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**PARENTS' OPINION TOWARDS SINGLE-SEX
AND COEDUCATIONAL SCHOOLS: A STUDY IN KAZAKHSTAN**

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Abstract: *Single-sex education is a vast topic; it has many areas of study. The majorly covered field is comparative study on academic performance between single-sex and coeducational students. Academic performance evaluation is covered from kindergarten to university students. The other major area of study is the evaluation of opinions of teachers, parents, students themselves and other stakeholders in the education system. Many interesting areas of studies conducted on gender-based schooling education. In this particular research, the author evaluated the opinion of parents. It is found out that parents consider coeducational schools more advantageous. The second set of findings is that there is no demographic variable that determines schooling type preference.*

Keywords: *single-sex education, school choice, parent opinion*

INTRODUCTION

In this research, the parents were given a list of 12 criteria and they were asked to choose for each criterion an educational type, which they consider advantageous. These 12 criteria were developed especially from Mael, Smith, Alonso, Rogers and Gibson's (2004). The authors (Mael et al, 2004) prepared a list of pro-single-sex schooling arguments under "Proposed Explanations in Favor of Single-Sex Schooling" and the same way listed arguments disfavoring single-sex schooling in a separate list.

In the current study, these 12 criteria will be put forward in front of parents to decide which schooling type they consider to be beneficial. These criteria were prepared by considering Kazakhstan's social context. Here are points of view by Mael et al (2004) on two arguments. The authors believes single-sex schools lead to male (or female) bonding that can be construed as developing exclusionary (and even discriminatory) networks and cliques, which can affect the success of students even many years after schooling. Strong bonding of schoolmates is a positive achievement of single-sex school but it also has a risk of turning into exclusionary and discriminatory networks, so called "cliques". The problem lies being both on being discriminatory

towards others and repels to develop a relationship with outsiders. It may be even more problematic if this exclusionary group formed from a private elite single-sex school that has an amount of understanding being disadvantaged. The early school bonding may turn into a future business partnership.

Mael et al (2004) further argues single-sex schools do not prepare students for mainstreaming into the mixed-sex workplace and society. Opponents of single-sex schooling in the opinion that both boys and girls it is most appropriate to have interaction, group study and take challenges as a team from early stages with the opposite sex, which will enhance capabilities and competencies and will prepare for real-life situations. Some authors argue that the operationalization of this assumption that coeducational students cope better in the mixed-sex workplace has not been forthcoming, nor has the evidence to support it and put forward opinion that a study in this angle is required (ibid).

There is a high academic debate over the pros and cons of single-sex schools. The major challenge in research is difficulty in conducting random sample experimental research. That is to have classrooms with students being randomly assigned as single-sex and coeducational. In reality, this kind of case is almost impossible, in today's context parents and students choose in which school to be enrolled. Just having an intention is also insufficient as there is "selection and school quality effect", where a willingness is not enough because the admission criteria to be met.

Kocak (2019a) believes it is inadequate to compare academically reputed single-sex institutions with government neighboring schools. Considering continued academic performance of university students hailing from single-sex and coeducational schools, with a belief that being admitted into the university itself minimizes differences for future opportunities.

In terms of "selection and academic quality effects", Roberson (2010) took a theoretical study along with empirical research considering this significant subject. In his master thesis, Roberson (2010) classifies the "selection effect" into two categories, "school-driven selection effect" and "student-driven selection effect". The first is a case when the school has admission criteria and selects the student, and the second student/parent chooses school upon their interests and opportunities. In general, the single-sex schools happen to be well established and academically reputed with admission criteria. Thus, it is possible that any positive outcomes associated with public single-sex schools are the result of selection effects. That is, it possible that public single-sex and coeducational schools enroll students differentially as a function of achievement, with single-sex schools selecting those students who are already high achieving. In majority cases, the single-sex schools are privately owned schools for affluent families.

Thus, any research dedicated to the comparison of private single-sex schools with public coeducational schools would be essentially meaningless in terms of uncovering the potential benefits of single-sex education (ibid).

In the empirical part of the study, the author (Roberson, 2010) compared the academic achievement of 492 female students aged between 10-13 admitted in single-sex and coeducational public magnet schools. Students were divided into three groups, the first one is those who are studying in a single-sex school, the second group is those who applied for single-sex school hence in waiting list and currently studying in the co-educational school, and the last third group is students who have not applied for single-sex and just studying in coeducation. Standardized state achievement test scores were collected for comparative analysis. The author recorded exam results before joining and opting to enter in single-sex schools and analyzed how schooling type affects the student. Considering the "selection effect" the author has chosen schools having similar admission criteria. Findings revealed that the quality of the school was more determinant in students' achievement, not the gender-based criteria. In some inferential analysis, the author has performed Student t-Test analysis to compare the difference, hence t-Test used when the sample size is inadequate. The author using ANOVA could have been much correct.

Significance and Objectives of the Study

Significance of this study is being conducted in Kazakhstan, a post-Soviet country. Single-sex schools in this country were established after independence by the privately owned educational foundation. Turkish entrepreneurs have established the foundation as Kazakh-Turkish Educational Foundation. The interesting fact about this foundation is building collaboration with the Kazakh government. The government funded the single-sex schools for gifted children established by the foundation. These privately run hence governmentally owned and funded single-sex schools for gifted boys and girls admits students from seventh grade and very prestigious establishments in Kazakhstan. The Foundation also established privately owned fee-based institutions. The later foundation was split into two "Bilim-Innovation Educational Foundation" and "Bilim-Orda Educational Foundation". All publicly owned and funded institutions were brought under "Bilim-Innovation" and all privately owned fee-charging institutions were kept under "Bilim-Orda".

Kocak (2019b) has taken the research about these foundations' action. The study was conducted in four schools, and the same questionnaire was distributed among parents of single-sex and coeducational schools. For parents of single-sex schools, it is more of a "school-driven selection effect" as for the school's academic reputation, future opportunities, and government

support is an attraction in the process of the selection. For parents of coeducational schools, it is fee-based reputed schools for affluent families, which can be categorized as "student-driven selection effect". The study aims to analyze aspects of how parents view single-sex schools. In the literature review, a set of research papers related to gender-based school choice are critically analyzed and reviewed.

Research Questions

1. What are the opinions of parents towards single-sex vs coeducational schools?
2. Which type of schooling is considered to be advantageous by parents?
3. Which demographic variables determine the preference of schooling type?

Hypotheses:

- H1: Fathers consider single-sex schools to be more advantageous
- H2: Parents, whose children are in a single-sex school, consider single-sex schools to be more advantageous
- H3: Traditional parents consider single-sex schools to be more advantageous
- H4: Religious parents consider single-sex schools to be more advantageous

LITERATURE REVIEW

Tichenor, Tichenor, Piechura-Couture, and Heins (2012) researched the satisfaction of parents on single-sex education. The study was conducted in one of the elementary public schools (PreK-5) in South Carolina, USA. The school offers single-sex education as an option for parents, and they can choose to opt-out any time, one-third of classes are in single-sex format. Out of 650 student body schools, the 95 parents responded for the survey. The South Carolina Department of Education's Office of Public School Choice developed the questionnaire. Questions consisted of both closed and open-ended formats. The questionnaire was handed over to students to be given to parents and a one-week time slot was given to get envelope returned. The main pinpoints in the survey were how parents evaluate the impact of single-sex schooling on students' performance. The criteria included the following elements: Self-Confidence, Motivation, Self-Esteem, Independence, Self-Efficacy, Attitude towards School, Behavior, and Grades. The 7-point scale was from "Greatly Decreased" to "Greatly Increased", "No Change" in the middle. The answers were summarized into three categories: decreased, no-change and increased.

Abovementioned study has interesting findings. All the criteria observed have demonstrated the positive change (increase), with a minimum of 72.5% for criteria "Behavior" for boys. The highest positive change was found in

"Self-Confidence" and "Motivation" criteria for girls. Overall, for all criteria, parents had an opinion of single-sex classes had a positive impact. For the question of teachers' gender-based professionalism, the majority of the parents had a positive opinion on this aspect as well. For the question of overall satisfaction on single-sex education, 98% of parents had positive feedback. Hence, should be noted that the authors had not considered the opinion of parents, who opted out from the single-sex program. It was not given space what were the reasons, as in the current context just parents who are satisfied with single-sex education remain.

As a part of the inferential analysis, the authors used Chi-Square Test for testing the difference between parents of girls and boys. Hence cross-tabulation analysis Chi-Square Test is used to analyze the "association" between categorical variables, where answers are also categorical. Initially, the questionnaire was designed in a 7-point Likert type scale, and answers were converted into three categories to suit for the Chi-Square test. The "association" concept in the Chi-Square Test can be interpreted as a difference; hence, the ANOVA method to analyze the difference could have been much more feasible and correct.

Shah and Conchar (2009) analyzed gender-based school choice from the cultural and faith perspectives in Nottingham City, the UK. The findings show, 90% of Muslim respondents consider single-sex education as "important", compared to 27% of Christian respondents. This indicates that there is an association between faith and gender-based school choice. Especially male Muslim respondents showed a keen interest in single-sex schooling for their daughters. The sample was grouped into born and not born in the UK. Ethnic minorities, who were not born in the UK, stood out to be more inclined towards a single-sex form of education. Thus, we can conclude that the cultural influence affects the choice of the school. Adolescent ethnic minority respondents, who are generally the UK born, favored coeducation as their choice. Authors also evaluated religious doctrines and expert opinions on women in Islam and sex-segregation in Islam.

Another compelling comparative study on factors affecting gender-based school choice is from Kaushik, Garg, and Saxena (2012) conducted in India. The authors evaluated seven papers dated 1997, 1992, 1987, 2004, 1985, 2004 and 2007. Their research is quite past distant. The target group for the study was university students. In higher educational context there are just all-girls colleges or coeducational colleges, there are no all-boys colleges in the state of Haryana, India. 430 respondents' questionnaire was shortlisted after screening, containing both quantitative and qualitative questions. Questions mainly focused on factors that will affect them in their future choice. For girls

from single-sex the "Parents' opinion" comes first, for girls in coeducational colleges the "familiarity group" is a primary factor and for boys, it is "Friends advice". In terms of the choice, the majority of the respondents wish to join coeducational courses as their future choice. Even girls from single-sex colleges wish to continue in coeducation.

Jackson and Bisset (2005) conducted similar research in the UK context. Authors point out that in the UK school education market the number and popularity of single-sex fell down, both in private and public sectors. The target group was selected middle-income families of three privately owned schools. Schools consisted of one girls', one boys' and one coeducational school. Both single-sex schools belong to the same educational foundation and all three are in close proximity. The new parents were chosen for this study, i.e. they should have been recently admitted. Idea is to take and evaluate their decision-making process. Data collection was done through quantitative questionnaire from parents and qualitative semi-structured interviews from parents. Semi-structured interview was taken from 15 parents, who have shown interest from the initial questionnaire. One of the interesting input variables is whether parents themselves have been educated in a single-sex school. In the questionnaire parents had to give 10 ranks for the set of 13-factor criteria. Among parents, those chosen single-sex schools, just 45% stated that "type of schooling" was the factor/reason in their choice, that is just 45% of parents have included "schooling type" among the top 10 ranks. For parents of girls, the schooling type was more important than for the parents of boys. For the majority of the parents, the "academic results" and "reputation" of the schools were the main two reasons in taking admission in both schooling types. Authors cited one parent's answer "[We chose the school] not because it was single-sex, but because it had the best exam results". Authors also share that in the society the single-sex schools have positive impression being for elite and high achieving, and middle-income families opt to be among. Through an inferential analysis, more factors were tested for the association: parents' being educated in a single-sex school, parents having more than one child and mother-father opinion.

In his scientific paper conducted in Aotearoa, New Zealand, Watson (1997) contacted three families and made a qualitative interview with them (both parents and daughter) to analyze the secondary school choice factors for their daughter. The main angle of the questions surrounded what are the reasons in opting for single-sex schooling. Initially, the author has evaluated the theoretical arguments from different perspectives on the topic of choosing single-sex schools. Then, interview results were presented for three families separately. The daughter of the first family thinks that in single-sex schools she will be away from destruction from boys, and will have safe space for

concentration. Her parents are in the opinion that in current time single-sex schooling does not prevent girls from building a relationship with boys, and just see the benefit of admitting in girls' school. The second family, where the parents were unskilled and semiskilled workers, they wanted their daughter to be admitted to the single-sex school without any clear reasons, they have been sure their daughter will be better educated there. The daughter of the second family thought the same as her parents and she will avoid a distraction caused by boys. Third family' results were in similar lines. All three girls have an opinion that boys will be a distracting factor in the future, if not now and at the same time, they expressed an interest in communication with boys in the future, but fearing of possible hindrance in their academic pursuit.

RESEARCH METHODOLOGY AND DATA ANALYSIS

Three schools in Almaty city were chosen, two being single-sex (girls' and boys') and one being coeducational school. One coeducational school in Nur-Sultan (Astana) was joined to our study. In total two single-sex and two coeducational schools were targeted. Parents of students from 7th to 11th grade were chosen randomly. Approximately, there are 1,500 students in four schools in these grade categories. The questionnaire was circulated during the parents meeting, which was feasible indirectly communicating with parents and explaining the research. 90 parents responded to the questionnaire, hence 78 was shortlisted after identifying errors and non-response to the compulsory questions. The data have been entered into Excel for editing and coding, and later transferred to SPSS software for statistical inferences.

The questionnaire was designed in three sections. The first section included demographic and family-related questions. The first question was related to the "Grade" of the student. The parents of students from 7th grade were selected, as in Kazakhstan there are boarding single-sex schools for gifted children, which admit students from 7th grade. The parents of students from 7th grade of coeducational schools were joined to our research. Results of responses are presented in *Table 1*.

The second question was related to the parents, who participated into the questionnaire. *Table 2* presents frequency distribution. Generally, mothers attended the meeting; hence, there are still a couple of instances grandparents and elder siblings attending the meeting.

The third question is about the "Monthly Income" of the family. *Table 3* presents the frequency distribution of this variable. 53% of parents opted not to answer these questions, which was optional to answer. We hoped to correlate single-sex schooling opinion with income level. However, we have received less than half of the parents' answers and rejected this variable from our analysis.

Table 1**Frequency distribution of variable "Grade"**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	7	19	24.4	24.4	24.4
	8	21	26.9	26.9	51.3
	9	16	20.5	20.5	71.8
	10	11	14.1	14.1	85.9
	11	11	14.1	14.1	100.0
	Total	78	100.0	100.0	

*Source: calculated by author***Table 2****Frequency distribution of variable "Parent"**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Father	11	14.1	14.1	14.1
	Grand Father	2	2.6	2.6	16.7
	Grand Mother	1	1.3	1.3	17.9
	Mother	62	79.5	79.5	97.4
	Sister	2	2.6	2.6	100.0
	Total	78	100.0	100.0	

*Source: calculated by author***Table 3****Frequency distribution of variable "Income"**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0\$	2	2.6	5.6	5.6
	1-500\$	8	10.3	22.2	27.8
	501-1,000\$	6	7.7	16.7	44.4
	1,001-2,000\$	4	5.1	11.1	55.6
	2,001-5,000\$	10	12.8	27.8	83.3
	5,001+	6	7.7	16.7	100.0
	Total	36	46.2	100.0	
Missing Data		42	53.8		
Total		78	100.0		

*Source: calculated by author***Table 4****Frequency Distribution of variable "Traditional"**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	1	1.3	1.6	1.6
	Neutral	14	17.9	22.2	23.8
	Agree	34	43.6	54.0	77.8
	Strongly agree	14	17.9	22.2	100.0
	Total	63	80.8	100.0	
Missing Data		15	19.2		
Total		78	100.0		

Source: calculated by author

The following two questions of section one are about how traditional and religious their family is. *Table 4* presents "Traditional" and *Table 5* presents "Religiosity" frequency distributions. Most of the families consider their family to be traditional and in terms of religiosity majority families consider themselves as neutral in this angle.

Table 5
Frequency Distribution of variable "Level of Being Religious"

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	1	1.3	1.8	1.8
	Disagree	4	5.1	7.0	8.8
	Neutral	39	50.0	68.4	77.2
	Agree	9	11.5	15.8	93.0
	Strongly agree	4	5.1	7.0	100.0
	Total	57	73.1	100.0	
	Missing Data	21	26.9		
	Total	78	100.0		

Source: calculated by author

The last question of the section one is the main one, "Type of Schooling". *Table 6* presents frequency distribution is 57.7% to 42.3%, which is acceptable.

Table 6
Frequency Distribution of variable "Type of Schooling"

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Coeducational	45	57.7	57.7	57.7
	Single-sex	33	42.3	42.3	100.0
	Total	78	100.0	100.0	

Source: calculated by author

In section one, the questions related to the gender of the child were not asked. The purpose was not to push a biased approach for girls and boys. The city was included in the questionnaire, as it is not to be used in data analyses; there are two cities and schools are not equally distributed. The question on whether parents themselves were educated in single-sex schools was not included as during Soviet-period there was no single-sex schooling format.

The second section of the questionnaire is focused on the opinion, which schooling type they consider to be much advantageous on 12 criteria. Questions were formatted as "Which schooling type you consider to be advantageous on *criteria*?" The answer options included just three categories "Single-sex", "Coeducational" and "No Difference". The questions were unbiased, i.e. in the answering respondent have to choose one schooling type or keep neutral. *Table 7* represents results. Single-sex schooling was favored for "Educational attainment", "Protection from sexism" and "Protection from harmful activities". In terms of "Teacher as Role Model", there was "No difference". Coeducational

schooling is favored for "Moral development", "Admission of girls into STEM", "Gender formation", "Friendship bonding", "Life skills development", "Opportunities of extracurricular activities", "Preparedness for mixed-sex work space" and "Preparedness for family building". It can be observed that parents have more trust in the coeducational format of education.

Table 7

Descriptive analysis of Section two questionnaire

No	Criteria	Coeducational		No difference		Single-sex		Total	Top
1	Educational attainment	26	33.33%	21	26.92%	31	39.74%	78	Single-sex
2	Moral development	32	41.03%	23	29.49%	23	29.49%	78	Coeducational
3	Admission of girls into STEM	28	35.90%	26	33.33%	24	30.77%	78	Coeducational
4	Teacher as Role Model	22	28.21%	32	41.03%	24	30.77%	78	No difference
5	Gender formation	31	39.74%	27	34.62%	20	25.64%	78	Coeducational
6	Friendship bonding	33	42.31%	24	30.77%	21	26.92%	78	Coeducational
7	Life skills development	43	55.13%	19	24.36%	16	20.51%	78	Coeducational
8	Opportunities for extra-curricular activities	32	41.03%	26	33.33%	20	25.64%	78	Coeducational
9	Protection from sexism	24	30.77%	22	28.21%	32	41.03%	78	Single-sex
10	Protection from harmful activities	24	30.77%	25	32.05%	29	37.18%	78	Single-sex
11	Preparedness for mixed-sex work space	46	58.97%	21	26.92%	11	14.10%	78	Coeducational
12	Preparedness for family building	39	50.00%	22	28.21%	17	21.79%	78	Coeducational
	Summation	380		288		268		936	

Source: calculated by author

The new variable "Sum" is created by summing up all 12 criteria for each respondent. "Single-sex" was valued +1, "No Difference" to 0, and "Coeducational" to -1. If we sum up all 12 criteria, it will indicate towards which direction the respondent is more inclined.

The first hypothesis is

H1: Fathers consider single-sex schools to be more advantageous

Fathers and mothers are two categorical data, and sum is scale. In this regard, the ANOVA method is used to test the hypothesis. Grandparents and elder siblings are eliminated from this analysis. *Figure 1* presents the interval plot for two variables. The mean value for "Father" is -1.27, and for "Mother" is -2.097. Both parents prefer coeducational schooling. The probability value is 0.735; there is no statistically significant difference between father and mother.

The second hypothesis is

H2: Parents whose children in single-sex schools consider single-sex schools to be more advantageous

Over here, the variable "Type of schooling" is categorical, and "Sum" is scale. Like in the first hypothesis H1, ANOVA method is used to test the difference between the two groups. *Figure 2* presents an interval plot for two variables. The mean value for "Single-sex" is -3.515 , and the mean value for "Coeducational" is 0.09 . It is interesting to note that parents whose children in single-sex schools consider coeducation as more advantageous, and parents whose children in coeducation consider no difference between. The probability value of 0.035 is less the 0.05 , indicating there is a statistically significant difference. As it was mentioned, in Kazakhstan's context the single-sex schools are government-funded institutions for gifted children. It is prestigious to study in these schools, hence parents actual would have preferred coeducation.

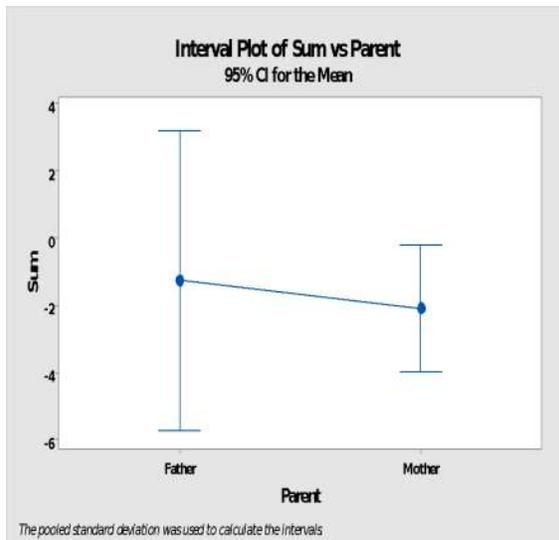


Figure 1: Interval Plot of Sum vs Parent

Source: created by author

The third hypothesis is

H3: Traditional parents consider single-sex schools to be more advantageous

Over here, the variable "Level of Being Traditional" is a scale, "Sum" is a scale. In this case, Pearson's Correlation test is used to analyze the correlation significance. *Figure 3* displays a scatter plot for two variables. The probability value from the test is 0.395 , which indicates there is no statistically significant correlation. Being traditional does not determine schooling type.

The last hypothesis is

H4: Religious parents consider single-sex schools to be more advantageous

Here also we use Pearson's Correlation test to analyze the relationship and determination. *Figure 4* displays the scatter plot for two variables. The probability value for the test is 0.107 , which is greater than 0.05 ; it means there is no statistically significance between the two variables.

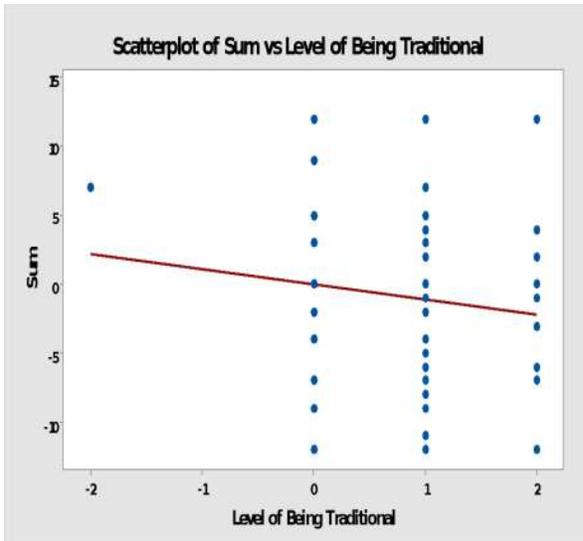


Figure 3: Scatterplot of Sum vs Level of Being Traditional

Source: created by author

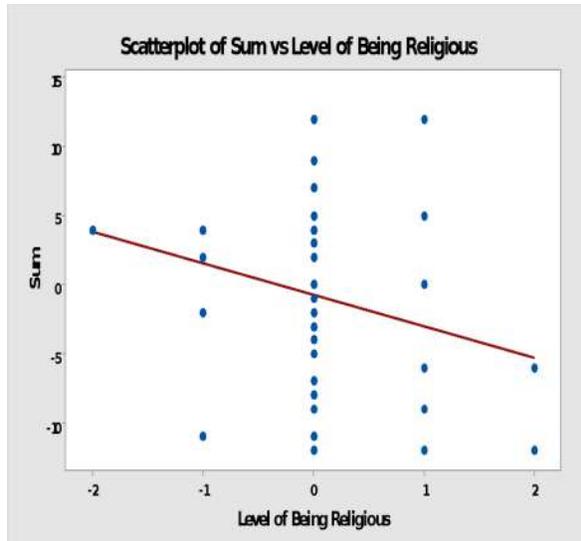


Figure 4: Scatterplot of Sum vs Level of Being Religious

FINDINGS

1. Single-sex schooling was favored for "Educational attainment", "Protection from sexism" and "Protection from harmful activities".

2. In terms of "No Difference", it is "Teacher as Role Model", schooling type do not decide teacher being played as a role model.

3. Coeducational schooling is favored for "Moral development", "Admission of girls into STEM", "Gender formation", "Friendship bonding", "Life skills development", "Opportunities of extracurricular activities", "Preparedness for mixed-sex work space" and "Preparedness for family building".

4. Both parents prefer coeducational schooling and there is no statistically significant difference.

5. Parents, whose children in single-sex schools, in contrary consider coeducational schools to be more advantageous.

6. Family's traditional and religious levels do not determine schooling preference.

CONCLUSIONS AND DISCUSSIONS

The findings of this study are in the line with Jackson & Bisset's (2005) conclusions. As many other earlier studies concluded, it is an academic achievement of the school, not its format that attracts to itself. Tichenor, Tichenor, Piechura-Couture, and Heins (2012) researched parents' satisfaction, for Kazakhstan's context, this would not have been proper format to compare the satisfaction. Hence, a separate study for two types of parents can take place in the future on the topic "How parents of single-sex schools are

satisfied with school from the perspective of gender-based education will be an interesting study?"

Shah and Conchar (2009) concluded that the religious aspect of parents plays an important role in gender-based school type choice. The majority of Muslims prefer the single-sex format of education for their children. A similar angle was tested in this research and it was found no difference both in religious and traditional perspectives. The authors have researched the cultural influence, as well. They concluded that cultural influence plays a role in school type preference. Such influence could be observed how the UK born young Muslim preferred coeducation rather than single-sex education. Kazakhstan has a long history of being in the Soviet Union and under the Communist party ruling system. Probably, this cultural influence played a major role in developing a sense of indifference. Maybe it is also Kazakh view on religious principles.

Kaushik, Garg, and Saxena (2012) held an interesting study of how students themselves wish to decide their future course choice. In Kazakhstan, there is just one single-sex higher educational institution, which is "Kazakh State Women's Pedagogical University" (Kocak, 2019b). A study of how they have decided to join this university and in what opinion are they in terms of gender segregation will be another interesting research. As in Kazakhstan, pedagogical faculties and departments are already in the majority of girls.

REFERENCES

1. Tichenor, M.S., Tichenor, J.M., Piechura-Couture, K., & Heins, B. (2012). Hearing the Voices of Parents in Single-Gender Classes. *Advances in Gender and Education*, Vol. 3, pp. 7-13.
2. Kaushik, N., Garg, R., & Saxena, P. (2012). Factor Influencing Choice of Single-Sex Education and Coeducational Classes among Students. *Globsyn Management Journal*, Vol. 6 (1), pp. 41-48. Available at: <https://search.proquest.com/docview/1491113329?accountid=38885>.
3. Jackson, C., & Bisset, M. (2005). Gender and school choice: factors influencing parents when choosing single-sex or co-educational independent schools for their children. *Cambridge Journal of Education*, Vol. 35(2), pp. 195-211.
4. Roberson, A.E. (2010). *The Efficacy of Single-Sex Education: Testing for Selection and School Quality Effects* (Master's thesis). The University of Texas at Austin, Faculty of the Graduate School, Austin, USA.
5. Shah, S.J. A., & Conchar, C. (2009). Why Single-Sex Schools? Discourses of culture/faith and achievement. *Cambridge Journal of Education*, Vol. 39(2), pp. 191-204.

6. Watson, S. (1997). Single-sex Education for Girls: heterosexuality, gendered subjectivity, and school choice. *British Journal of Sociology of Education*, Vol. 18(3), pp. 371-383.
7. Kocak, A. (2019a). Comparative Analysis of Academic Achievement of University Students Coming from Single-Sex and Coeducational Schools: A Study in Suleyman Demirel University, Almaty, Kazakhstan. *International Journal of Social Sciences & Educational Studies*, Vol. 5(4), pp. 209-227.
8. Kocak, A. (2019b). Running single-gender schools for gifted children in Kazakhstan's educational context. In: Doghonadze, N., Krajka, J., & Smeds, J. (Eds.), *Modern Trends in Education in Georgia*, (Volume 2, pp. 31-56). Tbilisi, Georgia: LAP LAMBERT Academic Publishing.
9. Kocak, A. (2020). Single-Sex School Graduates in the Post-School Mixed-Sex Environment: A Study in Kazakhstan. *European Journal of Contemporary Education*, Vol. 9(1), 43-53.
10. Mael, F., Smith, M., Alonso, A., Rogers, K., & Gibson, D. (2004). *Theoretical Arguments For and Against Single-Sex Schools: A Critical Analysis of the Explanations*. United States Department of Education.