

# Social assessments of the safety of educational institutions in youth in the context of gender and material security

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**Abstract.** This study investigates the social assessments of safety in educational institutions among young individuals, considering gender and material security factors. The research, conducted between October 2022 and May 2023, involved surveys and interviews with 1183 students aged 18 to 27. The study revealed that while most students assessed their awareness of safety positively, there were disparities between genders and financial statuses. Despite generally positive assessments, nearly 37% of students experienced fear about safety in educational institutions, with 6.8% experiencing constant fear. The authors' study of student youth demonstrated a high level of self-assessments of awareness of the rules of behavior in case of a Columbine, a high assessment of the security of educational institutions and, at the same time, a high level of fears of an armed attack. It was found that lower assessments of awareness, security of educational institutions and higher levels of fear were observed among girls as compared to boys. Youth with low material status have lower assessments of awareness, security compared to youth with medium and high financial status and experience a higher level of fear of attack. Youth see the main way to solve the problem in strengthening security, access control and technical equipment.

## 1 Introduction

The phenomenon of columbine in educational institutions appeared at the end of the 20th century in the USA. Sociological analysis of mass shooting cases focuses on socio-psychological, socio-cultural factors underlying mass shootings [1-4]. Sociologists note the importance of the role of the culture of violence and gender stereotypes [5; 6]. Researchers actively discuss the issue of the correlation between accidents and determinants in the occurrence of violent incidents of shooting of students in educational institutions [7; 8].

In the last 20 years, school shootings have been recorded not only in the United States, but also in European countries, and in 2014 the first case occurred in Russia, which some researchers attribute to the Columbine effect of imitation [9].

From 2014 to 2022, 70 incidents in 34 subjects related to armed attacks on institutions of secondary, secondary vocational and higher education (schools, technical schools, colleges, universities) were recorded on the territory of the Russian Federation [10; 11]. Against the

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background of the growing intensity of such incidents, there is a lack of scientific, including sociological understanding of the issues of physical security of the system of educational institutions in Russia [12]. As a rule, researchers focus on legal aspects or socio-psychological features of the personality of school shooters [13-16]. At the same time, social assessments of security and fears of young people regarding armed attacks on educational institutions do not become the object of research.

Starting from the first case for 9 years, the institutional system of Russian society has been responding to the problem with a set of social, legal, regulatory, and organizational changes to increase adaptability to risks and enhance security to prevent incidents, including by restricting freedom of movement, strengthening the pass regime, etc. [17; 18]. The question of sociological examination of young people's assessments, perception and awareness of the security system of educational institutions, the level of fears of armed attacks, the vision of the best ways to prevent them in the conditions of an improved institutional system of security of the educational environment arises [19-22].

## **2 Materials and Methods**

In the period from October 2022 to May 2023, the authors undertook a sociological study of assessments of the problem of armed attack on educational institutions. Respondents from 18 to 27 years old, studying in educational institutions of Kazan, where one of the cases of Columbine occurred in May 2021, were interviewed.

The questioned students were involved in different educational programs and directions (bachelor's, master's, specialist, postgraduate). The study was conducted by means of a mass survey of online learning youth of Kazan (N=1183), a quota sampling method with gender control. The methods of semi-structured interview (N=19) and analysis of normative and legal documents (N=29) were also used.

The questionnaire survey data were processed with SPSS program using chi-square statistical criterion to identify the relationships of variables. This article demonstrates some results of the study concerning the assessments of the security system of educational institutions, awareness of the rules of behavior and fears of armed attack, as well as measures to prevent such threats.

## **3 Results and Discussion**

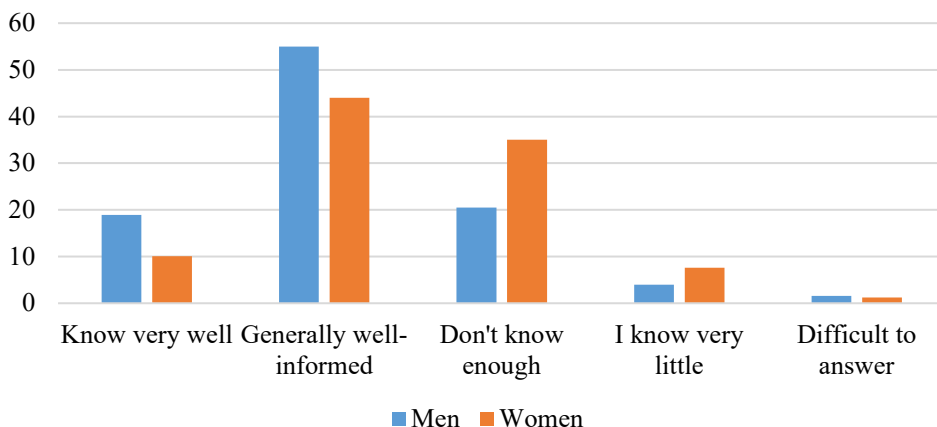
An important indicator of the state of the formulated problem is awareness of safety and rules of behaviour in case of an armed attack on an educational institution [23-27]. The informants expressed different opinions during the interviews, most often talking about the lack of awareness.

However, in general, it can be said that awareness of safety is insufficient. "...When I was still in school, there was an attack on one of the Kazan schools. At that time in the OBG (life safety basics) class we were told about the basic actions in case of an armed attack.... But there were no practical lessons, only theory" (girl, 19 years old).

The majority of respondents positively assessed the level of awareness of young people: 42% of respondents assessed the awareness of youth as "good in general", 8.5% - "very good". However, a significant part indicated insufficient level of awareness - 34.2% of the respondents, 9.3% assessed it as very bad. 6.1% found it difficult to answer.

It is interesting that respondents more often assess personal awareness better than in general among the social group of young people: the total share of positive assessments of personal awareness is 15% higher compared to the group, the frequency of low personal awareness variant is correspondingly 10% less frequent.

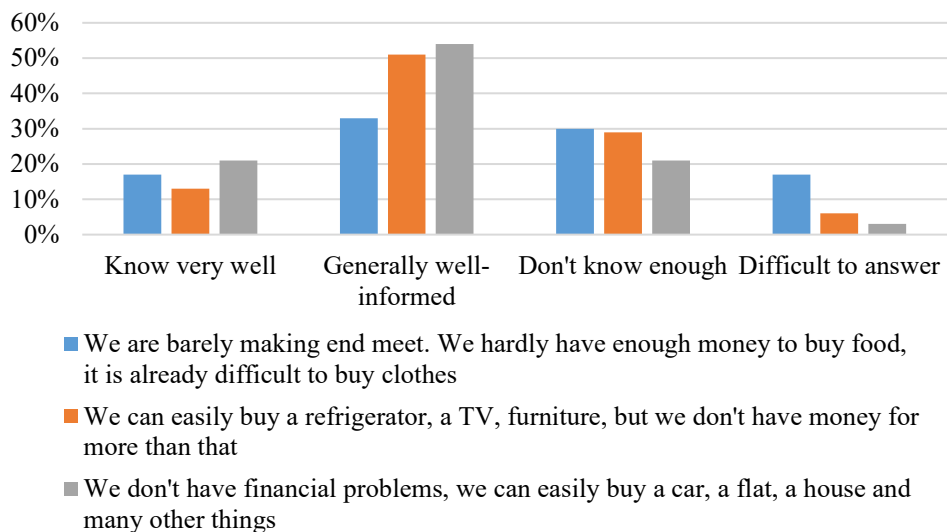
Statistical analysis revealed the links between the distribution of answers to the awareness questions and the gender and financial status of respondents [28; 29]. All this is becoming particularly relevant in the age of digital technologies [30-38]. Estimates of youth awareness in the responses of young men were shifted in favor of choosing answers with the options "very good" and "generally good", while girls more often chose the options "not good enough" and "very bad" ( $\chi^2=12.916$  at  $p<0.012$ ). This tendency showed itself even more pronounced when answering the question about personal awareness ( $\chi^2=49.683$  at  $p<0.0001$ ). As can be seen in Fig. 1, the share of girls in the response options "very well aware" and "generally well aware" is about 10% less than that of boys in self-assessments of awareness of safety and rules of behavior in case of an armed attack on an educational institution.



**Fig. 1.** Bivariate distribution of answers to the question "Assess your awareness of safety and rules of behavior in case of armed attack" and gender (in % by gender)

This distribution can be associated with the culture of traditional masculinity and gender role distribution, where a man should be self-sufficient, self-reliant, and this connection was to a certain extent expected in contrast to the connection obtained when pairing the answers to the question with the level of income.

In terms of income, the better-off are more often inclined to give high estimates of modern youth's awareness of safety and rules of behavior than representatives of youth with average and low financial status. Thus, for example, among financially disadvantaged students, 29.5% of students with low incomes, 41.5% of students with medium incomes, and 47.6% of students with high incomes generally rated awareness as good; very poor awareness was reported by 18.2%, 9.9%, and 5.3% of respondents, respectively. The same trend can be traced when answering the question about personal awareness of respondents (see Fig. 2).



**Fig. 2.** Bivariate distribution of answers to the question "Rate your awareness of safety and rules of behavior in case of an armed attack" and income (in % by income)

Security of the educational institution, where the interviewees study, on a five-point scale was assessed by respondents more often by positive marks. Only 7.9% of students marked the lowest level of safety as 1 point, 2 points were given by 12.6% of students. The majority chose the average score: 3 points were given by about 33% of students. 4 points were given by 28.8%. 17.7% gave the highest score on the proposed scale.

Girls have less optimistic evaluations of the security system compared to boys ( $\chi^2=49.683$  at  $p<0.0001$ ): for example, 21.5% of boys and only 13.5% of girls gave a score of 5. The dynamics is similar when pairing with income: there are also lower security system scores given by students with low financial status.

With a high frequency of positive scores in assessing the security system, it is alarming that 36.9% of students experience fears about the safety of the educational organization, of which 6.8% constantly and 30.1% periodically. 31.7% indicated that they experience fear rarely, 27.9% - that they do not experience fear about armed attacks on educational institutions of the city.

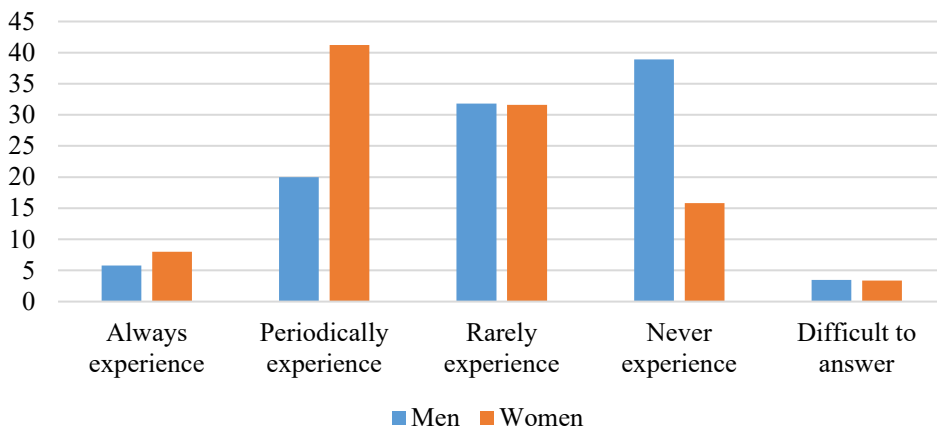
The analysis of one of the interviews shows the contradictory feeling of fear: "The feeling of security is present, but only because there has not been an armed shooting at our university yet. It seems that this is a serious educational institution, and not everyone can even enter here, let alone shoot. But in case of anything, there is nowhere to hide: the corridors are bare, all unused classrooms are closed, emergency exits are still closed" (girl, 21 years old).

In another interview, an informant explains fear as a feeling of anxiety for his relatives: "Personally, I feel fear now, because many of my friends work in security, and as we know, these representatives of the profession are the first to be killed. But some security measures have been taken... I do not feel it as vividly as before (for example, after the shooting in Kazan or Perm)" (young man, 20 years old).

Bivariate distribution revealed a statistically significant relationship with respondents' gender and income for this variable as well. Among the less well-off, not only is the frequency of low scores for physical security in educational institutions higher, but also the frequency of fears associated with the threat of armed attack is higher ( $\chi^2=49.683$  at  $p<0.0001$ ). For example, among those who chose the lowest score, the share of "poor" students was 15.9%, and the share of "rich" students was only 6.5%; the frequency of constant

fear among "poor" students was 15.8%, and among "rich" students 8.2%, respectively. At the same time, the proportion of students with high material wealth who gave a total of 4 and 5 points to the security system amounted to 56.9%, while the proportion of students with low wealth was only 34.1%, and the percentage of students not experiencing fear was 28.8% and 19.3%, respectively.

It was also found that fear was significantly higher among girls compared to boys ( $\chi^2=49.683$  at  $p<0.0001$ ) (see Figure 3).



**Fig. 3.** Bivariate distribution of answers to the question "Do you currently experience fear of possible armed attacks on educational institutions of the city" and gender (in % by gender)

Interesting results were obtained in the course of answering the question about measures to be taken by the authorities and administration of educational institutions to prevent armed attacks (no more than two options could be selected, therefore, the percentage distribution in the submitted materials exceeds 100%). The most popular measure among young people was strengthening security, access control and technical equipment in educational institutions (66.9%). Changing the rules for selling weapons (34.7%) and improving psychological assistance (31.3%) ranked second and third, respectively, by a wide margin in the system of measures to improve the safety of educational institutions from armed attacks. Approximately one in five (22.8%) stated the need to improve living standards and reduce social inequality as a measure to help prevent this form of violence in society. The introduction of additional prevention and self-defense classes as part of the educational process (16.1%), as well as the strengthening of educational work among adolescents and young people (13.2%), can be considered the least effective in the opinion of young people.

Girls more often chose two answer options: changing the rules for the sale of weapons - 41% (in comparison, for boys it amounted to 28.9%), as well as a measure to strengthen security and access control in educational institutions - 70.7%. Young men chose the last one less often (63.5%), but more often pointed to the need to improve living standards and reduce social inequality - 26.6% (for girls, this indicator amounted to only 18.7%).

When the answers to this question were correlated with respondents' incomes, it was revealed that the answer option related to improvement of living standards was chosen by young people with low incomes (their share is about 10% higher). Also, the share of this group in the number of psychological help choices is higher. Those who can be attributed to the middle class and the well-off, more often indicated the answer options related to the strengthening of security and educational work in educational organizations.

## 4 Conclusions

The survey results demonstrate rather high self-assessments of young people's awareness of safety rules in educational institutions, which can be observed more often among students with higher incomes compared to the poor and among boys compared to girls. With fairly high scores assigned by the questionnaire respondents to the security of educational institutions, there is still a high level of fear of armed attacks. The ranking of scores and "distribution" of fear by groups is not homogeneous: the poor and female respondents are more afraid. The survey results also showed that young people see the most effective measures to prevent attacks as strengthening security, access control and technical equipment in educational institutions. Other methods of prevention, such as tightening the rules for the sale of weapons and strengthening psychological work, are twice as rarely mentioned by students as effective measures to combat threats to physical security. When identifying the leading ways to reduce the risks of armed attack, a correlation with gender and income was found, which can be explained by gender stereotypes and social deprivation. The identified correlations allow us to conclude the importance of the gender and socio-economic status of the learner for risk perception and assessments of the school shooting situation.

## Acknowledgments

This paper has been supported by the Kazan Federal University Strategic Academic Leadership Program (Priority-2030).

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