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Comparison of Self-Concept and Self-Perceived School Success of Children with Foster Home or Family Upbringing

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Abstract

This study is concerned with comparing the self-concept and self-perceived school success of children aged 10–15 years growing up in foster homes or in family environments. The research was carried out using the standardized Student's Perception of Ability Scale (SPAS) questionnaire (Matějček, Vágnerová, 1992), applied to a sample cohort of 178 selected respondents. The article reflects key aspects relating to this research.

Keywords: self-concept, school success, foster home, upbringing, standardized questionnaire, older school students, ANOVA

Introduction and theoretical background

It is important for every child from an early age to be appreciated for something and to have the feeling that they belong somewhere. How successful they are at school depends not only on their inherited abilities and skills, but also on the influences of the external environment. In our opinion the most important of these is probably upbringing, because it is precisely this which sets up children's basic patterns of behaviour and features of character, also affecting for example the area of their ambition or urge to become educated. Upbringing on the other hand can also develop various self-concepts in each individual, which are subsequently reflected in their success in school education. The school years make up a separate and significant chapter in a child's life, requiring special attention and especially so with regard to those growing up in foster home facilities. Another aspect of this issue is the fact that the later school period in particular is very

important for older students' attitude to school. This is namely the period in which adolescents develop their own identity, attempting to understand themselves, judging their own appearance more critically, reflecting on their own personality, strengthening an appropriate attitude to school and school obligations, and thinking towards the end of that period about their choice of a future profession. All of these aspects combine to form adolescents' overall self--concept and contribute to the development of their personality. In our opinion the issue of self-concept for children in the second stage of elementary education is a very important topic from the point of view of comparing the influences of family or foster home upbringing.

The general need for provision of institutional care is predominantly attributable to the loss or mental illness of parents, or their abandonment or abuse of their children (Berens, Nelson, 2015). On the other hand, a considerable proportion of foster home children have at least one parent still living. It is presumed moreover that poverty and its consequences primarily contribute much more significantly to the incidence of institutional care (Bunkers, Cox, Gesiriech, Olson, 2014). One of the aims of this kind of care should therefore be to apply a model of education approximating as closely as possible to the model of life within a family. It is then the task of foster home staff to create an environment ensuring personal safe-keeping for the children, based on mutual trust, cooperation and communication, protection and nurture of each child's personality and privacy, bringing them up to acknowledge and respect values as well as themselves. Around the world too there is increasing focus on children's experience of institutional care itself and its critical influence on their physical and mental health throughout their lives (Blaisdell, Imhof, Fisher, 2019; Boparai et al., 2018). The unfavourable impacts of children's negative experience are linked namely with increased incidence of diseases, from diabetes and obesity through heart problems to a range of mental health issues in adulthood (Berens, Nelson, 2015; Metzler, Merrick, Klevens, Ports, Ford, 2016). There exist many factors influencing children's experience itself, starting for instance with the socio-economic or political situation in the country, but a much more important factor, considered as key in certain aspects of influence, is the quality and integrity of the educational processes applied to children in institutional care (Berens, Nelson, 2015). We strongly support the claim that monitoring of the influences on children in that system needs to be done on the level of personal intervention, with individual objectives, and the quality of this approach depends on the quality of each teacher who applies it, choosing the methods for achieving those objectives, and setting up further categories and conditions for implementing those methods. One of the many dilemmas concerning the upbringing of children in substitute care facilities lies in the search for balance between two principal issues. The first of these is whether children in out-of-home care should receive

specially-targeted pedagogical and psychological attention, while the second consists on the other hand in whether the most important thing for these children is in fact to have a normal everyday life as much as possible like that of other children (Højlund, 2011). We are aware that this is an important issue from the point of view of our considerations as a whole. Upbringing in institutions is often seen as a more comprehensive process compared with educational activity because of the view that the upbringing of children in substitute care facilities should actively form the individual child's personality, and that may include socializing or re-socializing the child.

Placing a child in a substitute care facility incurs considerable impact which significantly influences his/her development and subsequent life. The point is that each individual's self-concept is fully constructed in the process of socialization, involving mutual interaction with the social environment (Helus, 2018). In this regard, however, that self-concept needs a firm and constant structure which is able to develop in accord with the changes in the person him/herself and the environment acting on him/her. Maintenance of a more-or-less stable self-concept is ensured by various defense mechanisms, which may be termed as mechanisms of accommodation. The perception and concept of oneself is determined to a marked extent by the relations the person has with other people, the type of social activities the individual focuses his/her attention on, but also the degree of anxiety s/he experiences in particular situations. Self-concept is thus an active, creative factor which predetermines personal behaviour. It may be claimed moreover that the way children perceive themselves and what they think about themselves is significantly influenced by the way they are taught and how they work in school. Children's school performance is affected therefore not only by their capabilities but also by how they themselves perceive those capabilities (Matějček, Vágnerová, 1992).

Research methodology and results

We carried out our research in the Czech Republic using a sample cohort of 178 children aged 10–15 years, growing up either in institutional care (in foster homes) or in their original family environment. The children in traditional families made up 95 of the respondents, consisting of 60 boys (63%) and 35 girls (37%). The foster-home group numbered 83 children, consisting of 41 boys (49%) and 42 girls (51%). The research was carried out using the standardized Student's Perceived Ability Scale (SPAS) questionnaire (Matějček, Vágnerová, 1992), which measures a child's self-concept as a school student.

The questionnaire itself consists of a total of 48 items divided into six areas for self-assessment. These areas cover: general capability (students assess their own intellectual capabilities and the characteristics they see as important for success in school), mathematics, reading, writing, spelling, self-confidence and

self-concept. With regard to general capability the children express their opinion as to how intelligent, clever or quick-witted they are, and some other characteristics. For mathematics, reading, writing and spelling they subjectively evaluate their abilities and success in these subjects. In the final scale the children assess their confidence in their own abilities and estimate their status with respect to their fellow-students. The SPAS questionnaire intentionally asks students about their own idea of their capability and their performance in the given subject areas, and of their social status in comparison with the other students. This research approach essentially contributes to understanding students' experience of one of the most significant areas of their socialization, i.e. school life.

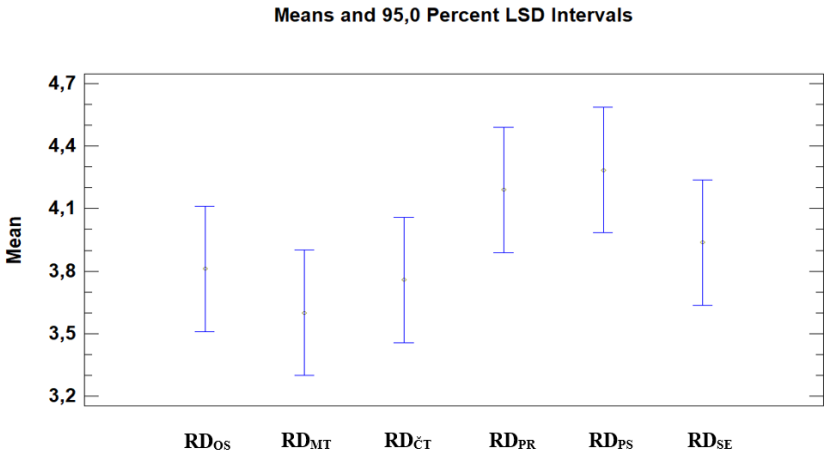
We chose as the principal indicator in our research approach the overall raw scores achieved by the respondents in our study in the particular SPAS scales. The absolute maximum score which can be achieved in the whole test is 48 points, with respondents gaining between 0 and 8 points in each of the subject--area scales. Arithmetic means were calculated on the basis of the latter scores, and are represented in the results as follows: RD = arithmetic mean of the raw score results for children living in a family environment; ÚV = arithmetic mean of the raw score results for children living in a foster home facility; OS = scale for general capability; MT = scale for mathematics; ČT = scale for reading; PR = scale for spelling; PS = scale for writing; SE = scale for self-confidence; SD = standard deviation; D_{RD} = children living in a family environment; $D_{ÚV}$ = children living in a foster home facility. Multiple comparisons of the data by means of ANOVA variance analysis were carried out using Statgraphics Centurion XVI.II software, taking the level of statistical significance at $\alpha = 0.05$.

The raw score results in the separate subject-areas analyzed for self--perceived school success among children living in a family environment revealed two basic values after ANOVA variance analysis: an F value of 1.48 and a P value of 0.1948, i.e. greater than our $\alpha = 0.05$. This means that the variances found between the compared data sets are very similar.

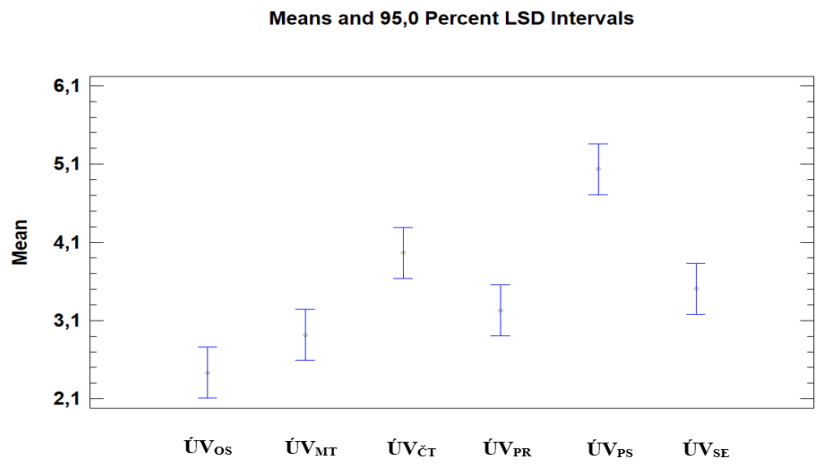
Graph 1 gives a demonstration of the overall situation, whereby $RD_{OS} = 3.811$ ($SD_{OS} = 1.593$), $RD_{MT} = 3.600$ ($SD_{MT} = 1.678$), $RD_{ČT} = 3.758$ ($SD_{ČT} = 2.225$), $RD_{PR} = 4.189$ ($SD_{PR} = 2.494$), $RD_{PS} = 4.284$ ($SD_{PS} = 2.142$), $RD_{SE} = 3.937$ ($SD_{SE} = 2.351$). No statistically significant differences were found between the studied groups in the results of our analysis.

Regarding the ANOVA test results, we were primarily interested in the value of the F-ratio and the corresponding P value, the level of statistical significance found. In the event that the P value was less than 0.05, we subjected the data to post-hoc analysis. In our statistical analysis we chose specific methods depending on the type and distribution of the data. The data sets were first subjected to the Shapiro-Wilk test for normality (Shapiro, Wilk, 1965). For comparisons within individual sub-tests we then applied the Mann-Whitney U-test,

which is intended for comparing two independent groups (Mann, Whitney, 1947). We subsequently established which groups had significant differences between them by means of post-hoc analysis based on the Dunn method (Dunn, 1964).



Graph 1. Interval graph of results based on overall raw scores in the separate subject-area scales analyzed for self-perceived school success among children living in a family environment: RD = arithmetic mean and standard deviation of the raw score results; OS = scale for general capability; MT = scale for mathematics; ČT = scale for reading; PR = scale for spelling; PS = scale for writing; SE = scale for self-confidence



Graph 2. Interval graph of results based on overall raw scores in the separate subject-area scales analyzed for self-perceived school success among children living in a foster-home facility: ÚV = arithmetic mean and standard deviation of the raw score results; OS = scale for general capability; MT = scale for mathematics; ČT = scale for reading; PR = scale for spelling; PS = scale for writing; SE = scale for self-confidence

We then went on to compare the raw score results in the separate subject--areas analyzed for self-perceived school success among children living in a foster-home facility. The results of ANOVA variance analysis again produced two basic values: an F value of 15.2 and a P value of 0.000, i.e. smaller than 0.05. This means that the variances found between the compared data sets are not at all similar.

Interval graph 2 demonstrates the overall situation, whereby $ÚV_{OS}$ = 2.434 (SD_{OS} = 1.555), $ÚV_{MT}$ = 2.916 (SD_{MT} = 1.639), $ÚV_{ČT}$ = 3.964 ($SD_{ČT}$ = 2.643), $ÚV_{PR}$ = 3.229 (SD_{PR} = 2.132), $ÚV_{PS}$ = 5.036 (SD_{PS} = 2.467), $ÚV_{SE}$ = 3.506 (SD_{SE} = 2.155). The values obtained from post-hoc analysis of all results connected with the overall raw scores in the separate subject-area scales analyzed for self-perceived school success among children living in a foster-home facility are presented in Table 1.

Table 1. Values obtained from post-hoc analysis of all results connected with the overall raw scores in the separate subject-area scales analyzed for self-perceived school success among children living in a foster-home facility (DÚV = children in foster homes; OS = scale for general capability; MT = scale for mathematics; ČT = scale for reading; PR = scale for spelling; PS = scale for writing; SE = scale for self-confidence)

----------	**DÚV OS**	**DÚV MT**	**DÚV ČT**	**DÚV PR**	**DÚV PS**	**DÚV SE**
DÚV OS	----------	P_t = 0,09	**P_t = 0,00**	**P_t = 0,01**	**P_t = 0,00**	**P_t = 0,01**
DÚV MT		----------	**P_t = 0,01**	P_t = 0,34	**P_t = 0,00**	P_t = 0,16
DÚV ČT			----------	P_t = 0,10	**P_t = 0,01**	P_t = 0,29
DÚV PR				----------	**P_t = 0,00**	P_t = 0,72
DÚV PS					----------	**P_t = 0,00**
DÚV SE						----------

The bold-highlighted figures in Table 1 indicate specifically which compared areas of self-perceived school success have statistically significant differences between them at the 5% level of significance. Comparison of the results for this group in the research cohort revealed statistically significant differences primarily in the writing scale, followed by the self-confidence and reading scales.

We hold the opinion that these findings are influenced precisely by the placing of children in institutional care, i.e. foster homes. Concerning intervention itself, any remedy for educational failure will naturally be based on evaluation of objective factors such as the level of a child's intellectual abilities and other measurable skills, but should moreover always take into account the child's attitudes to school and his/her self-concept in this regard. The remedy must seek to modify the child's attitudes, not his/her school performance.

The structure of a person's self-concept is composed of three mutually--dependent and overlapping elements, namely the cognitive, emotional and

conative elements. These three aspects ensure that the self-concept functions as an integrated system in the individual's personality. Of these three, the key aspect forming the most essential part of the whole system is the cognitive element, which itself has two components, i.e. content and structure. The content is made up of gradually accumulating information about the person him/herself, the source of which may be feedback coming from the external environment. By means of topics, models, prototypes and knowledge stored in the memory, individuals are better able to process information about themselves, and in this way the content component of the cognitive element assists them in orienting and visualizing themselves in their self-knowledge and self-understanding. The emotional element on the other hand is linked with and expressed through the concept of self-appraisal, which is an important mechanism in the emotional relation to one's own self. This part of the self-concept extends further to include personal notions about oneself as well. Depending on the functioning of the cognitive element, the emotional aspect develops in terms of the individual's view of his/her own qualities. Self-assessment is consequently a result of social comparison and self-judgement based on observation of one's own activity. The third part of the self-concept is the conative element, which is often also termed behavioural. This operates through various mechanisms to ensure the assertion of one's own self in personal actions and social behaviour. This is often identified with the concept of self-regulation, influencing individuals' experience, control and orientation of their behaviour. The linkage between these three principal dimensions of the self-concept produces a strong construct within which the different components influence, complement and support each other. Considered as a whole, this mutual interaction produces problem-free functioning of the self-concept as an internal system in the individual personality (Výrost, Slaměník, 2008).

Children's self-concept with regard to school is formed in the context of the social groups they find themselves in (Mertin, Krejčová, 2016). Significant roles in this respect are played not only by fellow-students, but also by teachers and parents in their (mutual) comparisons of results and success levels. Perception in the school environment therefore develops not only on an individual level, but is also the product of interaction with other people around the student. Institutional upbringing from an early age however exerts crucial influence on a child's overall development. The results of several studies (Pacnerová, Myšková, 2016) indicate that children in institutional care achieve lower scores in the area of cognitive progress and lag behind in their speech development compared with children growing up in a family environment. Moreover, children who transfer from institutional care to adoptive family upbringing improve in terms of intellectual characteristics. On the other hand, there is evidence that very young chil-

dren show improvement only after approximately four years of adoptive family upbringing. There appears to be a marked impact on the development of children in institutional care in the area of their socio-emotional progress, particularly as a result of insufficient experience of close relationships with ageing relatives. Equally, bonds with biological parents as well as with fellow inmates tend to become disrupted. In order for children to develop into mentally healthy individuals, they need to have relationships with adults, ideally from birth. Children in institutional care do not as a rule have the possibility of establishing such bonds. Problems in establishing attachment (an aspect of the relationship between children and their carers) may even persist after the transfer of children into adoptive family care, because in many cases they have experienced considerable emotional stress in the critical early phases of development of their personality. Their self-concept with regard to school can be characterized as a consequence of perception and observation of the self in comparison with their peers in the classroom experience. The development of their self-concept in school is therefore influenced by the comparison of their individual results with those of their fellow-students, and by the experiences (emotional states) which that comparison evokes (Mertin, Krejčová, 2016).

We hold the opinion that potential progress in this area is very closely linked with children's intensive individual social interaction with adult persons (care providers). For this reason, we emphasize the influence of the teachers in school and the pedagogical staff (supervisors) in institutional care facilities. It is necessary here to reiterate that the aim of providing institutional or protective upbringing is to furnish children with the kind of care otherwise given by parents or other persons officially entrusted with their upbringing. In this sense, foster home staff have the task of creating an environment which ensures children's personal safe-keeping, mutual trust and respect, cooperation and communication, protection of children's personality and privacy, support for their personal development and upbringing towards positive values, self-awareness and self--respect (Smolík, Svoboda, Zilcher, 2012).

The final area of interest in this study was the intercorrelation between the individual scales of self-perceived school success for all the respondents in our research cohort (Table 2).

It follows from the results presented in Table 2 that in terms of this comparison it is worth pointing out the high degree of correlation between the scales of general capability and self-confidence. It is evident that both scales essentially measure the children's general attitude towards school work and achievement, even though from a slightly different point of view. Nevertheless, the overall correlation in the area of self-confidence is clearly visible in all of the scales focused on in the SPAS questionnaire.

Table 2. Intercorrelation between individual SPAS scales/descriptions according to all respondents in the research cohort

scale	general capability	mathematics	reading	spelling	writing	self--confidence
general capability	----------	0,273	0,265	0,254	0,398	0,543
mathematics		----------	0,097	0,022	0,313	0,344
reading			--------	0,467	0,196	0,595
spelling				----------	0,366	0,665
writing					---------	0,465
self--confidence						----------

Conclusion

This study involves comparisons of levels of self-perceived school success among children aged 10 to 15 years living either in institutional care facilities (foster homes) or in an original family home environment. The research was carried out using the standardized Student's Perceived Ability Scale (SPAS) questionnaire (Matějček, Vágnerová, 1992) with a sample cohort of 178 selected respondents. The article presents the key aspects associated with this research.

Perception is generally a component part of the human personality, and it is made up of a complex of emotions, opinions, attitudes, notions, thoughts, conversations and behaviours which an individual consciously relates to his/her own self. It is necessary to emphasize the fact that the process of forming one's self--concept as a whole is considerably influenced by socialization and social interaction, without which the process would not be complete. Disruption of the standard process of an individual's integration can lead to overall diminution of his/her self-respect and self-confidence, with possible further complications in the process of positive perception of the world and a person's perception of him/herself in it.

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