study and father's education as follows: "Students who think they have preconditions for the selected profession more frequently have fathers with a high school diploma or higher than students who do not think so."

Pearson's chi-square = 0,723316	degree of freedom	= 1 significance p	significance p= 0,395058	
Question 7	Question 10 (secondary education with school- leaving exam or higher)	Question 10 (primary/apprenticeship)	Line totals	
yes	289 (282,81)	243 (249,19)	532	
no / I don't know	182 (188,19)	172 (165,81)	354	
Column totals	471	415	886	

Table 2. Detected	and	expected.	frequ	encies	to	H2.
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Since the calculated chi-square value is less than the test criterion value and the significance value is greater than the chosen significance level of 0.05, no statistically significant relationship was confirmed between the examined variables. The formulated hypothesis was not confirmed. Thus, it cannot be assumed that the self-assessment of study prerequisites is related to the education of students' fathers.

In hypothesis H3, the relationship between subjectively assessed assumptions about the study and the student's gender was assumed. "Students-boys more frequently think that they have the prerequisites to study at a technical secondary school than students-girls."

Pearson's chi-square = 0,087602	degree of freedom $= 1$	significance p=0,767248	
Question 1	Question 7 (yes)	Question 7 (no / I don´t know)	Line totals
boy	531 (530,34)	349 (349,66)	880
girl	12 (12,66)	9 (8,34)	21
Column totals	543	358	901

Table 3. Detected and expected frequencies to H3.

Since the calculated chi-square value is less than the test criterion value and the significance value is greater than the chosen significance level of 0.05, no statistically significant relationship was found between the students' gender and the self-assessment of study prerequisites. The formulated hypothesis was not confirmed. Thus, self-evaluation of study prerequisites is not related to gender.

Hypothesis H4 assumed a connection between subjectively evaluated prerequisites for study and the field focus of secondary school studies: "Students of engineering specialisation more frequently think they have prerequisites for study than students of other specialisation". Since the calculated chi-square value was less than the test criterion and the significance value was greater than the chosen significance level of 0.05, no statistically significant relationship was demonstrated between self-assessment of study prerequisites and study focus. The formulated hypothesis was not confirmed. The self-evaluation of prerequisites for the study is thus not related to the field of study.

#### 7. Discussion and conclusions

The fundamental conclusions of the research survey are:

- 1. More than half of the respondents think they have the selected (technical) study prerequisites.
- 2. More than half of the respondents have a mother with a secondary school diploma or higher education.
- 3. More than half of the respondents have a father with a secondary school diploma or higher education.
- 4. None of the four research hypotheses has been validated, and thus:
  - a. It cannot be confirmed that the self-assessment of study prerequisites is related to the education of students' mothers.

- b. It cannot be assumed that the self-assessment of study prerequisites is related to the education of students' fathers.
- c. Self-evaluation of study prerequisites is not related to the student's gender.
- d. Self-evaluation of study prerequisites is not related to the field of study.

Zehringer's research findings (2017, p. 67) showed that the pupils' decisions about their secondary school were made mainly by themselves, without significantly adapting to their parents' wishes or the pressure of the environment. The children were most influenced by their parents, more by their mothers than by their fathers." 69). Furthermore, this research showed that "children from families with lower socioeconomic status, including lower levels of parental education, have lower ambitions for higher education" (p. 69).

# References

- Babarovič, T. & Šverko, I. (2016). Vocational Development in Adolescence: Career Construction, Career Decision-Making Difficulties and Career Adaptability of Croatian High School Students. *Primenjena Psihologija*, 9(4), 429-448. DOI: 10.19090/pp.2016.4.429-448.
- Brabec, J., Kreislová, B., Zábranová, L. (nedatováno). Jak efektivně zavést kariérové poradenství do škol. Výstup projektu Vzděláním k úspěchu bez bariér řešeného v letech 2017-2020. [Brabec, J., Kreislová, B., Zábranová, L. (undated). How to effectively implement career guidance in schools. Output of the project Education for Success without Barriers solved in the years 2017-2020.]
- Creed, P., Prideaux, L.-A., & Patton, W. (2005). Antecedents and consequences of career decisional states in adolescence. *Journal of Vocational Behavior*, 67(3), 397–412. DOI: 10.1016/j.jvb.2004.08.008
- Katrňák, T. (2006). Faktory podmiňující vzdělanostní aspirace žáků devátých tříd základních škol v České republice. In Matějů, P.; Straková, J. et al.: Nerovné šance na vzdělání: Vzdělanostní nerovnosti v České republice. Praha: Academia, 173-193. ISBN 80-200-1400-4. [Katrnak, T. (2006). Factors determining the educational aspirations of ninth-graders of primary schools in the Czech Republic. In Matějů, P.; Straková, J. et al.: Unequal Opportunities for Education: Educational Inequalities in the Czech Republic. Prague: Academia, 173-193. ISBN 80-200-1400-4.]
- Knotková, P. (2019). Vliv rodičů na výběr povolání dítěte. [Bakalářská práce]. Brno: Masarykova univerzita, Filozofická fakulta. Vedoucí práce: Millová, K. [Knotková, P. (2019). Influence of parents on the choice of child's profession. [Bachelor thesis]. Brno: Masaryk University, Faculty of Arts. Supervisor: Millová, K.]
- Otto, L.B. (2000). Youth Perspectives on Parental Career Influence. *Journal of Career Development*, 27(2), 111–118. DOI: 10.1177/089484530002700205.
- Průcha, J., Walterová, E. & Mareš, J. (2009). Pedagogický slovník. Praha: Portál. ISBM 978-80-7367-647-6. Průcha, J., Walterová, E. & Mareš, J. (2009). Pedagogical dictionary. Prague: Portal. ISBN 978-80-7367-647-6.
- Pulišová, K. (2016). Neklape nám to: učitelé a rodiče žáků prvního stupně základních škol a jejich problémové vztahy. *Studia Paedagogica*, 21(3), 167-182. DOI: 10.5817/SP2016.39. [Pulisova, K. (2016). It does not suit us: teachers and parents of primary school pupils and their problematic relationships. *Studia Paedagogica*, 21 (3), 167-182. DOI: 10.5817 / SP2016.39.]
- Rabušicová, M., Čiháček, V., Emmerová, K. & Šeďová, K. (2003). Role rodičů ve vztahu ke škole – empirická zjištění. *Pedagogika*, 53(3), 309-328. [Rabušicová, M., Čiháček, V., Emmerová, K. & Šeďová, K. (2003). The role of parents in relation to school - empirical findings. *Pedagogy*, 53 (3), 309-328.]
- Roe, A., & Lunneborg, P. W. (1990). Personality development and career choice. In D. Brown & L. Brooks, *Career choice and development: Applying contemporary theories to practice*, 68–101. Jossey-Bass.
- Super, D. E. (1955). Dimensions and measurement of vocational maturity. *Teachers College Record*, 57(3), 151-163. DOI: 10.1177/016146815505700306.
- Super, D. E. (1980). A life-span, life-space approach to career development. Journal of vocational behavior, 16(3), 282-298.
- Vágnerová, M. (2012). Vývojová psychologie: dětství a dospívání. Praha: Nakladatelství Karolinum. ISBN 978-80-246-2153-1. [Vágnerová, M. (2012). Developmental psychology: childhood and adolescence. Prague: Karolinum Publishing House. ISBN 978-80-246-2153-1.]
- Vincent, C. & Martin, J. (2000) School-based parents' groups a politics of voice and representation? Journal of Education Policy, 15(5), 459-480. DOI: 10.1080/026809300750001649
- Zehringerová, A. (2017). Faktory ovlivňující volbu další vzdělávací dráhy žáků deváté třídy ZŠ. [Diplomová práce]. Praha: Univerzita Karlova, Filozofická fakulta. Vedoucí práce: Komárková T. [Zehringer, A. (2017). Factors influencing the choice of further educational path of ninth grade elementary school students. [Thesis]. Prague: Charles University, Faculty of Arts. Supervisor: Komárková T.]