Career orientations and migration attitudes of schoolchildren with different levels of giftedness

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Abstract. The study is devoted to comparing the career orientations of schoolchildren (N=461) from the Omsk region, who have different levels of giftedness, and the search for relationships between their career orientations and migration attitudes. The method of determining career orientations by E. Schein and the scale of migratory attitudes of the individual S.A. Kuznetsova were used. Groups of schoolchildren with reduced and increased educational activity, gifted in one or more areas, were identified. It was found that schoolchildren with reduced educational activity significantly higher than in more active groups developed orientations towards professionalism, autonomy in work, stability of place of residence and work, and the desire to integrate different aspects of life. Migration attitudes of all respondents are expressed at the average level and are negatively related to the orientation towards the stability of the place of residence. The desire to migrate among gifted students has a positive correlation with an orientation towards autonomy in work, among schoolchildren with increased educational activity, in addition, there is a connection with career orientations for managing people and entrepreneurship. Keywords: migration intentions, choice of profession, preferred employer, life plans of teenagers.

1 Introduction

It is typical for the modern way of life that an increasing number of people are included in migration, it captures ever wider territories. The idea of migration as a social norm is being strengthened [1]. The study of patterns of migration processes can be fruitful only on the basis of an interdisciplinary approach. Representatives of such sciences as sociology, statistics, demography, economics, political science, and jurisprudence address the problems of population migration. It is worth considering that all the listed sciences take mass-like processes as a subject. At the same time, it is often not fully taken into account that any set of people consists of separate individuals - individuals with their own individual characteristics, needs and desires, life goals and plans. Migration behavior, like any other type of complex social behavior, is determined by a large combination of external and

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internal factors. Among external factors, one should single out the country of residence [2], culture and the level of xenophobia in it [3], belonging to a certain ethnic group [4], living conditions and their assessment by potential migrants [5]. The sciences mentioned above only indirectly consider the psychological determinants of migration as a life choice made by a person. Without belittling the importance of the influence of external factors on any decision made, it is necessary to remember the role of the subjective potential of the individual, the ability of most people to maintain freedom of choice, to make decisions independently, based on their life experience and the experience of people close to them, on their ideas about their capabilities, on the assessment their abilities. Subjective reality, internal factors that determine all types of activity, are an integral part of the subject matter of psychological science.

A number of Russian and foreign psychological studies have identified subjective (internal) factors that can be considered as determinants of migratory behavior. The predictors of migration intentions include expectations of an improved quality of life, better employment prospects, and career growth [6, 7, 8, 9, 10]. An increased level of subjective well-being of an individual weakens migration intentions. Subjects with a low level of life satisfaction are more likely to show an intention to migrate within the country and abroad [11, 12, 13, 14]. The severity of migration intentions is determined by the degree of frustration of the need for status and socio-economic benefits. The level of satisfaction with the socio-economic position and social status acts as a moderator of the connection between migration intentions and career orientations [15]. In an empirical study by M.N. Efremenkova found negative correlations, low closeness, but statistically significant, indicators of migration intentions with the severity of orientations towards the stability of the place of work and place of residence, as well as the desire to organize one’s life in a balanced way in general, to have the opportunity for self-development, leisure, and the establishment of harmonious relations in the family, without an accent to high professional achievement [15]. More pronounced migration intentions are people who are oriented towards professionalism, skill, solving the most difficult, unique tasks in their chosen business, prone to competition, novelty and risk in making professional decisions.

In an empirical study by S.A. Kuznetsova [16] found links between the migration attitudes of Magadan residents and the characteristics of coping behavior. Residents with a low level of personal anxiety, using psychological defense in the form of regression and such coping strategies as avoidance, cautious actions and passive ways of reactions, in general, have less pronounced migratory attitudes. And vice versa, migration attitudes are more pronounced in subjects who are ready for active constructive actions to change their unsatisfactory life situation. They seek social support, strive to take into account the opinions and expectations of their immediate environment. Connections between migratory attitudes and active ways of coping have not been identified. For many people, their inherent activity can be shown at the current place of residence and does not necessarily imply a desire to move.

Most often, the attention of specialists is directed to the study of ideas about a professional career and migration intentions of students. The leading career orientations identified as a result of surveys indicate the existing discrepancy between career goal setting (“career anchors”) and motivation. The revealed differences in the hierarchy of "anchors" indicate different ideas of students about the future and current career situation [17]. The specificity in career orientations of students of various profiles of education is described. Engineering students are more competitive and report a willingness to overcome career challenges. Humanities students prefer to find a job that is characterized by stability. When looking for a job, they pay more attention to the clear definition of tenure in the organization, its good reputation and concern for its employees. Students of natural science and technical areas of study are dominated by a career orientation towards following altruistic values, the desire to make the world a better place (in general or in certain aspects), to be useful to people [18].
An analysis of published works shows a lot of discrepancies in the conclusions about the dominant career orientations and ideas about their future professional career among students of Russian universities [18, 19, 20, 21]. Such a contradictory picture can be explained by a complex interweaving, combined influence of the individual qualities of a young person, socio-demographic parameters, family traditions, socio-cultural factors, social and economic conditions in different regions of a large country.

Difficulties in explaining broad empirical studies of the mutual influence of individual and contextual differences in attitudes towards immigration are also noted by foreign authors [22, 23, 24]. The value of one contextual factor is interpreted in a very similar way by different authors - parental influence. The more pronounced parental support, the more successful a teenager's career search [25]. Among the external factors, one can single out the attractiveness of large and wealthy cities for young talents. In them, young people see more opportunities for employment, the realization of their dreams, and expect higher wages. Chi Jin and colleagues [26] come to this conclusion by collecting data involving 1242 young people across China. Sigal Kaplan, Luise Grünwald and Georg Hirte [27] in a number of external factors highlight the influence of social networks on interregional migration intentions of knowledge workers, which in its significance competes with the usual way of life.

O.P. Tsaritsentseva [28], comparing the career orientations of high school students and students of different courses, found interesting dynamics. In the life plans of high school students, a prominent place is occupied by vague fantasies, there is a fairly high level of claims to the vertical type of career development. Students discover for themselves a deeper meaning of their future professional activities, they have an acceptance of the importance of helping other people, a noticeable focus on humanistic values in their careers, which is less common in senior school age. With an increase in the period of study at a university, students begin to understand the need to choose a job that has the character of stability and a clear time perspective. Career orientations during adolescence are changeable in content, this variability is associated not only with age characteristics, but also with adaptation to the current social situation, to other tasks that a person must solve at different stages of his life path.

In this study, we will not touch on aspects of external migration, but will focus on some of the factors that influence the motivation for internal migration. Let us focus our attention on the role of career orientations of young people and the abilities that teenagers show in their educational and extracurricular activities. An analysis of the psychological plane of the problem of migratory behavior shows that these important aspects have clearly not been studied enough.

2 Organization of the study

To collect empirical data, two methods were used: 1) the method of determining career orientations by E. Schein (adapted by V.E. Vinokurova and V.A. Chiker) [29]; 2) the scale of migratory attitudes of the personality of S.A. Kuznetsova [30].

E. Schein's technique allows us to compare the severity of a number of career orientations, which every person realizes with a greater or lesser degree of clarity when he thinks about his life path and professional self-determination. There are nine scales in the methodology, which allow obtaining a numerical characteristic for each type of career development: 1) orientation towards professionalism, mastery in the chosen field; 2) focus on managing people; 3) autonomy in work - the primacy of the maximum possible exemption from prescriptions, restrictions, regulations; 4) stability of the place of work - the preference for permanent work with a minimum probability of dismissal, job loss; 5) stability of the place of residence - orientation towards the stability of the place of residence, the preference to
keep the job in the place where one is used to living; 6) service - following altruistic values, the desire to make the world a better place (in general or in certain aspects); 7) focus on solving the most difficult, unique tasks; 8) integration of different aspects of life - career and family, personal interests and goals of the organization; 9) entrepreneurial spirit, initiative, orientation to a new business.

Since the authors of these methods do not offer norms, we calculated normalized indicators by converting raw scores into a T-score scale. For statistical processing, the IBM SPSS Statistics 20 program was used.

The sample of respondents included 461 schoolchildren (age: M=15.5 years, SD=1.39) from 39 secondary schools, of which 313 people (67.9%) are residents of Omsk, 148 people (32.1%) - Omsk region; The gender distribution was as follows: 268 girls (58.1%) and 193 boys (41.9%). An anonymous psychodiagnostic examination was carried out in agreement with the administration of educational institutions in the spring (from April to May 2022). Of the urban participants, 74 people (23.6% of the surveyed citizens) study in ordinary schools, 239 (76.4%) - in advanced schools with in-depth study of a number of subjects, with specialized classes and purposeful development of students' giftedness. On the basis of expert assessments and self-assessments, groups of students with significant achievements in various competitions and competitions of the district, city, regional, all-Russian and international levels were identified: intellectual competitions (subject competitions, olympiads, scientific and practical conferences), competitions of artistic creativity (musical, vocal, dance, etc.), sports competitions.

According to the level of demonstrated abilities, the entire sample was divided into four groups (cohorts) of schoolchildren:

1. Group with reduced learning activity. It included 82 people (17.8%) - schoolchildren who did not show interest in achievements in one or another of the above-mentioned areas of self-development;

2. Group with increased activity. It includes 158 people (34.3%) - schoolchildren participating in competitions at the school and city or district levels. According to experts, there is no reason to classify these schoolchildren as gifted, but it is necessary to note their increased motivation both for studies and for certain types of self-development, forms of creativity or sports;

3. A group of gifted in one area. It included 146 (31.7%) adolescents who showed signs of high efficiency in one of the types of creative activity: participation in high-level events - regional, all-Russian, international competitions and competitions. Among them, 66 (45.2%) people showed high results in intellectual competitions, 28 (19.2%) in art, 52 (35.6%) in sports.

4. A group of versatile gifted. It includes 75 people who showed high results in various forms of activity: 30 people (40%) in intellectual and artistic competitions; 20 (26.7%) - in intellectual and sports competitions, 8 (10.7%) - in sports competitions and art competitions, 17 people (22.7%) showed themselves in all three of these areas.

### 3 Results and its discussion

In the above groups of schoolchildren, divided according to the criterion of the presence and severity of giftedness, career orientations were compared using the Kruskal-Wallis H-criterion. Table 1 presents the average values of the normalized numerical indicators of scale assessments of career orientations for four compared groups of schoolchildren (according to the method of E. Schein).
Table 1. Career orientations of schoolchildren with different levels of giftedness.

<table>
<thead>
<tr>
<th>Career orientation</th>
<th>Group with reduced educational activity</th>
<th>Group with increased activity</th>
<th>Group of gifted in one area</th>
<th>A multi-talented group</th>
<th>$\chi^2, p$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Focus on professionalism</td>
<td>54.7</td>
<td>10.9</td>
<td>50.3</td>
<td>10.5</td>
<td>50.0</td>
</tr>
<tr>
<td>Focus on people management</td>
<td>53.2</td>
<td>10.9</td>
<td>50.7</td>
<td>10.6</td>
<td>49.7</td>
</tr>
<tr>
<td>Focus on autonomy at work</td>
<td>55.0</td>
<td>11.0</td>
<td>49.9</td>
<td>10.2</td>
<td>49.9</td>
</tr>
<tr>
<td>Focus on job stability</td>
<td>53.9</td>
<td>11.2</td>
<td>50.6</td>
<td>10.2</td>
<td>50.0</td>
</tr>
<tr>
<td>Orientation to the stability of the place of residence</td>
<td>55.8</td>
<td>12.8</td>
<td>50.4</td>
<td>9.9</td>
<td>49.3</td>
</tr>
<tr>
<td>Service</td>
<td>54.1</td>
<td>11.1</td>
<td>50.3</td>
<td>10.4</td>
<td>49.9</td>
</tr>
<tr>
<td>Focus on solving the most difficult problems</td>
<td>54.0</td>
<td>11.7</td>
<td>50.3</td>
<td>10.4</td>
<td>49.9</td>
</tr>
<tr>
<td>The desire to integrate different aspects of life</td>
<td>54.9</td>
<td>10.7</td>
<td>50.1</td>
<td>10.3</td>
<td>49.8</td>
</tr>
<tr>
<td>Entrepreneurship, new business orientation</td>
<td>53.6</td>
<td>11.1</td>
<td>50.2</td>
<td>10.1</td>
<td>50.0</td>
</tr>
</tbody>
</table>

Note: Designation of significance levels of differences: ** – $p \leq 0.01$, *** – $p \leq 0.001$.

Significant differences in career orientations between groups of teenagers with different levels of giftedness were found in orientations towards professionalism, autonomy in work, stability of place of residence and work, integration of different aspects of life. All of the listed options for career orientation are more pronounced in the group of schoolchildren with reduced learning activity (Group 1). This may mean that students who do not show increased activity outside the curriculum may be concerned about possible difficulties in building a career due to the low level of their achievements, and therefore think in advance about how their implementation in work will develop. Perhaps they understand that in the near future they will have to make extra efforts, show more diligence in order to succeed.

Analyzing the standard deviations in the four compared groups of schoolchildren, it should be noted that the scatter of indicators is greater for schoolchildren with reduced learning activity and least of all for versatile gifted ones. This means that in the first group, the variations in career orientation are noticeably more diverse than among multi-talented students, who are more similar in career preferences.

Pairwise comparison of three groups with higher achievements in intellectual, artistic and sports competitions (than the group with reduced educational activity) revealed that there are no significant differences between gifted in one area and students with increased activity, as well as between the third and fourth groups. career orientations. Adolescents with increased educational activity differ from versatile gifted adolescents by a more pronounced desire for a permanent place of work ($U=4986.5; p \leq 0.05$) and residence ($U=4335; p \leq 0.001$). Perhaps especially talented children who are gifted in several areas, realizing their versatility, are not too afraid of losing their jobs, assuming that their careers can develop non-linearly, that they...
can succeed in different ways, in different conditions. A lesser degree of concern about the stability of the place of residence may mean that multi-talented adolescents are more inclined to migrate from their home region, confident that they can be competitive in other regions. This assumption needs additional confirmation, which we turn to below.

Of undoubted interest is the influence of migratory moods among people from a close social environment on the migratory attitudes of schoolchildren. It is important to find out what role the level of giftedness plays in these processes. To clarify this kind of relationship, we used data collected using the scale of migratory attitudes of the personality of S.A. Kuznetsova. A comparison was made of the migration attitudes of young people with different levels of giftedness. Table 2 presents the average values of indicators of migration attitudes normalized for our sample (according to the method of S.A. Kuznetsova).

Table 2. Migration attitudes of schoolchildren with different levels of giftedness.

<table>
<thead>
<tr>
<th>Migration moods of the respondent and his environment</th>
<th>Group with reduced educational activity</th>
<th>Group with increased activity</th>
<th>Group gifted in one area</th>
<th>A multi-talented group</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Migration attitudes of the respondent (schoolchild)</td>
<td>49.8 ± 9.1</td>
<td>49.7 ± 10.5</td>
<td>50.9 ± 10.5</td>
<td>50.3 ± 9.9</td>
<td>0.4</td>
<td>0.8</td>
</tr>
<tr>
<td>Migration installations of closed persons</td>
<td>51.0 ± 9.5</td>
<td>49.4 ± 9.9</td>
<td>50.5 ± 10.7</td>
<td>49.1 ± 10.6</td>
<td>0.8</td>
<td>0.5</td>
</tr>
<tr>
<td>Attitude of closed persons about respondent migration</td>
<td>49.8 ± 9.5</td>
<td>49.2 ± 10.2</td>
<td>50.4 ± 10.7</td>
<td>51.3 ± 9.9</td>
<td>0.8</td>
<td>0.5</td>
</tr>
</tbody>
</table>

According to the presented data, it can be seen that the migratory moods of schoolchildren with different levels of giftedness and their close circle do not differ significantly from each other. All presented attitudes towards migration are expressed at the average level. The only difference is that adolescents with increased activity and those gifted in one area dominate their own migration attitudes, schoolchildren with reduced educational activity have the migration attitudes of close people, and versatile gifted have the attitude of adolescents close to migration. These features are rather trends – the differences are not statistically significant. It is possible that the influence of relatives on the migration intentions of young people is mediated by many factors, the role of which can be revealed in a study with a large number of indicators. According to S.A. Kuznetsova [16], close people of undergraduate students can play a dual role in the formation of time perspectives: expectations from relatives and support for the student’s migration attitudes open up a temporary perspective of the future for him, and vice versa, the absence of such leads to frustration, a sense of hopelessness, which is described in the terminology of F Zimbardo as a "fatalistic present".

Thus, the desire to migrate is not directly related to the level of motivation for self-development and giftedness. However, if the basis for dividing schoolchildren into groups (cohorts) is based not on their level of motivation and activity, but on the type of school education - a rural school, an ordinary school or an urban school specializing in the development of giftedness, then young people's own migration attitudes begin to differ significantly (F = 7.06, p ≤ 0.01), as well as the attitudes of relatives about their migration (F=5.55, p ≤0.001), while in both cases these attitudes are higher in the sample of young people studying in schools with a high level of training. Most likely, the desire to migrate is influenced not only by the student's activity itself, but also by the educational environment.
In which he is located, in which a certain attitude towards migration is formed, indirectly associated with career self-realization.

In groups of schoolchildren with different levels of giftedness, an analysis was made of the correlations between their own migration attitudes and schoolchildren's career orientations. In schoolchildren with reduced educational activity, the connection of migration attitudes can be traced only with career orientation to the stability of the place of residence ($r=-0.32$, $p\leq0.01$). In adolescents with increased activity, the connection of migration attitudes with a future career is manifested in a significantly larger number of types of orientation - to manage people ($r=0.27$, $p\leq0.001$), autonomy in work ($r=0.26$, $p\leq0.001$), stability of the place of residence ($r=-0.21$, $p\leq0.01$), entrepreneurial spirit ($r=0.29$, $p\leq0.001$).

In gifted children, their own migration attitudes are associated with an orientation towards the stability of the place of residence ($r=-0.22$, $p\leq0.01$ for gifted in one area, $r=-0.25$, $p\leq0.01$ for versatile gifted) and autonomy in the work ($r=0.23$, $p\leq0.01$ for gifted in one area and $r=0.23$, $p\leq0.05$ for multi-talented).

Thus, the majority of schoolchildren have a very strong orientation towards a permanent place of residence: the more it is expressed, the weaker the migration attitudes. This rather obvious correlation is the only one for adolescents with reduced educational activity, but among the gifted, in addition to it, the connection with migration attitudes can also be traced with the desire to be free from formalities and rules that limit the activity of an employee. The more gifted a teenager strives for autonomy in work, the more likely he will seek to move to another city, where, according to his assumptions, there will be employers with a high level of organization, giving their employees the opportunity to decide for themselves how to carry out the tasks received, how to organize your activities in general. Perhaps gifted teenagers need this especially because they may feel the desire to express their inherent creativity without being limited by various frameworks and regulations. The desire for autonomy, for a free choice of forms of activity, potentiates pronounced migration attitudes.

According to adolescents, the widespread way of activity in organizations and enterprises in their region does not meet the expectations of gifted youth in terms of the breadth of the choice of forms of activity. The adequacy of adolescents' ideas about the way of activity in organizations and enterprises in other regions and about the labor market requires separate consideration. The emergence of such subjective assessments and expectations may be due to insufficient awareness, unreasonable romanticization of business activity and the state of the labor market in other cities.

It is interesting that most of the correlations of migration attitudes are observed not in the group of students who are gifted in one or more areas, but in the group of students with increased activity. In addition to the connections already described, their desire to move to another city is associated with their desire to be entrepreneurial, proactive, the desire to create something new and focus on managing people. Probably, at the moment when gifted children are immersed in the study of sciences, their less capable, but active peers develop communicative and organizational skills. Perhaps it is precisely in order to realize themselves in leadership activities and gain the freedom to open their own business that motivated students decide to migrate. It seems that not only gifted, but also quite active young people perceive their hometown as a place where leading career ambitions cannot be fully satisfied. However, the fact that the correlations between the indicated variables, although significant, are not high, the relationship between them is currently not so great, and there is an opportunity to correct the ideas of young people, informing them in a timely manner about the opportunities that open up.
4 Conclusion

The level of educational activity, the characteristics of schoolchildren’s giftedness, and the dominant career orientations are significant factors influencing migration attitudes in certain aspects. The majority of schoolchildren have a very strong orientation towards a permanent place of residence, which reduces the motivation to migrate. This is especially noticeable in adolescents with reduced educational activity. In contrast, gifted adolescents have a significant influence on migration attitudes due to the desire to be free from formalities and rules in the business sphere that limit the activities of an employee. The desire to migrate is not directly related to the level of motivation for self-development and giftedness. What matters is the category of educational organization - a rural school, an ordinary city school or a city school specializing in the development of one or another type of giftedness. The own migration attitudes of young people, as well as the migration moods of close people, differ significantly, and in both cases these attitudes are higher in the sample of young people studying in schools with a high level of training.

Concerning the applied aspects of the problem, it is worth noting that in this complex and acutely relevant issue for many regions, subjective, internal factors of migration behavior should not be considered as the only relevant ones. We can agree with the opinion of researchers [31], who noted that informing young people about all the difficulties that potential migrants may face, systematic and large-scale efforts to develop the region and improve its image should be of considerable importance in migration policy.

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