PARENTAL INVOLVEMENT IN CHILDREN'S CAREER DECISION-MAKING PROCESS IN SLOVENIA: PARENTS' AND CHILDREN'S PERSPECTIVE

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Abstract
At the end of lower secondary education in Slovenia, students have to choose their future career path. Since parents have the most influence on their children's decisions in this period, the aim of the study was to explore the differences between parents' and children's perspectives on parental involvement in their children's career choices. Our sample included 713 students from 37 (Slovenian) lower secondary schools and 779 of their parents. We formed three discrepancy groups (low, medium and high) according to the degree of incoherence between students and parents and used the support and directivity dimension of parental involvement to predict students' confidence in their final career choice and the extent of their difficulties regarding career decision-making in general. Parental support for their children's thinking about this process was the strongest predictor of greater confidence and fewer difficulties. Some practical implications are discussed.

Keywords: career decision-making; parental involvement; discrepancy; students

Career decision-making and adolescents' difficulties in this process

One of the important developmental tasks for students at the end of compulsory lower secondary education is the decision to pursue a professional career. This is a process of deciding on career goals, choosing a profession, and

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the related issue of choosing the right upper secondary school that will lead them to the desired profession.

While some adolescents do not have major difficulties in choosing a career, others have to deal with them before or during the career decision-making process, which often reflects in career indecision when the choice of further education should already have been made. A good theoretical basis for diagnosing career decision-making difficulties is the taxonomy of these difficulties (Gati, Krausz, & Osipow, 1996), which was used also in our study. The authors define difficulties as any deviation from the ideal decision-making model of a person in relation to his or her career that prevents or even discourages a career decision or leads a person to make a decision that is not optimal.

In the taxonomy, Gati et al. (1996) classified career decision-making difficulties into three major clusters, which are further subdivided into 10 specific categories of difficulties. The first broad category, lack of readiness, comprises three categories of difficulties that can occur before the career decision-making process begins: a) lack of motivation to start the career decision-making process; b) general indecisiveness concerning all kinds of decisions; and c) dysfunctional beliefs, including irrational expectations about the career decision-making process. The other two broad categories of difficulties, namely lack of information and inconsistent information, include difficulties that may arise during the career decision-making process. Lack of information covers four categories of difficulties: a) lack of knowledge about the steps of the career decision-making process; b) lack of information about oneself; c) lack of information about the variety of career alternatives (*e.g.*, study programmes, professions); and d) lack of information about ways to obtain additional information. The third major category of difficulties, inconsistent information, includes: a) unreliable information - problems associated with unreliable or contradictory information (*e.g.*, above-average school grades and low IQ on an intelligence test); b) internal conflicts - conflicts within the person, such as conflicting preferences or difficulties regarding the need for compromise; and c) external conflicts - conflicts involving the influence of significant others.

In order to identify the nature of the difficulties, the authors designed the instrument Career Decision Difficulties Questionnaire (CDDQ, Gati et al., 1996), which is now widely used. Although the questionnaire was not fully validated in the sample of Slovenian upper secondary school students (Pečjak, Podlesek, & Pirc, 2018; Zagoričnik & Pečjak, 2007), we used the above

mentioned instrument as a starting point for the development of an adapted version of the questionnaire to identify difficulties in career decision-making in lower secondary school (Pečjak, Pirc, & Podlesek 2019; *see* Instruments).

The process of an adolescent's career development in lower secondary education depends to a large extent not only on him or her and his/her characteristics, but also on the psychosocial stimuli of the environment - especially school and family. In our study we have focused on the role of parents in this process.

Parental involvement in career decision-making

Relational theories/approaches emphasise the role of the social environment or significant other people in that environment (parents, friends, teachers, acquaintances) in adolescents' career choices. Within these approaches, many researchers have focused on the role of parents and family relationships (*e.g.*, Roe, 1957; Super, 1990; Young, Marshall, Domene, Arato-Bolivar, Hayoun, Marshall et al., 2006). Adolescents themselves report that parents are in fact the most important people to turn to for career decisions and advice - more often than to friends, teachers or school counsellors (Keller & Whiston, 2008). Bardick, Bernes, Magnusson, & Witko (2004) found that as many as 59% of 11-14-year-olds chose parents as their first choice for career support, 12% of them chose friends, while only a handful of students would turn to teachers and career counsellors first (3% and 2% respectively).

In the process of adolescent career decision-making, contemporary researchers particularly emphasise the importance of parental influence. Parents may support or hinder the development of their children's interests, their professional aspirations, the exploration of educational or occupational alternatives, the formation of a professional identity, and the making of career decisions in general (Hargrove, Inmann, & Crane, 2005; Koumoundouru, Tsaousis, & Kounenou, 2011; Lee & Kerpelman, 2007; McDevitt & Omrod, 2004).

Parents also play an important role in the Slovenian environment when it comes to their children's choice of career. Pečjak et al. (2019) investigated among 19 school psychologists how many students and parents used the opportunity to consult with them individually about the further education of their children in the last two grades of lower secondary school (grades 8 and 9). They found that only a small share of 8th grade students (0-30%) took part in individual career

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guidance, but significantly more students in the 9th grade (40-100%) took advantage of this opportunity, with a modal response of 100%. In grade 8, an extremely small share of parents (0-3%) consulted the school psychologist for career guidance for their children, and in grade 9, the range of individual guidance to parents for the further education of their children varied between 5 and 100% depending on the school (on average, 46% of parents participated in individual counselling).

Ways of parental involvement in children's career decision-making

Parents are involved in the process of the adolescent's career decision-making in many ways. They influence their career development both directly (*e.g.*, by being prepared to financially support their child's schooling elsewhere) and indirectly through interactions with the child in terms of career decision-making. At the relationship level, parents move on a continuum in their child's career decision-making process - from being their supporters to making decisions for them. Recent studies most frequently report on three facets of parental behaviour related to a child's career development (Chope, 2005; Neunschwander, 2008): (i) parental support, which is seen as encouraging the child to explore his or her own interests, abilities and occupational opportunities; (ii) excessive parental control or parental interference, which is seen as an attempt to impose the parents' career choice without taking into account their child's wishes, and (iii) parental disengagement in the process of career decision-making, which manifests itself through the neglect of the child in that process.

Parental support is important for the development of children's values, interests and skills, which are crucial for the development of students' motivation and aspirations to set and achieve professional goals (Ashby & Schoon, 2010; Duffy & Dik, 2009; Restubog, Florentino, & Garcia, 2010), as well as in the final stage when a child has to make a specific decision to continue schooling at a particular school/study program (Tynkkynen, Nurmi, & Salmela-Aro, 2010). In the early stage of the career decision-making, which usually takes place in a pleasant atmosphere (Olaosebikan & Olusakin, 2014), the parents usually support the adolescent by providing assistance and various suggestions to make the adolescent aware of the career decision-making process and encourage him/her to learn about different schools/occupations. On the other hand, parental control could lead to a greater passivity of the children in the process of preparing for a career (Kracke & Noack, 2005). However, the last characteristic - parental

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disengagement - may have an impact on a current lack of interest in their child or imply that career decisions are less important. This may be reflected in a child's slower progress in professional development or in its less stable career paths (Mortimer, Zimmer-Gembeck, Holmes, & Shanahan, 2002).

The involvement of significant others (parents and friends) in the career decision-making process was studied by Phillips, Carlson, Christopher-Sisk, and Gravino (2001). In analysing interviews with parents and children, they found that this involvement is reflected in two ways: (i) how parents/friends are involved in the students' career decision-making process (what is referred to as the actions of others), or (ii) the extent to which students actively involve others in their career choices (what is referred to as self-direction). They explain parental actions and involvement in their children's career decision-making process with 7 categories from low to high participation: non-active support (indicates that the parents are not involved in the students' decision-making); unconditional support (the parents actively and unconditionally support the child no matter what decision they make); information provided (the parents help the child with information about the options he/she has to choose from without suggesting the best decision); alternatives provided (parents provide the child with several types of interrelated information that help him/her to make decisions - *e.g.* not only about the type of school, but also about employment opportunities); push/nudge (parents try to advise the child or guide the child towards a particular choice); forced advice (parents force the child to choose a particular school without considering the child's interests and wishes); criticism (parents criticise the child's decision-making process and/or decisions).

Some researchers have reported that parental support increases children's motivation to engage in vocational activities (*e.g.*, Kracke & Noack, 2005; Phillips, Blustein, Jobin-Davis, & White, 2002). Dietrich and Kracke (2009) also pointed out that parental support is associated with positive career exploration, while lack of engagement and interference/disagreement are associated with difficulties in career decision-making. The disagreement between parents and their children was considered in our study to be the discrepancy between their perceptions, which is explained in more detail in the next section.

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Discrepancy in parents' and children's perceptions regarding parental involvement in the child's career development

Discrepancy between parents and their children in career decision-making is considered as the differences between adolescents' and parents' subjective perception and interpretation of the way parents support or hinder their children on their career path. In Bronfenbrenner's theory of ecological systems (1986), good adaptation and development of an individual in a system is possible if the microsystems of the individual are congruent. Therefore, we can assume that the career development of adolescents is better if the ideas, aspirations, and values of the adolescent regarding his career are congruent with those of his parents. Specifically, this means that parental support only has a positive effect on children's career decision-making if the parents are also perceived as supportive by adolescents (Lent, Brown, & Hackett, 2000).

Research shows that parents and children often disagree with each other's expectations and beliefs about career development, for example, the extent to which parents are expected to influence their child's final decision about his or her future career development, which often leads them to find themselves on "different shores" (Zimmer-Gembecki, Ducat, & Collins, 2011). This discrepancy often arises from different representations by parents and children of what the supportive role of parents should be - where does support become parental pressure or whether the absence of parental pressure is the same as lack of support. One aspect of the discrepancy is also the degree to which parents and adolescents match with professional/educational goals and aspirations. Furthermore, the discrepancy results from how much they know (or do not know) about the other person's preferences and how much they talk about them. It should be stressed that a certain degree of coherence in their thinking implies a more positive career development (Otto, 2000) and vice versa, divergences in ideas, aspirations and plans hinder this career development (Leung, Hou, Gati, & Li, 2011). Studies show that parental support and the parental support perceived by adolescents are important predictors of the self-efficacy of career decision-making among adolescents (Garcia, Restubog, Toledano, Tolentino, & Rafferty, 2012) and career choices (Constantine, Wallace, & Kandaichi, 2005).

Aims of the study

In our study we investigated the degree of incoherence of perceptions between adolescents and parents regarding the participation of parents in their

children's career decision-making processes. In our case, the career decision-making was linked to the decision on the adolescent's further education after compulsory lower secondary school.

We derived from the socio-cognitive career theory - SCCT (Lent et al., 2000), which emphasizes the importance of differentiating the objective and perceived effects of environmental factors on the individual and focuses on the role of parental support in career decision-making. The role of parents in the process of career guidance is particularly important during early adolescence (12-14 years), as it is during this period that adolescents move from a growth phase (in which the development of interests and skills takes place) to a research phase (in which preferences for particular occupations are crystallized) and collect information on the educational pathways leading to these occupations (Super, 1990).

Given the instability of adolescents' occupational preferences, their parents play a particularly important role in their career decision-making. Nevertheless, some studies have examined the importance of parental support, which is derived only from students' reports, rather than including parents' perceptions (Dietrich & Kracke, 2009; Keller & Whiston, 2008). However, as some researchers stress (*e.g.*, Gagnon, Ratelle, Guay, & Duchesne, 2019), it is important to include both student and parental views, as we did in our study. However, we have to keep in mind that, in accordance with the SCCT (Lent et al., 2000), adolescents' perception of the supportive behavior of their parents is more important than the actual parental support.

Our first goal was to investigate how students and parents perceive parental involvement in career orientation and how this coherence or discrepancy in perceptions leads to (some) adolescents' career choices. We formed three groups based on the degree of discrepancy between the perceptions of adolescents and parents about parental involvement in the career decision-making of adolescents: Low discrepancy group (LDG) with minimal discrepancy between children's and parents' perceptions (included in Q1 and Q2); medium discrepancy group (MDG) with moderate discrepancy (Q3) and high discrepancy group (HDG) with the largest discrepancy between children's and parents' perceptions (Q4) (*see* Pečjak et al., 2019). Specifically, we determined how many students were in each group and which items had the smallest/largest discrepancy - in general and between groups.

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The second aim of our study was to investigate to what extent the degree of discrepancy between the perception of students and parents regarding parental support and the directivity of parental involvement in the career decision-making process predicts two career outcomes - the degree of student's confidence in the decision about further education and the perceived extent of difficulties in career decision-making. We hypothesized that greater discrepancies between students and their parents contribute to a lower level of confidence in career choice and a higher rate of reported difficulties among adolescents (Čerče & Pečjak, 2007; Ginerva, Nota, & Ferrari, 2013; Lent et al., 2000).

Method

Participants

Our first sample comprised 780 students in the last - 9th grade of lower secondary education from 37 schools in 12 Slovenian regions. The multi-level cluster sampling method was used. In each statistical region we first took a random sample of individual schools (according to the size of the municipalities: 52% of schools from smaller municipalities and 48% of schools from larger municipalities) and then randomly selected a certain number of students at each selected school. The planned number of students included in the sample was proportional to the regional population size of the students in the 9th grade. The final sample consisted of 713 students from whom we collected all the data and whose parents signed a consent form for their children's participation in the study. Of these, 323 were boys (45.5%) and 387 girls (54.5%). The structure of the sample led to a slight overrepresentation of girls and an underrepresentation of boys. The average age of the students was 14.29 years (SD=.34). All participants had a Caucasian background and attended schools with school-based counselling activities. In our sample there were also 779 parents of the students, namely 600 (76.9%) mothers and 179 (23.1%) fathers.

Instruments

The Questionnaire of Parental Involvement in Child's Career Decision-making (QPICCD, Pečjak et al., 2019) is a tool based on the model of Phillips et al. (2001) on the participation of significant others in a person's career decision-making. Starting from this model, we have designed the items to be placed in the context of parental involvement in their children's career decision-making about

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their further education in upper secondary education. The questionnaire has two versions - for students and for parents, with 7 identical items. The student version provides information on how students perceive and experience parental involvement in the decision-making process on upper secondary education, while the parent version provides information on how parents themselves perceive and evaluate their own involvement in the process. The items in both versions cover different aspects of parental involvement in children's career choices, taking into account two dimensions: i) degree of directionality - from the parent's non-participation in the choice of secondary school to the imposition of his or her own idea of what secondary school would be most appropriate for the child, and ii) degree of support - from disregarding the child's opinion to unconditional support for the child's choice of school. Item 1 asks about the general involvement of parents in the child's career orientation, items 2-5 indicate the parental support of the child (*e.g.*, item 2 - Parents support me in my considerations about which secondary school to choose.) and items 6-7 indicate a high degree of directivity (*e.g.*, item 7 - Parents convince me which secondary school to choose.). Respondents express their agreement with each item on a 5-point scale (1-not at all true for me, 5-very true for me). The result is an index of discrepancy between student and parent ratings, which is the sum of the squared differences between the items. If the discrepancy index is less than 11, the result falls into the category of small discrepancy category (Q1 and Q2), if the difference is between 12 and 18 points, the result shows a medium discrepancy (Q3) and the difference of 19 points or more indicates a large discrepancy in perceived parental participation in vocational orientation of adolescents (Pečjak et al., 2019).

The Career Decision Difficulties Questionnaire - CDDQ (Pečjak et al., 2019) was derived from the original online CDDQ (Gati et al., 1996), which was simplified with the help of a focus group of lower secondary school psychologists so that the items were suitable for secondary school students. Accordingly, we modified some items (concerning tertiary education) and changed the response scale from 9- to 5 points (1-not at all true for me, 5-very true for me). First, we performed a confirmatory factor analysis to find out whether our data were consistent with the original structure proposed by Gati et al. (1996). Since our data fit the model poorly, we continued with exploratory factor analysis (performed with the MINRES method and the Oblimin rotation), which yielded five scales with satisfactory reliability coefficients: S1-Internal

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conflicts (Cronbach's α=.77) with 6 items, including difficulties in decision making in general (*e.g*., I usually find it difficult to make decisions.) and unclear perceptions of one own's abilities and possible occupations (*e.g*., I find it difficult to make a career decision because I do not have enough information about myself -am I able to work with numbers or am I persistent, etc.) (min=6; max=30); S2- Lack of information (α=.80) with 6 items about students who are not familiar with the process of career decision-making and lack of information about occupations or educational programmes (*e.g*., I find it difficult to make a career decision because I do not have enough information about the programmes or about the occupations.) (min=6; max=30); S3 - External conflicts (α=.67) with 6 items regarding conflicts between one's own opinion and the opinion of important others (parents and friends) and the fear of not being able to meet the enrolment requirements (*e.g*., I find it difficult to make a career decision because parents have a different opinion about which secondary school would be suitable for me) (min=3; max=15); S4 - Lack of motivation (α=.68) with 3 items about still having enough time to think about further education (*e.g*., I think that I do not have to decide for a secondary school at the moment because I still have enough time for it.). (min=3; max=15); S5 - Dysfunctional beliefs (α=.50) with 3 items about unrealistic and too high expectations regarding the choice of educational programme (*e.g*., I think that there is only one upper secondary school that is right for me.) (min=3; max=15). At the beginning of the questionnaire the students indicated how confident they are in choosing the right secondary school on a 5-point scale (1-I am not convinced at all, 5-I am completely convinced) and finally they estimated the extent of their difficulties in career orientation in general (1-small, 5-big).

Procedure and data analysis

Data on students were collected in November and December 2018, *i.e*. about three months before they had to make their final decision on enrolment in individual upper secondary schools. After obtaining parental consent for the students' participation in our study, the school counsellors administered the Career Decision Difficulties Questionnaire - CDDQ and the student version of the Questionnaire of Parental Involvement in Child's Career Decision-making during regular school hours. It took the students about 15 minutes to complete the questionnaires. However, the parents answered the parent version of the Questionnaire of Parental Involvement

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in The Child's Career Decision-making in December 2018 and January 2019 after a school counsellor held a meeting with the parents for career guidance.

We used one-way ANOVAs to study the differences between the discrepancy groups and hierarchical regression analysis (HRA) to determine the predictive power of parental involvement in their children's career decision-making process for confidence in their decision and the degree of perceived difficulty in this process.

Results

Discrepancy between students' and parents' perceptions regarding parental involvement in their children's career decision-making

First, we identified the differences between (all) children and their parents using the individual items of the Questionnaire of parental involvement in child's career decision-making, to find out for which of the items these differences were the largest (Table 1). In Figure 1, we present the differences between the individual discrepancy groups for each item.

Table 1. Differences between students' and parents' perceptions of parental involvement in career decision-making of their children

Parental involvement in choosing upper secondary school		N	M	SD	t	df	p	d
1. General involvement	C	756	3.32	1.40	−14.34	755	.000	0.65
	P	756	4.15	1.12				
2. Support in thinking	C	760	4.55	0.83	−7.10	759	.000	0.31
	P	760	4.77	0.55				
3. Help with information seeking	C	757	4.20	1.07	−8.92	756	.000	0.38
	P	757	4.56	0.80				
4. Leaving the decision to the child	C	758	4.19	1.08	−4.42	757	.000	0.21
	P	758	4.39	0.89				
5. Considering the child's opinion	C	761	4.56	0.82	−1.51	760	.132	0.02
	P	761	4.61	0.68				
6. Proposing the »right« upper secondary school	C	749	2.70	1.43	−0.583	752	.560	0.16
	P	749	2.94	1.49				
7. Convincing about the »right« upper secondary school	C	753	1.52	0.99	−3.50	748	.001	0.07
	P	753	1.54	0.97				

Note: C – children, P – parents; d - Cohen's d: 0.2 - small effect; 0.5 - medium effect; 0.8 - large effect
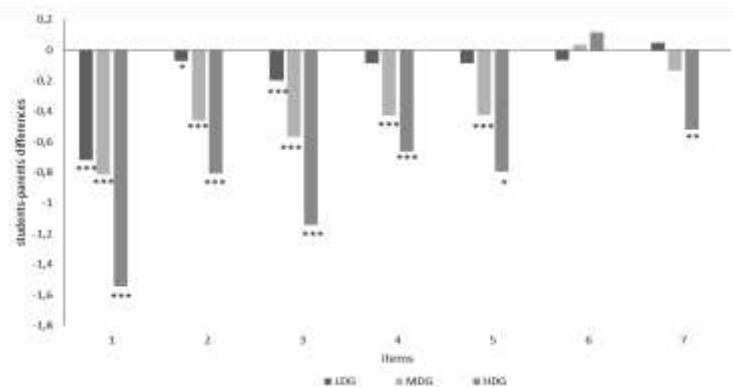
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Figure 1. Differences between discrepancy groups by each item of the Questionnaire of parental involvement in children's career decision-making
Note: LDG – low discrepancy C-P group; MDG – medium discrepancy C-P group, HDG – high discrepancy C-P group; *p < .05; **p < .01; ***p < .001.

Table 1 and Figure 1 show that there were significant differences between children and parents in the perception of parental involvement in the career orientation of their children for items 1-5. For all items, parents overestimated their involvement in their children's career choice. In general, they felt more involved (item 1; medium effect size of differences); felt that they gave more support and assistance to their children (items 2 and 3; small effect sizes of differences), left decisions to the children and took their opinions into account to a greater extent than was perceived by their children (items 4 and 5; small or negligible effect sizes of differences).

For item 5, there were significant differences between students and parents only in the HDG, where parents believed that they took their children's views into account to a much greater extent than their children. For items 6 and 7, parents and children did not differ significantly in their perception of parental involvement, except for HDG for item 7, where parents believed that they convinced their children to choose which secondary school to attend, significantly more than students reported.

Discrepancy groups with regard to their career decision-making difficulties

Next, we examined whether discrepancies between children and parents are reflected in a different profile of their children's difficulties in making a career choice (Table 2). We divided the students into three groups according to their

discrepancy index regarding the perception of parental involvement in their children's career decision-making process: LDG had the lowest discrepancy index (N=516; 70.1%), MDG had the moderate discrepancy index (N=143; 19.5%) and HDG had the highest discrepancy index (N=77; 10.4%). The results showed that a vast majority of students differed only slightly from their parents in their perception of their parents' involvement in their career decision-making process, but for just over one-tenth of students the differences between them and their parents were large.

Table 2. Differences between discrepancy groups with regard to the type of career decision-making difficulties

		N	M	SD	F	df	p	η^2_p
Internal conflicts	LDG	488	14.89	5.20	0.295	2	.744	.001
	MDG	129	15.22	4.47				
	HDG	72	14.67	5.55				
Lack of information	LDG	488	16.75	5.18	1.156	2	.315	.003
	MDG	129	17.41	5.14				
	HDG	72	16.36	5.59				
External conflicts	LDG	488	10.68	3.72	8.768	2	.000***	.025
	MDG	129	12.12	4.66				
	HDG	72	12.07	5.06				
Lack of motivation	LDG	488	4.59	1.86	.783	2	.457	.002
	MDG	129	4.83	2.16				
	HDG	72	4.65	2.18				
Dysfunctional beliefs	LDG	488	8.75	2.68	.699	2	.498	.002
	MDG	129	9.06	2.85				
	HDG	72	8.72	2.80				

Note: ***p < .001, η^2_p – partial eta squared; LDG – low discrepancy C-P group; MDG – medium discrepancy C-P group, HDG – high discrepancy C-P group

We found significant differences between individual discrepancy groups of students only on the External conflicts scale (Table 2), with a small effect size. Bonferroni's post-hoc tests for pairwise comparisons showed significant differences between LDG and MDG (the mean difference was 1.45; p<.001) and between LDG and HDG (the mean difference was 1.39; p<.05). There were no significant differences between the groups in Internal conflicts, Lack of information, Lack of motivation and Dysfunctional beliefs.

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Predictors of students' confidence in their career decision, their perceived career decision-making difficulties and external conflicts

We were interested in whether students' and parents' perceptions of parental involvement in their children's career orientation process predicted students' confidence in their decision about their further education and their perception of career decision-making difficulties (Table 3). The first step of the HRA included discrepancy indices between students' and parents' perceptions of support and help for children (items 2, 3, 4 and 5), and in the second step items indicating directive parental involvement (6 and 7) were added.

Table 3. Predictors of parental involvement in students' upper secondary school choice for confidence in their decision, perceived difficulties, and External conflicts

		Confidence	Perceived difficulties	External conflicts
	Upper secondary school choice	β	β	β
Step 1	Support in thinking	.15***	−.14**	−.25***
	Help with information seeking	−.03	-.00	−.03
	Leaving the decision to the child	−.05	.00	−.07
	Considering the child's opinion	.03	.03	−.09*
	R/R^2	.15/.02	.13/.02	.33/.12
	ΔR	.02**	.02*	.11***
Step 2	Support in thinking	.14**	−.12**	−.24***
	Help with information seeking	−.03	−.01	−.03
	Leaving the decision to the child	−.06	.01	−.06
	Considering the child's opinion	.02	.05	−.07
	Proposing the »right« upper secondary school	−.06	.11**	.08*
	Convincing about the »right« upper secondary school	.01	.01	.05
	R/R^2	.16/.03	.17/.03	.35/.13
	ΔR	.00	.01*	.01*

Note: N = 725; *p <.05; **p < .01; ***p < .001; β – standardized β coefficient; R – multiple correlation coefficient, R^2 – determination coefficient; ΔR – multiple correlation coefficient change

The results in Table 3 show that with the variables in our model we were able to explain only 3% of all differences between students in terms of their confidence in which upper secondary school they will choose and the same share of differences in perceived difficulties in the process of career decision-making. In addition, 13% of the differences in difficulties regarding External conflicts were explained by included variables. The strongest

predictor of all three criteria was support by parents when their children are considering further education. On the other hand, the parents' convincing their children of the "right" upper secondary school predicted more external conflicts and a higher level of perceived difficulties.

Discussion

The aim of the study was to investigate whether discrepancies in parents' and children's perceptions of parental involvement in the career decision-making process of their children at the end of lower secondary education are related to children's confidence in their career choice and to their potential difficulties in the process of career orientation. Since parents and students are often "on different sides" (Butner, Berg, Osborn, Butler, Godri, Fortenberry, & Wiebe, 2009), we were interested in how they differ in their interpretations of parental involvement. We explored the aspect of supplementary fit (Kristof, 1996), which refers to the agreement between adolescents and parents on professional interests, plans, goals and values. This is because "the intended effect of parental behaviour is only achieved if the supportive behaviour is perceived in the same way by the adolescent and parents" (Sawitri, Creed, & Zimmer-Gembeck, 2012, p. 212).

Discrepancies between parents and children perceptions of parental involvement in their children's career decision-making

The findings related to the first research question indicate that there were discrepancies between the perceptions of adolescents and parents regarding parental involvement in their children's career decision-making processes. In 70% of the participants the differences between students and parents in the perceived involvement of the latter were small; in 19% of the participants the differences were medium and in 11% of the participants large discrepancies between students and parents were found. Contemporary research findings on the role of parents as the most significant others in the child's career decision-making process, particularly in early adolescence (Bardick et al., 2004; Keller & Whinston, 2008), show that, in their own estimation, parents are just as involved in the career decision-making process as students themselves. Therefore, the above-mentioned differences between them may be a source of additional stress

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and strain for the adolescent, as has been shown in previous studies (Dietrich & Kracke, 2009; Kracke & Noack, 2005).

A more detailed analysis of the perceived parental involvement in the career guidance of their children showed some similarities and differences with regard to individual items. Students and parents were similar in their highest expressed agreement values for the items that take the child's opinion into account, support the child in thinking about further education and help him or her to find information. In addition, both parents and children expressed the lowest degree of agreement on the items that take into account the direct involvement of parents in career orientation, i.e. that parents suggest or force the child to choose the upper secondary school they think is right for the child (Table 1). These results suggest that parental involvement in career orientation of their children is generally supportive and with relatively limited directivity/control. Such parental attitudes naturally encourage children to explore their own interests, skills and career options (Chope, 2005; Neunschwander, 2008). However, the results also revealed that students and parents differ significantly in 5 out of 7 items. Specifically, parents in all groups (with more or less different perceptions between them and their children) significantly overestimated their involvement in this process in general and, above all, their support and help for the children (Figure 1). They also had the impression that they left the decisions to their children and took their opinions much more into account than their children. In terms of parental directivity, however, the only significant difference was found for convincing children about the 'right' level of upper secondary school, namely in the group where the discrepancies were generally the largest. However, a possible explanation could also be that children do not assess their parents' involvement correctly and therefore underestimate their parents' attempts to help them in their choice of career.

For example, parents had the impression that they were more directive towards their children than their children. Nevertheless, the question remains to what extent this conviction influences children in terms of barriers and prevents them from making the final decision (Constantine et al., 2005). Despite that, it should be borne in mind that the data on parental involvement in the career orientation of their children were collected on the basis of self-reports (both from parents and children) and do not necessarily reflect the real situation. It is also necessary, especially when there are large differences between children and parents, to clarify such discrepancies with the help of a career counsellor.

Discrepancy groups and their career decision-making difficulties

We found significant differences between the groups only in the area of external conflicts. Students with medium and high discrepancies between students and parents (MDG and HDG) reported significantly more external conflicts than students from LDG, where the discrepancy index was smaller. This result suggests that the discrepancies in parental involvement may lead to a subjective feeling of greater difficulty in career orientation and less confidence in one's own decision, which has also been mentioned previously by several other authors (*e.g*., Garcia et al., 2012; Leung et al., 2011).

This was confirmed by the HRA (Table 3), which showed that parental support for children in their career choices was the only significant predictor of greater student confidence in their decisions three months before enrolment, which is in line with other studies (*e.g*., Kracke, 2002). It appears that parental support encourages adolescents to explore vocational interests and skills and different career options, and helps them to reflect on career choice experiences (Dietrich & Kracke, 2009).

Discrepancies in the perception of other opportunities for parental involvement in their children's career choices were not found to be significant predictors of children's confidence in their career choice or their perceived current difficulties. The role of parents in supporting children in their thinking seems to be very important in all earlier stages of children's career development - *e.g*. in shaping their career aspirations (Flores & O'Brien, 2002) and in exploring their own and professional characteristics (Super, 1990), as well as in the "last part" of the children's career decision-making process, i.e. just before entering upper secondary school.

Furthermore, our results (Table 3) showed that parental social support can even help an individual to overcome the effects of perceived and encountered barriers. Students and parents who were more in agreement in their perception of parental social support reported fewer external conflicts and rated their difficulties lower, which is consistent with the findings of previous studies (Kenny, Blustein, Chaves, Grossman, & Gallagher, 2003; Lent et al., 2000).

At the same time, parental directivity in terms of convincing their children about the "right" upper secondary school was a low but significant predictor of more perceived difficulties and external conflicts (β=.11 and .08). We agree with the warnings that parents may be unaware of their influence on their children's career choices in the long run - by serving as role models as

workers (Kniveton, 2004) and living by their norms and values (Simpson, 2003) rather than simply being directly involved in the process of career decision-making, e.g. by giving advice and forcing their children into a particular upper secondary school in the months before the final decision is made.

Practical implications

In addition to clarifying the research field of parental involvement in the career orientation of their children, our findings are also relevant for school counsellors in several respects. First, it would make sense to sensitise parents at an early age, when their children are still in the lower grades, by informing them on how to promote the development of interests in children, how to talk about their career plans and goals, and how to achieve what is known as the supplementary fit (Kristof, 1996). This is particularly important because parents are the most important source of knowledge about occupations and have similar beliefs about career and school choices as their children (Bryant, Zvonkovic, & Reynolds, 2006; Otto, 2000). Moreover, it is the parents who follow their children's professional development most closely and know their interests and strengths.

Second, if counsellors find medium or large differences in the perception of parental involvement in the process of career decision-making between students and parents, it is necessary to invite parents together with their children to individual career guidance. However, it is important how the counsellor conducts the counselling interview with them. An interesting approach to conducting a career guidance interview is the five-step PICE model by Amundson and Penner (1998): i) Introduction to counselling, where the counsellor explains to the parents that this counselling is primarily intended for the student and that the parents have been invited mainly as observers; ii) Pattern-finding exercise - where the counsellor talks to the student about his/her leisure activities. In this way the counsellor encourages the student to talk about the activities in which he is good and those in which he is less competent, thus identifying the stronger and weaker sides of the student. At the end of this stage, the counsellor invites parents to comment on what they have heard and add their own perspective; iii) School preferences and academic performance - the counsellor discusses the subjects the student prefers and encourages them to illustrate these preferences with concrete examples, followed by a parental view of the child's narrative; iv) Perspectives on educational opportunities - the

counsellor talks to the student about his or her wishes and possibilities for further education (*e.g*., whether they have good enough academic achievement, possible admission procedures, possible fears, etc.), and finally invites the parents to comment; v) Action planning - the counsellor, the student and the parents together make a plan of the steps they have to go through until the next meeting or until the final career decision.

Limitations of the study and further research

The results of our study should be interpreted with some limitations. First, we used a new instrument to measure the difficulties of lower secondary school students in making career choices, which should be taken into account when interpreting the empirical results, although the questionnaire proved to be valid and reliable (except for the Dysfunctional Beliefs scale with very low reliability).

A further limitation is the fact that the results of parental involvement in the career decision-making of their children were collected in a cross-sectional study. A longitudinal approach with multiple data collection in the last year of lower secondary education would probably provide a more reliable estimate of parental involvement in decision-making and explain to what extent the discrepancy between parents and children at different intervals predicts the difficulties children have in making career decisions.

Further research should propose predictive models with variables less frequently studied in the field of parental involvement in the career orientation of their children. For example, the discrepancy between parents and children should be examined according to the extent of the influence of mother and father on the child's career decision, and the discrepancy between them should be triangulated in terms of the child's career choice and difficulties, as this has only been investigated in a few studies to date (*e.g*., Ginerva et al., 2013). It should also be investigated how the degree of separation or parental attachment (investigated *e.g.* by Lee & Kerpelman, 2007) influences the differences in the parents' and children's perspectives on the children's career choice, thus producing a predictive model with greater ecological validity. One of the future research challenges in this area would be to conduct a meta-analysis that would summarize the results of individual research on the role of parents with different cultural backgrounds and different developmental periods, which to our knowledge does not yet exist.

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In addition to the role of parents, the role of friends in students' career choices should also be taken into account, as studies show that they have the most important influence on adolescent's decision-making alongside parents (Keller & Whinston, 2008). Indeed, studies show that peers have a particularly strong influence on career choice (Kracke, 2002), but less so on the final career decision.

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