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Paulina MICHALSKA *

How do adults think about problems related to children’s readiness for starting school?

Jak ludzie dorośli myślą o problemach związanych z gotowością szkolną dzieci?

Abstract

Introduction. In adulthood, post-formal ways of reasoning become more important, because the formal-logical ones do not provide adaptation in solving life-related problems (Gurba, 1993). These problems are mainly related to the functioning of family life and relate to experiencing developmental crises related to changes taking place in the family. One of such important moments in the life of a family is the time when a child starts school education (Chojak, 2019) because the current rhythm of the day is modified (Czub, Matejczuk, 2014) and the entire family system changes (Skrzetuska, 2016).

Aim. The main aim of the research was to determine the post-formal ways of reasoning used by adults when solving problems related to children’s preparedness for school.

Materials and methods. The study used 8 out of 18 problems from the Questionnaire of Ways of Solving Life Problems (authors: Paulina Michalska, Anna Szymanik-Kostrzewska), which concern the situation of parents of children starting school.

Results. The respondents preferred solutions to problems from the meta-system level to the greatest extent. Variables such as age, education and having children were significant for the obtained results. The importance of the content of the dilemmas for the preferred solutions was confirmed.

* e-mail: pmichalska@ukw.edu.pl

Kazimierz Wielki University in Bydgoszcz, Faculty of Psychology, Staffa 1, 85-867 Bydgoszcz, Poland

Uniwersytet Kazimierza Wielkiego w Bydgoszczy, Wydział Psychologii, Staffa 1, 85-867 Bydgoszcz, Polska

ORCID: 0000-0003-2703-158X

Conclusion. The most interesting conclusion from the research is that people with children preferred meta-system solutions less often than people without children. This is not consistent with the assumption that life experience in a given area contributes to more autonomous solutions (e.g., Sebby, Papini, 1994; Michalska, 2015a). This may be because parents, in the situation of solving a dilemma, are more focused on specific solutions to the problem, and more general methods with a wide range are less often taken into account by them.

Keywords: children's school readiness, post-formal reasoning, dilemmas, problem-solving, life-experience.

Abstrakt

Wprowadzenie. W okresie dorosłości znaczenia nabierają postformalne sposoby rozumowania, ponieważ te formalno-logiczne nie pomagają rozwiązaniu problemów o treści życiowej (Gurba, 1993). Problemy te są powiązane głównie z funkcjonowaniem życia rodzinnego i dotyczą doświadczania kryzysów rozwojowych związanych ze zmianami zachodzącymi w rodzinie. Jednym z takich ważnych dla życia rodziny momentów jest czas, kiedy dziecko zaczyna edukację szkolną (Chojak, 2019), ponieważ modyfikacji ulega dotychczasowy rytm dnia (Czub, Matejczuk, 2014) i zmienia się cały system rodzinny (Skrzetuska, 2016).

Cel. Głównym celem badań było określenie postformalnych sposobów rozumowania, wykorzystywanych przez osoby dorosłe podczas rozwiązywania problemów związanych z gotowością szkolną dzieci.

Materiały i metody. W badaniu wykorzystano 8 z 18 problemów pochodzących z Kwestionariusza Sposobów Rozwiązywania Problemów Życiowych (autorzy: Paulina Michalska, Anna Szymanik-Kostrzewska), które dotyczą sytuacji rodziców dzieci rozpoczynających naukę szkolną.

Wyniki. Osoby badane preferowały w największym stopniu rozwiązania problemów z poziomu metasytemowego. Dla uzyskanych rezultatów znaczenie miały takie zmienne, jak: wiek, wykształcenie i posiadanie dzieci. Potwierdzono znaczenie treści dylematów dla preferowanych rozwiązań.

Wnioski. Najciekawszym wnioskiem płynącym z badań jest to, że osoby posiadające dzieci preferowały rozwiązania metasytemowe rzadziej niż osoby nieposiadające dzieci. Nie jest to zgodne z założeniem, że doświadczenie życiowe w danym obszarze przyczynia się do bardziej autonomicznych rozwiązań (m.in. Sebby, Papini, 1994; Michalska, 2015a). Może to wynikać z tego, że rodzice w sytuacji dylematu są nastawieni na konkretne rozwiązania problemu, a sposoby bardziej ogólne, o szerokim zasięgu są przez nich rzadziej brane pod uwagę.

Słowa kluczowe: gotowość szkolna dzieci, rozumowanie postformalne, dylematy, rozwiązywanie problemów, doświadczenie życiowe.

Introduction

The main aim of the article is to indicate what postformal reasoning approaches adults use to solve problems concerning different aspects of children's school readiness. The paper presented uses one of the selected concepts of post-formal reasoning by Gisela Labouvie-Vief (1980, 1982, and 2006). The researcher distinguishes four levels of reasoning, with the first two – pre-systemic and intrasystemic – classified as formal-logical thinking, i.e., thinking that is carried out based on premises that allow a variety of conclusions to be drawn. The next two levels constitute what the author calls precisely post-formal modes of reasoning and she includes the intersystemic and metasystemic levels. The former includes relativistic schemas that make it possible to think according to the situational context. It allows the maintenance of different life models and conceptions of the surrounding world or value systems, and can therefore be seen as a condition for reaching mental maturity in adulthood. The metasystemic level, meanwhile, implies the combination of diverse knowledge, making it possible to think taking into account different constraints and to create dialectical structures containing variability and contradictions. The autonomous structure of the self becomes a metasystem that integrates thinking, emotions and actions, and activity becomes subordinated to the individual's goals and values.

To justify the research topic, it is worth emphasising that it is in adulthood that post-formal ways of reasoning become more important, as formal-logical ones do not ensure adaptation in solving problems with life content (Gurba, 1993). Logical thinking only works well in solving formal, mathematical, logical, and academic tasks. Life problems are relatively more common in adulthood than those of a formalised nature, as everyday issues are related to the family or work sphere. Concerning so-called "life problems", a significant proportion of them are related to the functioning of family life and concern the experience of developmental crises related to changes in the family. One such important moment in family life is the time when the child starts school (Chojak, 2019). It might seem that the transition of a child from pre-school to school does not raise major difficulties and does not affect the family system. Increasingly, however, this issue is the subject of research and scientific reflection, which indicates that it is a significant moment not only for the child but also for the entire family system (Skrzetuska, 2016).

Researchers working on this issue indicate that the family is one of the main elements of the child-school readiness system (Brzezińska, Czub, 2015). The family shapes the child's attitudes towards education and training and ensures that the child masters the competencies responsible for independent and responsible social functioning outside the family. This function will be realised at different levels due to social and economic resources. However, regardless of these fac-

tors, the family is important in how the child manages the moments of transition between educational levels (Rumberger, 1995). Susan M. Sheridan, Christine Marvin, Lisa Knoche, and Carolyn P. Edwards (2008), for example, point out that such activities of the family as being sensitive to the child's needs, supporting the development of the child's independence and autonomy, and being active and participating in the learning process are most relevant to the achievement of the child's school readiness.

The beginning of school is important for family life, because with this event the rhythm of the whole family's day changes, and initially school duties often involve not only the child but also the parents or older siblings (Czub, Matejczuk, 2014). The course of the year or the leisure schedule is regulated by the child's school rhythm. It is not only the timing of the child's school attendance itself that proves to be important but also the events surrounding the acceleration or postponement of the child's school attendance. Some parents confront the dilemma of whether to take advantage of such an opportunity after receiving an opinion on the possibility of accelerating schooling. Others, in contrast, are faced with the decision of whether to postpone their child's start of school if there are serious health problems, chronic illnesses or psychological problems that prevent an effective school start. Each of these situations requires the adult to weigh up the arguments for and against, consider multiple cognitive perspectives and attempt to resolve the issue. The research presented in this paper focuses precisely on adults' preferred ways of dealing with school readiness issues, in an attempt to identify which approaches accompany adults facing a solution to a school readiness dilemma.

Researchers in this field note that most children starting school are characterised by a relatively even and harmonious development of all spheres of functioning (Krzywoń, 2008). This does not mean that every child will present an identical level of skills useful at primary school, but the majority of children diagnosed are ready to start school due to their performance in school readiness measurement. However, based on the available knowledge of child development during childhood, we can assume that in some children developmental disharmonies may persist until the beginning of late childhood (Brzezińska, Appelt, & Ziółkowska, 2016). This may result in some children achieving readiness earlier than their metric age indicates and in other cases later. It is therefore important to remember that the decision to accelerate or postpone schooling is crucial to the success of a child's educational career both at the start and at later stages (Brzezińska, Appelt, & Ziółkowska, 2008). Parents are involved in this decision, who, as research indicates, place particular emphasis on the child's emotional readiness to take on the role of a student (Michalska, Szymanik-Kostrzewska, 2023).

Also of significance are parents' own experiences of schooling and selected demographic variables, e.g., place of residence (Skrzetuska, 2016). Research indicates that parents of children living in rural areas are more likely to decide to accelerate their child's schooling due to, among other things, difficulties in accessing pre-school care, but at the same time are characterised by lower involvement in their child's educational process. Stanisława Nazaruk and Joanna Marchel (2019), on the other hand, emphasise that parents are active participants in the process of diagnosing their child's school readiness and cooperate closely with kindergarten teachers in this regard. In their research, they noted that parents overwhelmingly consult with teachers about their children's progress in their preparation for school. While, on the one hand, they positively evaluate the work of the teachers in this regard, on the other hand, they make increasingly high demands, especially about the reinforcement of specific skills (mainly reading and writing). The results of these surveys clearly show that parents are involved in their child's transition from kindergarten to school and are aware of the demands that this new developmental stage in the life of the child and the family entails.

It is also worth noting that research reports indicate the existence of a variety of family determinants correlated with the achievement or lack of school readiness. For example, Marzena Adamowicz (2021) includes among them the number of children in the family, indicating that children who have siblings of the same sex, between whom there is little age difference, and who are siblings of highly gifted children or children with serious health problems may be at risk of lack of school readiness. Another factor, conversely, is parental education positively correlating with school readiness attainment. According to the researcher, this is a more significant factor than material conditions, which is why some of the demographic variables were included in the study.

Not only research reports but also the observations of practitioners emphasise that parents are actively involved in their child's transition from the pre-school to the school environment. Magdalena Christ (2014), for example, draws attention to a significant increase in psychological and pedagogical diagnoses dating from the second half of the 2013/2014 school year. At that time, parents concerned about the requirement to accelerate the education of Polish children by one year wanted their children to be examined for school readiness. The largest group were parents of children born in the first half of 2008. As described by the researcher, in many cases, the fears of such parents turned out to be justified and the diagnosis indicated that six-year-old children were not ready for school.

Another example of parental involvement in this issue is the situation described by one parenting portal:

All the time, the number of deferrals that parents of six-year-olds deliver to schools is growing. According to a survey conducted in the largest cities for *Dziennik Gazeta Prawna*: in Krakow, 30 percent of six-year-olds have already delivered a deferral from compulsory education to school, in Opole – 20 percent, in Wrocław – 15 percent, in Warsaw and Łódź – 10 percent. One thing is certain: the number of children deemed not ready for school is very high and definitely higher than last year. The psychological and pedagogical counselling centres have their hands completely full and are constantly issuing certificates so that children can stay in kindergarten or school pre-school (Malinowska, 2015).

This example illustrates that parents, motivated by several concerns, including the inadequacy of the facilities to accommodate the increased number of children and the insufficient school maturity of their children, have attempted to postpone their children's schooling.

In summary, it can be concluded from the above review that a child's start to school is a significant moment in the life of a family and that adults – especially those with children of their own – sometimes are confronted with a dilemma related to this event.

Aim of the research

The main aim of the research was to identify the post-formal reasoning approaches used by adults in dealing with children's school readiness. Based on the research and literature review, the following research questions were formulated:

Problem 1: What level of post-formal reasoning do respondents experience when dealing with children's school readiness?

Based on previous studies that used an analogous procedure to select the degree of support for each solution (e.g., Michalska et al., 2016), it was hypothesised that: H1: Respondents will most prefer solutions at the metacognitive level of thinking.

Problem 2: Do demographic variables relate to the level of post-formal reasoning used by respondents in dealing with children's school readiness?

Taking into account previous reports on the significance of respondents' age on levels of thinking (Michalska et al., 2016; Szymanik-Kostrzewska, Michalska, 2021), it was hypothesised that H2a: Age group membership will differentiate the respondents' thinking.

Given the results on the importance of thinking categories for the subjects (Sebby, Papini, 1994; Michalska et al., 2016), the hypothesis did not specify the direction of age-related differences. As the respondents' life experiences may influence their thinking (Sebby, Papini, 1994; Michalska, 2015a.), it was hypothesised that H2b: Individuals with and without children would differ in the degree of preference for solutions.

Problem 3. Does the problem category relate to the level of post-formal reasoning presented by respondents solving problems related to children's school readiness?

Previous research findings (Michalska, 2015b) have shown that the content of the dilemma matters for how it is solved, hence the implication of assumption H3: Problem category will differentiate the degree of preference for particular solutions.

Materials and methods

The study used 8 of the 18 dilemmas derived from *Kwestionariusz Sposobów Rozwiązywania Problemów Życiowych* [the Ways of Solving Life Problems Questionnaire] (by Paulina Michalska and Anna Szymanik-Kostrzewska). The full questionnaire includes a total of 18 dilemmas, 8 of which concern the situation of parents of children starting school. Among them, the following categories of problems were distinguished:

- 1) sending a child to school earlier than the age of seven,
- 2) postponing schooling for a seven-year-old child,
- 3) natural concerns about starting a child's schooling on time (e.g., will the child adapt to school, how will he/she cope with the new demands).

The respondent's task was to evaluate four solutions to each dilemma. Two solutions were assigned to the intersystem level and two to the metasystem level, which were presented in a random order that was the same for each respondent. The respondent gave answers on a scale of 0–4, where 0 meant “completely disagree” and 4 meant “completely agree”. Respondents were also allowed to mark answers with an “x” if they were completely unable to determine to what extent they agreed with a particular answer. In addition, respondents indicated whether they had faced the same or a similar dilemma in their lives and, if so, to what extent they were satisfied with the way the dilemma was resolved.

The theoretical accuracy of the questionnaire was assessed through the opinions of expert judges. Each dilemma and each answer was evaluated by 15 female students attending a seminar on readiness. Each of them had been previously trained in G. Labouvie-Vief's concept of post-formal reasoning, described in the introduction to this paper. In the end, complete concordance of the judges' assessments was obtained after making the corrections recommended by them (Kendall's $W = 1$). Those dilemmas and answers were included in the questionnaire which, after corrections, obtained the full agreement of the judges in terms of their ability to test post-formal reasoning and (in the case of answers) the unity of the content with a given stage of reasoning (intersystemic or metasystemic). The following measurement reliability indices were obtained for solutions at the metasystemic level of thinking: $rtt = 0.77$ (first and second half of the dilemmas), $rtt = 0.81$ (every second response), $\alpha = 0.79$ (given the assumption that solutions at the metasystemic level can be general enough to fit many similar situations, it can be assumed that these responses are relatively similar to each other and can form a consistent scale). Measurement reliability indices of less than 0.7 were obtained for the intersystem level solutions, due to the very high content diversity of responses, characteristic of intersystem level thinking. The highest indices were $rtt = 0.67$ (first and second half of the dilemmas), and $rtt = 0.68$ (every second dilemma).

A metric was used to collect sociometric data – respondents declared their age, gender, education level, being in a relationship, number of children, and financial situation.

Research procedure

The study was conducted from January to September 2022, observing all ethical standards used in psychological research. The research team consisted of third-year psychology students at Kazimierz Wielki University taking part in a monograph-empirical seminar on manifestations of psychological readiness and willing students of the Faculty of Pedagogy at UKW. Members of the research team recruited respondents using the door-to-door method (over 95% of respondents) and the snowball method (up to 5% of respondents). The condition for inclusion in the study was to be over 18 years of age. Respondents were sought who were in the three periods of adulthood, i.e., early, middle, and late adulthood, primarily those with children. Participation in the study was voluntary (one could withdraw until the completed questionnaire was completed/returned) and anonymous. The surveys were paper-and-pencil and online, with a link to the form being held by members of the research team; it was not made available for general use through

any media, it was only sent to those who declared their willingness to participate in the research.

The studies were part of a research project entitled: “Postformal ways of solving life problems in adulthood”, which received a positive opinion from the Research Ethics Committee of the Faculty of Psychology of UKW (opinion no. 1/19.01.2022 of 29.03.2022)¹.

Research sample

A total of 607 adults aged between 18 and 82 years (M = 41; SD = 17) participated in the study, including 178 participants aged up to 39 years (110 women and 68 men), 319 participants aged 40–59 years (194 women and 125 men) and 110 participants aged 60 years and over (80 women and 30 men). To organise the data, the detailed characteristics of the sample of respondents are shown in Table 1.

Table 1
Characteristics of respondents by age group

Age groups of respondents	Education			
	primary	vocational	secondary	higher
Early adulthood (18–39 years)	2	26	70	80
Middle adulthood (40–59 years)	6	26	168	119
Late adulthood (60–... years)	17	40	35	18
	Place of residence			
	Village	Small town (<100,000 residents)	Large city (>100,000 residents)	
Early adulthood (18–39 years)	61	60	57	
Middle adulthood (40–59 years)	81	106	132	
Late adulthood (60–... years)	51	37	22	

¹ Special thanks go to Dr Anna Szymanik-Kostrzewska, who was the co-ordinator of this project, co-author of the presented survey method and carried out the statistical analysis of the obtained results. I would also like to thank all the students involved in recruiting the subjects and helping to conduct the study.

Early adulthood (18–39 years) Middle adulthood (40–59 years)	Marital status		
	Formal relationship	Informal relationship	There is no relationship
Late adulthood (60–... years)	131	28	19
Early adulthood (18–39 years)	126	128	65
Middle adulthood (40–59 years)	73	4	33
	Material situation		
	Worse than average	Average	Better than average
Early adulthood (18–39 years)	3	134	41
Middle adulthood (40–59 years)	5	247	67
Late adulthood (60–... years)	12	88	10
	Having children		
	No children	Having children	
Early adulthood (18–39 years)	2	171	
Middle adulthood (40–59 years)	28	170	
Late adulthood (60–... years)	2	103	

Source: Author's own study.

Research results

The *Statistica* ver 13 packages from *StatSoft* and the open-access effect size calculator were used for the analysis (Effect Size Calculator, February 14, 2023).

To answer the first of the research questions, an analysis of the mean scores for the intersystem and metasystem level solutions was performed. To make comparisons, Student's t-test was used for the dependent variables and Cohen's *d* to determine the magnitude of differences. Metasystem solutions were preferred to a moderately greater extent than intersystem solutions (see Table 2), allowing H1 to be accepted.

Table 2
Comparison of the degree of preference for solutions from each level of reasoning

Level of reasoning	<i>M</i>	<i>SD</i>	<i>SKE</i>	<i>Kurt</i>	<i>t</i>	<i>p</i>	<i>d</i>
Metasystem	2.45	0.45	-0.9	2.3	20.28	<0.001	0.58
Intersystem	2.03	0.36	-0.3	1.16			

Source: Author's own study.

To answer the second research question, the significance of sociometric variables was analysed. Gender did not differentiate the degree to which respondents preferred intersystemic or metasystemic solutions. The age of the respondents proved to be significant. Analysis with the non-parametric Kruskal-Wallis ANOVA rank-sum test (applied due to unequal groups of respondents) showed differences in the level of intersystemic ($H = 12.88$; $p = 0.002$) and metasystemic ($H = 9.17$; $p = 0.008$) – in the former case, the oldest adults preferred intersystemic reasoning to a greater extent than the youngest and middle-aged adults, while in the latter case, middle-aged adults preferred metasystemic reasoning to a greater extent than the youngest adults (see Table 3). The results of the study allow us to adopt H2a in terms of:

- reasoning at the intersystem level of late, early, and middle adulthood individuals;
- reasoning at the metasystem level when comparing individuals from early and middle adulthood.

H2a was rejected, because of the lack of statistically significant differences in intergroup comparisons, for:

- intersystem-level reasoning for individuals in early and middle adulthood,
- reasoning at the metasystem level for people in late adulthood and people in early and middle adulthood.

Table 3
Significance of age of respondents

Intersystem level of reasoning	<i>M</i>		<i>SD</i>	<i>z</i>	<i>p</i>	<i>g</i>
Early adulthood (18–39 years)	1.99		0.36	3.46	0.002	0.39
Middle adulthood (40–59 years)	2.06		0.79	3.04	0.007	0.18
Late adulthood (60–... years)	2.2		0.75			
Metasystem level of reasoning	<i>M</i>		<i>SD</i>	<i>z</i>	<i>p</i>	<i>g</i>
Early adulthood (18–39 years)	2.36		0.5	3.08	0.006	0.25
Middle adulthood (40–59 years)	2.54		0.82			

Source: Author's own study.

Education was only significant for the preference of intersystem level solutions, and the only difference ($H = 9.91$; $p = 0.02$) was observed for vocational education ($M = 2.1$; $SD = 0.43$; $N = 92$) and higher education ($M = 2.04$; $SD = 0.54$; $N = 217$) – intersystem solutions were slightly more frequently preferred by those with vocational education than higher education ($z = 2.83$; $p = 0.03$; $g = 0.12$). There was a negative correlation of education level with the age of the respondents (Spearman's non-parametric correlations: $r = -0.15$; $p < 0.001$).

The material situation, marital status, and place of residence were not significant for the degree of preference for particular solutions while having children differentiated the degree for metasystem solutions. Those with children ($M = 2.42$; $SD = 0.45$; $N = 464$) preferred metasystemic solutions slightly less often than those without ($M = 2.54$; $SD = 0.42$; $N = 143$) (Wilcoxon paired rank-order test: $z = 2.24$; $p = 0.02$; $g = 0.27$). H2b was confirmed for metasystemic reasoning but rejected for intersystemic reasoning.

To answer the third research question, the results within each dilemma were analysed (see Table 4). Student's t-test and Cohen's d-coefficient were used for the analyses to estimate the magnitude of the differences.

Table 4
Differences in preference for individual solutions within dilemmas

Dilemmas	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>	<i>d</i>
Dilemma 2: Achieving career plans at the expense of risking a child's failure to adapt to starting school at age six abroad					
Metasystem solution 2: Discussion with husband, with a psychologist, then the solution	3.24	0.9			
Intersystem solution 4: Stay in Poland if the son is not ready	2.6	1.12	11.46	<0.001	0.63
Metasystem solution 1: Consider the possibilities: whether professional development is more important than your son's education	2.18	1.1	6.35	<0.001	0.38
Intersystem solution 3: Leave, the child will cope, his age is conducive to adaptation	2.06	1.29	2.06	0.04	0.1
6% of respondents had a similar dilemma, satisfaction with the solution: <i>M</i> = 2.7; <i>SD</i> = 1.45 (0–5 scale).					
Dilemma 4: Postponing the start of school for a seven-year-old child with a chronic illness					
Metasystem solution 4: Consultation with the psychological and pedagogical counselling centre and diagnosis before making a decision	3.17	1.04			
Metasystem solution 2: Talk to the son, decide with his participation, the child's understanding of the situation	2.83	1.02	6.78	<0.001	0.33
Intersystem solution 1: Start learning and trust your son to cope	2.82	1.18	0.18	0.86	0.01
Intersystem solution 3: Postponing the start of school, relationship with a colleague less important than school success	1.59	1.18	15.49	<0.001	1.04
6% of respondents had a similar dilemma, satisfaction with the solution: <i>M</i> = 3.26; <i>SD</i> = 0.86 (0–5 scale).					
Dilemma 6: Enrol a shy child in a school of choice or in a school that a very supportive kindergarten classmate will attend					
Metasystem solution 3: Specialist help in dealing with child's shyness, then decision	3.01	1.01			

Dilemmas	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>	<i>d</i>
Metasystem solution 2: Discuss with someone with experience, then make a decision	2.66	1.04	7.16	<0.001	0.34
Intersystem solution 1: Enrol in a school that a colleague does not go to, support the child	2.63	1.04	0.46	0.65	0.03
Intersystem solution 4: Enrol the child in a school attended by a colleague, the colleague will facilitate adaptation	1.78	1.14	11.92	<0.001	0.78
9% of respondents had a similar dilemma, satisfaction with the solution: $M = 3.25$; $SD = 0.96$ (0–5 scale)					
Dilemma 8: Separation of twins, due to the lack of school readiness of one of them, or joint education					
Metasystem solution 2: Talk to someone who has psychological and pedagogical knowledge, talk to sons	3.11	0.98			
Metasystem solution 4: Consult with the father on how to provide the best possible solution for the children	3.01	0.89	2.16	0.03	0.11
Intersystem solution 3: Send sons to school together so that the one who does less well does not feel disadvantaged	2.27	1.16	13.37	<0.001	0.72
Intersystem solution 1: Send son to school a year later than brother, brother can support his development	2.22	1.21	0.55	0.51	0.04
3% of respondents had a similar dilemma, satisfaction with the solution: $M = 3.13$; $SD = 0.86$ (0–5 scale).					
Dilemma 10: Public or inclusive school for a child with physical disabilities					
Metasystem solution 1: Contact the school and determine measures to provide the best possible conditions for a child with physical disabilities	3.5	0.82			
Metasystem solution 3: Talk with a psychologist and with the child about whether to choose a public or integrated school	3.14	0.91	9.23	<0.001	0.42
Intersystem solution 4: Public school choice and additional activities for children with physical disabilities	2.29	1.11	14.77	<0.001	0.84

Dilemmas	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>	<i>d</i>
Intersystem solution 2: Choosing an inclusive school because of facilities for the mobility impaired	2.27	1.05	0.26	0.79	0.02
5% of respondents had a similar dilemma, satisfaction with the solution: $M = 3.56$; $SD = 1.13$ (0–5 scale).					
Dilemma 12: “Carefree childhood” or schooling of an outstandingly gifted six-year-old child					
Metasystem solution 2: Consultation at the psychological-educational counselling centre and the child's participation in the decision	2.93	1.1			
Intersystem solution 1: Allow a “carefree childhood”, a child will not lose outstanding skills for another year in kindergarten	2.47	1.21	6.35	<0.001	0.4
Metasystem solution 4: Consult with someone to determine what will work best for the outstanding child	2.43	1.18	0.77	0.44	0.03
Intersystem solution 3: Send the child to school, another year in kindergarten not very stimulating, time to play after school	2.04	1.22	6.39	<0.001	0.32
10% of respondents had a similar dilemma, satisfaction with the solution: $M = 3.42$; $SD = 1.07$ (0–5 scale).					
Dilemma 14: Postponing the schooling of a seven-year-old anxiety child with delayed social development but strong intellectual abilities					
Metasystem solution 3: If parents decide to start school on time, provide the child with teacher support and social skills training	3.06	0.86			
Metasystem solution 1: Ensure intellectual and social development, consider homeschooling and contact with peers to promote social development	2.71	1.13	6.18	<0.001	0.35
Intersystem solution 4: Do not postpone schooling; the school situation will allow intellectual potential and social skills to develop	2.41	1.14	4.34	<0.001	0.26
Intersystem solution 2: Postpone going to school and provide therapy to develop social skills	1.9	1.14	6.86	<0.001	0.46
4% of respondents had a similar dilemma, satisfaction with the solution: $M = 3$; $SD = 0.92$ (0–5 scale).					

Dilemmas	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>	<i>d</i>
Dilemma 16: Home education of the child in the situation of the child's great-grandmother's health emergency					
Metasystem solution 1: Look for a compromise solution for the child's going to school and the child's great-grandmother's health	3.35	0.83			
Intersystem solution 2: Send your child to school because of your relationship with your children	3.02	0.97	6.59	<0.001	0.37
Metasystem solution 3: Talk to the child's great-grandmother about education options, then make a decision	2.41	1.23	9.46	<0.001	0.55
Intersystem solution 4: Home education of a child for great-grandmother's safety	1.22	1.09	20.64	<0.001	1.02
7% of respondents had a similar dilemma, satisfaction with the solution: <i>M</i> = 2.98; <i>SD</i> = 0.89 (0–5 scale).					

Source: Author's own study

Analysis of the responses to the individual dilemmas revealed that the content category of the dilemma was significant in the respondents' level of preference for solutions. In five of the eight dilemmas, metasystem solutions were the most preferred, with one of the metasystem solutions being significantly more preferred. In three – the second most popular solution was one of the intersystem solutions, twice as often being significantly more favoured than the second solution at the metasystem level. H3 was thus confirmed.

Between 3% and 10% of the respondents declared to have encountered similar dilemmas in their lives. Satisfaction with the ways of solving these dilemmas was in the average range (for the 0–5 scale, average scores of 1.5 to 3.5 were taken) in seven out of eight cases, once in the high range, in the situation of choosing a school for a child with physical disabilities.

An additional analysis of the importance of the side variables for the solution preferences of the individual dilemmas was carried out. Due to the limited size of the text, it is not possible to present all the results, so the most interesting ones were selected. A higher solution preference was noted (Kruskal-Wallis rank ANOVA test: $H = 14.44$; $p < 0.001$) involving home education of the child in a health emergency of the great-grandmother in older ($M = 1.59$; $SD = 1.22$) than in middle adulthood ($M = 1.18$; $SD = 1.05$; $z = 2.87$; $p = 0.01$; $g = 0.37$), and early adulthood ($M = 1.59$; $SD = 1.22$; $z = 3.6$; $p < 0.001$; $g = 0.48$). Respondents in middle adulthood preferred

the solution of postponing schooling to support the child's social development more ($M = 2.07$; $SD = 1.07$; $H = 20.16$; $p < 0.001$) than those in late ($M = 1.54$; $SD = 1.14$; $z = 4.11$; $p < 0.001$; $g = 0.48$), and early adulthood ($M = 1.8$; $SD = 1.19$; $z = 2.57$; $p = 0.03$; $g = 0.24$). Sending one of the twin brothers to school earlier than the other brother, on the other hand, was slightly more preferred by women ($M = 2.3$; $SD = 1.2$) than by men ($M = 2.07$; $SD = 1.22$; Mann-Whitney U test: $z = 2.15$; $p = 0.03$; $g = 0.19$).

Conclusion

The analyses carried out indicated the existence of many significant relationships. To structure the above analysis, three main conclusions were drawn.

Firstly, it can be inferred from the research that respondents had the greatest preference for solutions to problems from the metasytem level. This relationship did not apply to all dilemmas. The result obtained is consistent with previous research using the dilemma method (Sebby, Papini, 1994). This result furthermore clearly indicates the importance of the content of the problem being solved for the preferred way of thinking, which corresponds to previous research (Michalska et al., 2016). It is worth pointing out that the obtained result raises a reflection on the ability of the respondents to access their intellectual resources when solving life problems. Likely, the selection of ready answers from among the possible proposed solutions may "help" to choose a certain type of solution and cause a certain bias in the answers. It should be noted that the method of answering used in the self-report survey may be a limitation in the interpretation of the results, but on the other hand, it allowed the post-formal way of solving dilemmas to be specified.

Secondly, it can be concluded that variables such as age, education and having children were important for the results obtained. It turns out that concerning age, the results obtained are partly inconsistent with previous data (e.g., Michalska, 2015a, 2015b), as the analysis shows that this is not a correlate of the preference for solutions from the metasytem level. Perhaps age in this case triggers the selection of more specific solutions that dominate the presystem level of reasoning (*cf.* Labouvie-Vief, 2006). In an attempt to interpret the above relationship, one may venture to say that perhaps a generation of contemporary seniors brought up mainly with an authoritarian style, in which a way of thinking is imposed and the formation of one's own "Myself" is limited, tends to choose less "autonomous" ways of solving dilemmas. The importance of the age variable in the choice of metasytemic solutions in middle adulthood compared to younger people can definitely be observed. This result may be dictated by the fact that respondents in middle adulthood presumably have more life

experience and show a greater preference for autonomous solutions. In the case of the education variable, one difference was noted between those with vocational and higher education, but the negative correlation of age with education level shows that the above relationship is an artefact due to differences in the number of people with vocational and higher education in the compared age groups (see Table 1). Certainly, the lack of equality of the compared groups is another limitation of the analysis carried out, but this is due to the selection of individuals for the sample (see Survey Procedure). However, a rather surprising result is worth noting, indicating that those with children preferred metasytem solutions less often than those without children. This is not consistent with the assumption that life experience in an area contributes to more autonomous solutions (e.g., Sebby, Papini, 1994; Michalska, 2015a). This may be because parents in a dilemma situation are more oriented towards specific solutions to the problem, and more general ways with a broad scope are less often considered by them.

Thirdly, the study was able to confirm the relevance of dilemma content for preferred solutions, which is in line with previous results (Michalska, 2015b). It turned out that the most frequently preferred metasytem solution implies autonomy, communication with others to solve a problem or advice on difficulties, and the inclusion of making compromises. Furthermore, it can be inferred that some of the solutions located at the intersystem level were more popular than metasytem solutions, which probably reflected the beliefs of the people surveyed (in this case, they were mostly parents, and between 3 and 10 out of 100 people had encountered similar problems before).

In conclusion, it is worth mentioning the practical implications of the study. The results obtained can be used in the psychological and pedagogical counselling provided to parents of children starting school, and the developed own dilemma survey method can be useful for diagnosing difficulties or provide a starting point for a conversation with parents about the situation of a child standing on the threshold of school. The method also allows the parent to freely generate their answers. The dilemma can be just the beginning for further diagnosis or interview and, with its life-like content, can help some to “put themselves” in different points of view. Further lines of research will include the use of dilemmas with more general content, dealing with different spheres of adult functioning and related conflicts (e.g., family-work).

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