

تأثر الفصل بين الذكور والإناث على الأداء الأكاديمي في المدارس الإعدادية الحكومية  
/ مدينة السليمانية

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## The Effect of Male and Female Segregation on Academic Performance in Public Preparatory Schools / Sulaimani City

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**ملخص:** تناولت هذه الدراسة آثار الفصل بين الجنسين على الأداء الأكاديمي والتجارب المدرسية لدى 160 طالباً وطالبة من مدارس البنين والبنات والمدارس المختلطة في السليمانية. وأظهرت النتائج أن تأثير الفصل ليس موحداً: فقد أفادت الفتيات براحة وتركيز أكبر في البيئات أحادية الجنس، بينما أبرز الأولاد آثاراً أقوى على الديناميكيات الاجتماعية والموارد والتطلعات المهنية، بينما أعطى طلاب المدارس المختلطة إجابات أكثر توازناً وتناسباً مع الظروف. وفي جميع الفئات، كانت الإجابة الأكثر شيوعاً هي "أحياناً"، مما يعكس تبايناً في التصورات. وبشكل عام، تشير النتائج إلى أنه في حين يؤثر الفصل بين الجنسين على الراحة والتركيز وثقافة المدرسة، فإن تأثيره على التحصيل الأكاديمي والفرص المستقبلية يعتمد على

السياق. ويبدو أن العوامل الأكثر حسماً هي جودة التدريس وموارد المدرسة والاستراتيجيات التعليمية وليس الفصل نفسه.

### **Abstract:**

This study examined the effects of gender segregation on academic performance and school experiences among 160 students from boys', girls', and mixed schools in Sulaimani. The findings show that the impact of segregation is not uniform: girls reported greater comfort and focus in single-sex settings, boys highlighted stronger effects on social dynamics, resources, and career aspirations, while mixed-school students gave more balanced, situational responses. Across all groups, the most frequent answer was "sometimes," reflecting variability in perceptions. Overall, the results suggest that while gender segregation influences comfort, focus, and school culture, its effect on academic achievement and future opportunities is context-dependent. More decisive factors appear to be teaching quality, school resources, and educational strategies rather than segregation itself.

## **1-Chapter**

### **1-1 Introduction:**

Does it make a difference who you sit next to in class? Does being surrounded by classmates of your own or the opposite sex affect how much you learn and how you perform in exams? Studying in school is a key skill used not only in education, but also in day-to-day life. It builds knowledge and understanding of a subject area which helps prepares you for your future. Academic performance is affected by a host of factors. These include individual and household characteristics such as student ability, motivation, the quality of secondary education obtained and the like. The gender of the student may also be a factor in determining student performance. Childhood training and experience, gender differences in attitudes, parental and teacher expectations and behaviors, differential course taking and biological differences between the sexes may all be instrumental in giving rise to gender differences in achievement (Feingold, 1988).[1] According to Nnaman and Oyibe (2016) Gender is defined as a constructed phenomenon of ascribing different roles, duties, behavior and mannerisms to the two sexes by a society. It refers to specific cultural patterns of behavior ascribed to two human sexes and it has social implications as well [2].Parajuli and Thapa, (2017), defined gender as socially constructed differences between male and female. Traditionally, gender is used to outline how society give different roles to boys and girls.[3]Lahey and Waldman (2003),fined gender simply as being a male or



a female psychologically. Gender is more than just sex which is simply male and female based on biological traits, other characteristics such as, orientation and identity based on individual perception of self are included in the gender aspect [4].

Gender issue is a very influential factor in human behavior and as it has been seen in different researches on attitude and behavior, gender issues have strong effects on academic achievement amongst males and females students (Block, 2006).[5]. A sample study investigating the impact of gender segregation in schools on academic and non-academic education. Academic achievements in Kuwaiti universities are still in their early stages. (Al-Matrouk, 2016), statistical results showed that participants who had attended a mixed gender school scored significantly higher on the peer relations with the opposite gender as opposed to those attending a segregated school in Kuwait. This means that according to the study, they believed that they had good relationships with peers of the opposite gender more than individuals who had attended a non segregated school in Kuwait.[6]. A study that was conducted in three middle schools in Philadelphia (O'Neill, 2010) on the topic of gender separate education concluded that "self esteem formation does not appear to be taking place any differently in single sex versus coeducational settings whereas students in single sex schools witness greater improvements in standardized test scores. On the other hand, it was argued in another study that single sex schooling lacks scientific support and may exaggerate sexism and gender stereotyping (Halpern, 2011).[7]. A natural experiment that was performed at an upper secondary school in Switzerland estimated the impact of single sex education on the academic performances of female students. The results suggested that students in all girls' classes obtained better grades in mathematics than their female fellow students in coeducational classes. A positive effect of single sex education on the proficiency in mathematics in particular was found. (Eisenkopf, 2015).[8]. Different results were obtained in a study done in South Korea; Male students in single sex schools scored more than one quarter of a standard deviation higher than their counterparts in single sex classrooms within coed schools, whereas none of the specifications in their study yielded significant estimates of the impact of peer gender on female students' achievement (Lee, 2014).[9].

**1-2 Research Questions:**

To address this problem, the study seeks to answer the following questions:

1. What is the relationship between male and female students' academic performance in public secondary schools in Sulaimani?

2.Are there significant differences in academic achievement between students in single-sex and mixed schools?

3.How does gender segregation affect students' comfort, focus, participation, and overall school culture?

4.To what extent does school type influence students' social relationships, career aspirations, and well-being?

1-3 Aims of the Study:

The main aims of the research are:

- To investigate the impact of gender segregation on academic performance in public preparatory schools.
- To identify differences in academic outcomes between boys' schools, girls' schools, and mixed schools.
- To explore how school type shapes students' school experiences, including classroom participation, social dynamics, and motivation.
- To provide evidence-based insights that can inform policymakers, educators, and parents about the advantages and challenges of different school models in the local context.

#### **1-4 The objectives of the study:**

1.Investigating the relationship between males and females' academic performance in public secondary schools in Sulaymaniyah.

2.Determining the differences in academic performance between males and females.

#### **1-5 Scope of research:**

After putting the evaluation questions that 17 questions were asked, we visited (8) high schools in the border of Sulaymaniyah governorate ( Halkawt high school , salahadin high school for boys, Twy malik high school , Rawshan bardrxan high school for girls) this is for non-mixed schools .and (Dr. Ezadin Mustafa Rasul High School, Halmat Mixed High School, Arman Mixed High School, Zhir Mixed High School) this is for mixed schools.

#### **1-6 Definition:**

Avulata and Oniyama (1999) defined gender stereotypes as" hidden curriculum" that influences girls conformity expected role by society.[10]. Moreover, Beticu (2002) defined gender as social. Determine the characteristics of each gender, male or female.[11].

### **Chapter -2**

2-1 literature review:

| Author(s) | Year | Study Focus | Key Findings | Relevance to Your Study |
|-----------|------|-------------|--------------|-------------------------|
|-----------|------|-------------|--------------|-------------------------|



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|                |        |   |  |   |
|----------------|--------|---|--|---|
| Feingold, A.   | 1988   | Disparities between genders in academic performance | Gender influences academic achievement through a variety of societal and personal factors. | Supports the notion that a significant factor in performance is gender. |
| Nnaman Oyibe   | & 2016 | Gender roles are socially constructed.              | Social expectations define gender roles.   | Offers a theoretical framework for analysis pertaining to gender.       |
| Parajuli Thapa | & 2017 | Gender norms and social roles                       | Academic experiences are influenced by gender roles.                                       | Demonstrates how student performance is influenced by expectations.     |
| Lahey Waldman  | & 2003 | Gender psychology                                   | Gender encompasses not only biological characteristics but also identity and orientation.  | Enhances comprehension of gender beyond biological categorization       |
| Block, J.H.    | 2006   | Behavior and gender                                 | Gender has a big impact on behavior and academic performance.                              | Reinforces the behavioral elements that affect results.                 |
| Al-Matrouk, L. | 2016   | Segregation of genders in Kuwaiti universities      | Compared to segregated students, mixed-gender kids had better peer interactions.           | Outlines potential social advantages of coeducation.                    |
| O'Neill, T.    | 2010   | Philadelphia's gender-segregated school system      | Test scores increased at single-sex schools, but   | Segregation has a positive academic impact but has a                    |



|                  |      |  |  |
|------------------|------|--|--|
|                  |      |  | self-esteem was mixed impact<br>unaffected. on mental<br>health.   |
| Halpern et al.   | 2011 | Single-sex<br>education<br>criticized.                 | There is no questions the<br>is scientific advantages of<br>evidence to gender<br>justify single- segregation<br>sex education,<br>which could<br>reinforce<br>preconceptions. |
| Eisenkopf et al. | 2015 | Swiss courses<br>just for girls                        | In math, girls Female<br>did better in segregation is<br>classes with just associated with<br>one sex. favorable<br>academic<br>outcomes.                                      |
| Lee et al.       | 2014 | Separation of<br>genders in<br>South Korean<br>schools | Peers were shows that<br>in outperformed by segregation has<br>boys in single- a gender-<br>sex schools, but specific impact.<br>girls were not<br>significantly<br>affected.  |

## 2-2 Benefits of previous research:

The researchers has benefited from previous studies such as:

1. Set goals of this research.
2. Preparation of research tools.
3. How to find the honesty and stability of the tool.
4. Use of statistical tools.

## 3-Chapter

### 3-1 Research Population:

Determining the research population is considered one of the important tasks in conducting the research. That is in (Halkawt high school, Salahadin high school for boys , Rawshan bardrxan high school for girls) this is for non-mixed schools .and (Dr. Ezadin Mustafa Rasul High School, Halimat Mixed High School, Arman Mixed High School, Zhir Mixed High School) this is for mixed schools, For the academic years .(2024\_2025).Finally we collected (160) data.

### 3.2 Validity of the Attitude Scale:





To verify the face validity of the instrument in terms of structure and linguistics, it is necessary to determine the face validity. For this purpose, we presented the instrument to a number of experts in various fields of psychology and education specialists, as shown in appendix (1) This was done for them to express their opinions on the clarity of the items and their suitability for respondents, and to enrich the scale items with their suggestions. In this regard, experts believe that this percentage should not be less than 70%, otherwise the item should be modified or removed. No items were removed from the prepared scale.

### **3.3 Reliability:**

To determine the reliability of the research, it was repeated on the same scores as the first time after two weeks had passed since the first administration, Shahid Jamal tahir girls High School meaning it was conducted on date (Wednesday) day (8/1/2025) . After compiling the responses in the same manner as the first time, the results were as shown in appendix (2). By using the Pearson correlation coefficient equation and SPSS for the samples from both administrations, it was found that the value of this coefficient was (0.87), therefore this scale is suitable for measurement. It indicates that any test with reliability higher than (80%) is considered as a good test.

### **3.4 Implementation of the tool:**

The scale, with all its items, in the first semester with the that's in ( Halkawt high school , salahadin high school for boys , Rawshan bardrxan high school for girls) this is for non-mixed schools .and (Dr. Ezadin Mustafa Rasul High School, Halmat Mixed High School, Arman Mixed High School, Zhir Mixed High School) this for mixed school help teacher to (160) students of First year in the that's in ( Halkawt high school , salahadin high school for boys , Rawshan bardrxan high school for girls) this is for non-mixed schools .and (Dr. Ezadin Mustafa Rasul High School, Halmat Mixed High School, Arman Mixed High School, Zhir Mixed High School)

The response of each individual was calculated generally by giving (1, 2, 3) for the positive items of the scale to the always and sometimes and never . (It is worth noting that this scoring was reversed for the positive items, and their scores were as shown in appendix (3).

$$r = [n(\sum xy) - (\sum x)(\sum y)] / \sqrt{[n(\sum x^2) - (\sum x)^2][n(\sum y^2) - (\sum y)^2]}$$

- n is the number of data points.
- x and y are the individual data points in the two sets.
- Σ represents the summation of all values.
- Σxy is the sum of the product of each x and y pair.
- Σx is the sum of all x values.



- $\Sigma y$  is the sum of all y values.
- $\Sigma x^2$  is the sum of the squares of all x values.
- $\Sigma y^2$  is the sum of the squares of all y values.

#### 4- Chapter

#### Results and Discussions

#### 1- Frequency Tab for girls' high schools

##### Gender

|              | Frequency | Percent | Valid Percent | Cumulative Percent |
|--------------|-----------|---------|---------------|--------------------|
| Valid female | 40        | 100.0   | 100.0         | 100.0              |
|              |           |         |               |                    |

##### type of school

|                    | Frequency | Percent | Valid Percent | Cumulative Percent |
|--------------------|-----------|---------|---------------|--------------------|
| Valid Girl' school | 40        | 100.0   | 100.0         | 100.0              |

##### level of education

|                | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------------|-----------|---------|---------------|--------------------|
| Valid 10 grade | 12        | 30.0    | 30.0          | 30.0               |
| 11 grade       | 28        | 70.0    | 70.0          | 100.0              |
| Total          | 40        | 100.0   | 100.0         |                    |

#### 1- you think that you feel more comfortable expressing yourself and participating in classroom discussions in a single-race school than in a co-ed school

|              | Frequency | Percent | Valid Percent | Cumulative Percent |
|--------------|-----------|---------|---------------|--------------------|
| Valid always | 14        | 35.0    | 35.0          | 35.0               |
| Some time    | 22        | 55.0    | 55.0          | 90.0               |
| never        | 4         | 10.0    | 10.0          | 100.0              |
| Total        | 40        | 100.0   | 100.0         |                    |

This figure displays data from the table Comfort and Expression: Single-Race vs. Co-Ed Schools. The sample with the lowest frequency is Never,

showing 4 instances at 10%. The highest sample, Sometimes, records 22 instances at 55%. The final sample shows a frequency of 14 and a percentage of 35%.

**2- you notice any differences in the learning environment between single-sex and co-educational schools**

|       |           | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|-----------|---------|---------------|--------------------|
| Valid | always    | 8         | 20.0    | 20.0          | 20.0               |
|       | Some time | 22        | 55.0    | 55.0          | 75.0               |
|       | never     | 10        | 25.0    | 25.0          | 100.0              |
|       | Total     | 40        | 100.0   | 100.0         |                    |

This figure presents Learning Environment: Single-Sex vs. Co-Ed Schools sample data. Always is the lowest sample with a frequency of 8 and a percentage of 20%. Sometimes is the highest sample with 22 occurrences and 55%. The last sample frequency is 10 with a percentage of 25%.

**3- you think the racial composition of the school affects mental health and emotional well-being**

|       |           | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|-----------|---------|---------------|--------------------|
| Valid | always    | 16        | 40.0    | 40.0          | 40.0               |
|       | Some time | 14        | 35.0    | 35.0          | 75.0               |
|       | never     | 10        | 25.0    | 25.0          | 100.0              |
|       | Total     | 40        | 100.0   | 100.0         |                    |

This figure displays data from the table Racial Composition: Impact on Student Well-being. The sample with the lowest frequency is Never, showing 10 instances at 25%. In contrast, the highest sample, Always, records 16 instances at 40%. The final sample shows a frequency of 14 and a percentage of 35%.

**4- you experience any pressures or pressures related to racial dynamics in your school environment**

|       |           | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|-----------|---------|---------------|--------------------|
| Valid | always    | 5         | 12.5    | 12.5          | 12.5               |
|       | Some time | 14        | 35.0    | 35.0          | 47.5               |
|       | never     | 21        | 52.5    | 52.5          | 100.0              |
|       | Total     | 40        | 100.0   | 100.0         |                    |

This figure displays data from the table Racial Dynamics: Pressures in School Environment. The sample with the lowest frequency is Always, showing 5 instances at 13%. The highest sample, Never, records 21

instances at 52%. The final sample shows a frequency of 14 and a percentage of 35%.

**5- you think that the segregation of male and female students in high schools and single-sex schools affects the overall school culture and climate**

|       |           | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|-----------|---------|---------------|--------------------|
| Valid | always    | 17        | 42.5    | 42.5          | 42.5               |
|       | Some time | 14        | 35.0    | 35.0          | 77.5               |
|       | never     | 9         | 22.5    | 22.5          | 100.0              |
|       | Total     | 40        | 100.0   | 100.0         |                    |

This figure presents Segregation Impact: Single-Sex vs. Co-Ed Schools on School Culture & Climate sample data. Never is the lowest sample with a frequency of 9 and a percentage of 23%. Always is the highest sample with 17 occurrences and 42%. The last sample frequency is 14 with a percentage of 35%.

**6- you think the there is a difference in parental involvement and support between families with children in single-sex and co-educational high schools**

|       |           | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|-----------|---------|---------------|--------------------|
| Valid | always    | 9         | 22.5    | 22.5          | 22.5               |
|       | Some time | 23        | 57.5    | 57.5          | 80.0               |
|       | never     | 8         | 20.0    | 20.0          | 100.0              |
|       | Total     | 40        | 100.0   | 100.0         |                    |

This figure shows Parental Involvement: Single-Sex vs. Co-Ed High Schools sample data. The lowest sample is Never with a frequency of 8 and a percentage of 20%, while the highest sample is Sometimes with a frequency of 23 and a percentage of 57%. The last sample has a frequency of 9 and a percentage of 23%.

**7- you observe differences in social interactions and relationships between students in single-sex and coeducational schools**

|       |           | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|-----------|---------|---------------|--------------------|
| Valid | always    | 16        | 40.0    | 40.0          | 40.0               |
|       | Some time | 17        | 42.5    | 42.5          | 82.5               |



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|       |    |       |       |       |
|-------|----|-------|-------|-------|
| never | 7  | 17.5  | 17.5  | 100.0 |
| Total | 40 | 100.0 | 100.0 |       |

This figure presents Social Dynamics: Single-Sex vs. Co-Ed School Interactions sample data. Never is the lowest sample with a frequency of 7 and a percentage of 18%. Sometimes is the highest sample with 17 occurrences and 43%. The last sample frequency is 16 with a percentage of 40% .

**8- you think that the presence of the opposite sex in class affect your concentration and concentration on academic tasks**

|       |           | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|-----------|---------|---------------|--------------------|
| Valid | always    | 12        | 30.0    | 30.0          | 30.0               |
|       | Some time | 11        | 27.5    | 27.5          | 57.5               |
|       | Never     | 17        | 42.5    | 42.5          | 100.0              |
|       | Total     | 40        | 100.0   | 100.0         |                    |

This figure shows Gender Dynamics: Impact on Academic Focus and Tasks sample data. Sometimes is the lowest sample with a frequency of 11 and a percentage of 27%, while the highest sample is Never with a frequency of 17 and a percentage of 43%. The last sample has a frequency of 12 and a percentage of 30%.

**9- you think that the segregation of male and female students in high schools affects overall academic achievement and student well-being**

|       |           | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|-----------|---------|---------------|--------------------|
| Valid | always    | 11        | 27.5    | 27.5          | 27.5               |
|       | Some time | 15        | 37.5    | 37.5          | 65.0               |
|       | Never     | 14        | 35.0    | 35.0          | 100.0              |
|       | Total     | 40        | 100.0   | 100.0         |                    |

This figure displays data from the table Segregation Impact: High School Academic Achievement & Well-being. The sample with the lowest frequency is Always, showing 11 instances at 28%. The highest sample, Sometimes, records 15 instances at 37%. The final sample shows a frequency of 14 and a percentage of 35%.

**10- you think that attending a single-sex school or co educational schools will affect your academic performance**

|       |           | Frequency | Percent | Valid<br>Percent | Cumulative<br>Percent |
|-------|-----------|-----------|---------|------------------|-----------------------|
| Valid | always    | 10        | 25.0    | 25.0             | 25.0                  |
|       | Some time | 16        | 40.0    | 40.0             | 65.0                  |
|       | Never     | 14        | 35.0    | 35.0             | 100.0                 |
|       | Total     | 40        | 100.0   | 100.0            |                       |

This figure displays data from the table Academic Performance: Single-Sex vs. Co-Ed Schools. The sample with the lowest frequency is Always, showing 10 instances at 25%. The highest sample, Sometimes, records 16 instances at 40%. The final sample shows a frequency of 14 and a percentage of 35%.

**11- you feel that the availability of academic resources and support differs between single-sex and coeducational schools**

|       |           | Frequency | Percent | Valid<br>Percent | Cumulative<br>Percent |
|-------|-----------|-----------|---------|------------------|-----------------------|
| Valid | always    | 10        | 25.0    | 25.0             | 25.0                  |
|       | Some time | 25        | 62.5    | 62.5             | 87.5                  |
|       | Never     | 5         | 12.5    | 12.5             | 100.0                 |
|       | Total     | 40        | 100.0   | 100.0            |                       |

This figure presents Academic Support: Single-Sex vs. Co-Ed Schools sample data. Never is the lowest sample with a frequency of 5 and a percentage of 13%. Sometimes is the highest sample with 25 occurrences and 63%. The last sample frequency is 10 with a percentage of 25%.

**12- you notice any differences in the quality of educational resources and facilities between single-sex and co educational schools**

|       |           | Frequency | Percent | Valid<br>Percent | Cumulative<br>Percent |
|-------|-----------|-----------|---------|------------------|-----------------------|
| Valid | always    | 10        | 25.0    | 25.0             | 25.0                  |
|       | Some time | 20        | 50.0    | 50.0             | 75.0                  |
|       | never     | 10        | 25.0    | 25.0             | 100.0                 |
|       | Total     | 40        | 100.0   | 100.0            |                       |

This figure shows Educational Resources: Single-Sex vs. Co-Ed Schools sample data. The lowest sample is Never with a frequency of 10 and a percentage of 25%, while the highest sample is Sometimes with a frequency of 20 and a percentage of 50%. The last sample has a frequency of 10 and a percentage of 25%.



**13- you think that the segregation of male and female students in high schools and single-sex schools affect career aspirations and future opportunities for students**

|       |           | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|-----------|---------|---------------|--------------------|
| Valid | always    | 13        | 32.5    | 32.5          | 32.5               |
|       | Some time | 13        | 32.5    | 32.5          | 65.0               |
|       | never     | 14        | 35.0    | 35.0          | 100.0              |
|       | Total     | 40        | 100.0   | 100.0         |                    |

This figure shows Segregation Impact: Single-Sex vs. Co-Ed Schools on Career Aspirations and Opportunities sample data. Sometimes and Always are both present with 13 frequencies and respective percentages of 33% and 33%. The last sample has a frequency of 14 and a percentage of 35%.

**14- you receive any guidance or advice from school counselors or teachers about how your school's racial composition affects your future goals**

|       |           | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|-----------|---------|---------------|--------------------|
| Valid | always    | 9         | 22.5    | 22.5          | 22.5               |
|       | Some time | 17        | 42.5    | 42.5          | 65.0               |
|       | never     | 14        | 35.0    | 35.0          | 100.0              |
|       | Total     | 40        | 100.0   | 100.0         |                    |

This figure presents Guidance on School Diversity and Future Goals sample data. Always is the lowest sample with a frequency of 9 and a percentage of 23%. Sometimes is the highest sample with 17 occurrences and 42%. The last sample frequency is 14 with a percentage of 35%.

**15- you think that the racial composition of your school affected the way teachers interacted with students**

|       |           | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|-----------|---------|---------------|--------------------|
| Valid | always    | 12        | 30.0    | 30.0          | 30.0               |
|       | Some time | 18        | 45.0    | 45.0          | 75.0               |
|       | never     | 10        | 25.0    | 25.0          | 100.0              |
|       | Total     | 40        | 100.0   | 100.0         |                    |

This figure displays data from the table Racial Dynamics: Impact on



Teacher-Student Interaction. The sample with the lowest frequency is Never, showing 10 instances at 25%. In contrast, the highest sample, Sometimes, records 18 instances at 45%. The final sample shows a frequency of 12 and a percentage of 30%.

**16- you think that there are any differences in teaching methods between single-sex schools and co-educational schools**

|       |           | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|-----------|---------|---------------|--------------------|
| Valid | always    | 12        | 30.0    | 30.0          | 30.0               |
|       | Some time | 11        | 27.5    | 27.5          | 57.5               |
|       | never     | 17        | 42.5    | 42.5          | 100.0              |
|       | Total     | 40        | 100.0   | 100.0         |                    |

This figure shows Teaching Methods: Single-Sex vs. Co-Ed Schools sample data. The lowest sample is Sometimes with a frequency of 11 and a percentage of 27%, while the highest sample is Never with a frequency of 17 and a percentage of 43%. The last sample has a frequency of 12 and a percentage of 30%.

**17- you think that there are any differences in extracurricular activities or opportunities between single sex and co-educational schools**

|       |           | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|-----------|---------|---------------|--------------------|
| Valid | always    | 13        | 32.5    | 32.5          | 32.5               |
|       | Some time | 14        | 35.0    | 35.0          | 67.5               |
|       | never     | 13        | 32.5    | 32.5          | 100.0              |
|       | Total     | 40        | 100.0   | 100.0         |                    |

This figure displays Extracurricular Differences: Single-Sex vs. Co-Ed Schools sample data. Never is present with 13 frequencies and 33%. Always has 13 occurrences with 32%. The last sample has a frequency of 14 and a percentage of 35%.

**Inconclusion**

Overall, the results show that most students think that coeducational and single-sex schools differ in a number of ways, including academic focus, comfort, learning environment, mental health, and school culture. Nonetheless, there were frequently disagreements among the pupils, with a



## The Effect of Male and Female Segregation on Academic Performance in Public Preparatory Schools / Sulaimani City

sizable percentage voicing indifferent or conflicting perspectives.

This implies that although there may be certain perceived advantages to single-sex education, each person's experience will be different and may be impacted by other elements like peer dynamics, teacher quality, and school policies.

### 2-Frequency Tab for boys' high schools: Gender

|       |                | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----------------|-----------|---------|---------------|--------------------|
| Valid | male           | 40        | 95.2    | 100.0         | 100.0              |
|       | Missing System | 2         | 4.8     |               |                    |
|       | Total          | 42        | 100.0   |               |                    |

### type of school

|       |                | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----------------|-----------|---------|---------------|--------------------|
| Valid | boys school    | 40        | 95.2    | 100.0         | 100.0              |
|       | Missing System | 2         | 4.8     |               |                    |
|       | Total          | 42        | 100.0   |               |                    |

### level of education

|       |                | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----------------|-----------|---------|---------------|--------------------|
| Valid | 10 grade       | 17        | 40.5    | 42.5          | 42.5               |
|       | 11 grade       | 15        | 35.7    | 37.5          | 80.0               |
|       | 12 grade       | 8         | 19.0    | 20.0          | 100.0              |
|       | Total          | 40        | 95.2    | 100.0         |                    |
|       | Missing System | 2         | 4.8     |               |                    |
|       | Total          | 42        | 100.0   |               |                    |

**1- you think that you feel more comfortable expressing yourself and participating in classroom discussions in a single-race school than in a co-ed school**

|       |           | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|-----------|---------|---------------|--------------------|
| Valid | always    | 12        | 28.6    | 30.0          | 30.0               |
|       | Some time | 17        | 40.5    | 42.5          | 72.5               |
|       | never     | 11        | 26.2    | 27.5          | 100.0              |

|                |    |       |       |  |
|----------------|----|-------|-------|--|
| Total          | 40 | 95.2  | 100.0 |  |
| Missing System | 2  | 4.8   |       |  |
| Total          | 42 | 100.0 |       |  |

Our examination of "Comfort and Expression: Single-Race vs. Co-Ed Schools" offers valuable insights into school environments. Notably, "never" occurs 11 times, constituting 28% of the dataset. Conversely, "sometimes" emerges as the most frequent sample, occurring 17 times and constituting 43% of the data. Additionally, the last sample occurs 12 times, representing 30% of the data .

## 2- you notice any differences in the learning environmen between single-sex and co-educational schools

|                |           | Frequency | Percent | Valid<br>Percent | Cumulative<br>Percent |
|----------------|-----------|-----------|---------|------------------|-----------------------|
| Valid          | always    | 11        | 26.2    | 27.5             | 27.5                  |
|                | Some time | 19        | 45.2    | 47.5             | 75.0                  |
|                | never     | 10        | 23.8    | 25.0             | 100.0                 |
|                | Total     | 40        | 95.2    | 100.0            |                       |
| Missing System |           | 2         | 4.8     |                  |                       |
| Total          |           | 42        | 100.0   |                  |                       |

"Learning Environment: Single-Sex vs. Co-Ed Schools" reveals significant data patterns. The least occurring sample, "never," appears 10 times, representing 25% of the dataset. Conversely, "sometimes" emerges as the most frequent sample, occurring 19 times and constituting 48% of the data. Furthermore, the last sample occurs 11 times, representing 28% of the data.

## 3- you think the racial composition of the school affect: mental health and emotional well-being

|                |           | Frequency | Percent | Valid<br>Percent | Cumulative<br>Percent |
|----------------|-----------|-----------|---------|------------------|-----------------------|
| Valid          | always    | 14        | 33.3    | 35.0             | 35.0                  |
|                | Some time | 11        | 26.2    | 27.5             | 62.5                  |
|                | Never     | 15        | 35.7    | 37.5             | 100.0                 |
|                | Total     | 40        | 95.2    | 100.0            |                       |
| Missing System |           | 2         | 4.8     |                  |                       |
| Total          |           | 42        | 100.0   |                  |                       |

Our analysis of "School Diversity: Impact on Mental Health & Well-being" provides critical insights. Notably, "sometimes" occurs 11 times, constituting 28% of the dataset. Conversely, "never" emerges as the most frequent sample, appearing 15 times and constituting 37% of the data. Additionally, the last sample occurs 14 times, representing 35% of the data.



**4- you experience any pressures or pressures related to racial dynamics in your school environment**

|                |           | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------------|-----------|-----------|---------|---------------|--------------------|
| Valid          | always    | 7         | 16.7    | 17.5          | 17.5               |
|                | Some time | 14        | 33.3    | 35.0          | 52.5               |
|                | never     | 19        | 45.2    | 47.5          | 100.0              |
|                | Total     | 40        | 95.2    | 100.0         |                    |
| Missing System |           | 2         | 4.8     |               |                    |
| Total          |           | 42        | 100.0   |               |                    |

"Racial Dynamics: Pressures in School Environment" sheds light on racial dynamics within educational settings. Here, "always" occurs 7 times, constituting 18% of the dataset. Conversely, "never" emerges as the most frequent sample, appearing 19 times and constituting 47% of the data. Additionally, the last sample occurs 14 times, representing 35% of the data.

**5- you think that the segregation of male and female student in high schools and single-sex schools affects the overall school culture and climate**

|                |           | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------------|-----------|-----------|---------|---------------|--------------------|
| Valid          | always    | 19        | 45.2    | 47.5          | 47.5               |
|                | Some time | 12        | 28.6    | 30.0          | 77.5               |
|                | never     | 9         | 21.4    | 22.5          | 100.0              |
|                | Total     | 40        | 95.2    | 100.0         |                    |
| Missing System |           | 2         | 4.8     |               |                    |
| Total          |           | 42        | 100.0   |               |                    |

"Segregation Impact: Single-Sex vs. Co-Ed Schools on School Culture & Climate" provides valuable insights into school dynamics. Notably, "never" appears 9 times, constituting 23% of the dataset. Conversely, "always" emerges as the most frequent sample, occurring 19 times and constituting 48% of the data. Additionally, the last sample occurs 12 times, representing 30% of the data.

**6- you think there is a difference in parental involvement and support between families with children in single-sex and co-educational high schools**

|       |        | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|--------|-----------|---------|---------------|--------------------|
| Valid | always | 15        | 35.7    | 37.5          | 37.5               |

|                |           |       |      |       |       |
|----------------|-----------|-------|------|-------|-------|
|                | Some time | 17    | 40.5 | 42.5  | 80.0  |
|                | never     | 8     | 19.0 | 20.0  | 100.0 |
|                | Total     | 40    | 95.2 | 100.0 |       |
| Missing System | 2         | 4.8   |      |       |       |
| Total          | 42        | 100.0 |      |       |       |

Our examination of "Parental Involvement: Single-Sex vs. Co-Ed High Schools" reveals noteworthy insights. The least represented sample, "never," appears 8 times, constituting 20% of the dataset. Conversely, "sometimes" emerges as the most frequent sample, occurring 17 times and constituting 43% of the data. Furthermore, the last sample occurs 15 times, representing 38% of the data .

#### **7- you observe differences in social interactions and relationships between students in single-sex and coeducational schools**

|                |           | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------------|-----------|-----------|---------|---------------|--------------------|
| Valid          | always    | 19        | 45.2    | 47.5          | 47.5               |
|                | Some time | 16        | 38.1    | 40.0          | 87.5               |
|                | never     | 5         | 11.9    | 12.5          | 100.0              |
|                | Total     | 40        | 95.2    | 100.0         |                    |
| Missing System | 2         | 4.8       |         |               |                    |
| Total          | 42        | 100.0     |         |               |                    |

"Social Dynamics: Single-Sex vs. Co-Ed School Interactions" provides valuable insights into social interactions. Notably, "never" appears 5 times, constituting 13% of the dataset. Conversely, "always" emerges as the most frequent sample, occurring 19 times and constituting 48% of the data. Additionally, the last sample occurs 16 times, representing 40% of the data.

#### **8- you think that the presence of the opposite sex in class affect your concentration and concentration on academic tasks**

|                |           | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------------|-----------|-----------|---------|---------------|--------------------|
| Valid          | always    | 13        | 31.0    | 32.5          | 32.5               |
|                | Some time | 14        | 33.3    | 35.0          | 67.5               |
|                | Never     | 13        | 31.0    | 32.5          | 100.0              |
|                | Total     | 40        | 95.2    | 100.0         |                    |
| Missing System | 2         | 4.8       |         |               |                    |
| Total          | 42        | 100.0     |         |               |                    |

"Gender Dynamics: Impact on Academic Focus and Tasks" offers





insightful data perspectives. Remarkably, "never" and "always" both appear 13 times, each representing 33% of the dataset. Furthermore, "sometimes" emerges as the most frequent sample, appearing 14 times and constituting 35% of the data.

**9- you think that the segregation of male and female students in high schools affects overall academic achievement and student well-being**

|                |           | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------------|-----------|-----------|---------|---------------|--------------------|
| Valid          | always    | 15        | 35.7    | 37.5          | 37.5               |
|                | Some time | 15        | 35.7    | 37.5          | 75.0               |
|                | never     | 10        | 23.8    | 25.0          | 100.0              |
|                | Total     | 40        | 95.2    | 100.0         |                    |
| Missing System |           | 2         | 4.8     |               |                    |
| Total          |           | 42        | 100.0   |               |                    |

The exploration of "Segregation Impact: High School Academic Achievement & Well-being" uncovers crucial data trends. Notably, the least represented sample, "never," occurs 10 times, representing 25% of the dataset. Interestingly, both "sometimes" and "always" appear 15 times each, each constituting 38% of the data .

**10- you think that attending a single-sex school or co educational schools will affect your academic performance**

|                |           | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------------|-----------|-----------|---------|---------------|--------------------|
| Valid          | always    | 15        | 35.7    | 37.5          | 37.5               |
|                | Some time | 15        | 35.7    | 37.5          | 75.0               |
|                | never     | 10        | 23.8    | 25.0          | 100.0              |
|                | Total     | 40        | 95.2    | 100.0         |                    |
| Missing System |           | 2         | 4.8     |               |                    |
| Total          |           | 42        | 100.0   |               |                    |

"Academic Performance: Single-Sex vs. Co-Ed Schools" presents intriguing data insights. The least represented sample, "never," occurs 10 times, constituting 25% of the dataset. Remarkably, "always" and "sometimes" both appear 15 times each, each representing 38% of the data.

**11- you feel that the availability of academic resources and support differs between single-sex and coeducational schools**



|                |           | Frequency | Percent | Valid<br>Percent | Cumulative<br>Percent |
|----------------|-----------|-----------|---------|------------------|-----------------------|
| Valid          | always    | 17        | 40.5    | 42.5             | 42.5                  |
|                | Some time | 11        | 26.2    | 27.5             | 70.0                  |
|                | never     | 12        | 28.6    | 30.0             | 100.0                 |
|                | Total     | 40        | 95.2    | 100.0            |                       |
| Missing System |           | 2         | 4.8     |                  |                       |
| Total          |           | 42        | 100.0   |                  |                       |

"Academic Support: Single-Sex vs. Co-Ed Schools" provides valuable insights into educational dynamics. Notably, "sometimes" appears 11 times, constituting 28% of the dataset. Conversely, "always" emerges as the most frequent sample, occurring 17 times and constituting 43% of the data. Additionally, the last sample occurs 12 times, representing 30% of the data.

#### **12- you notice any differences in the quality of educational resources and facilities between single-sex and co-educational schools**

|                |           | Frequency | Percent | Valid<br>Percent | Cumulative<br>Percent |
|----------------|-----------|-----------|---------|------------------|-----------------------|
| Valid          | always    | 19        | 45.2    | 47.5             | 47.5                  |
|                | Some time | 11        | 26.2    | 27.5             | 75.0                  |
|                | never     | 10        | 23.8    | 25.0             | 100.0                 |
|                | Total     | 40        | 95.2    | 100.0            |                       |
| Missing System |           | 2         | 4.8     |                  |                       |
| Total          |           | 42        | 100.0   |                  |                       |

Our analysis of "Educational Resources: Single-Sex vs. Co-Ed Schools" uncovers significant data patterns. The least occurring sample, "never," appears 10 times, representing 25% of the dataset. Conversely, "always" emerges as the most frequent sample, occurring 19 times and constituting 48% of the data. Furthermore, the last sample occurs 11 times, representing 28% of the data.

#### **13- you think that the segregation of male and female students in high schools and single-sex schools affects career aspirations and future opportunities for students**

|       |           | Frequency | Percent | Valid<br>Percent | Cumulative<br>Percent |
|-------|-----------|-----------|---------|------------------|-----------------------|
| Valid | always    | 20        | 47.6    | 50.0             | 50.0                  |
|       | Some time | 11        | 26.2    | 27.5             | 77.5                  |



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|                |    |       |       |       |
|----------------|----|-------|-------|-------|
| Never          | 9  | 21.4  | 22.5  | 100.0 |
| Total          | 40 | 95.2  | 100.0 |       |
| Missing System | 2  | 4.8   |       |       |
| Total          | 42 | 100.0 |       |       |

The study "Segregation Impact: Single-Sex vs. Co-Ed Schools on Career Aspirations and Opportunities" sheds light on pertinent data points. Notably, the least occurring sample, "never," appears 9 times, representing 23% of the dataset. Conversely, "always" emerges as the most frequent sample, occurring 20 times and constituting 50% of the data. Additionally, the last sample occurs 11 times, representing 28% of the data .

**14- you receive any guidance or advice from school counselors or teachers about how your school's racial composition affects your future goals**

|                |           | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------------|-----------|-----------|---------|---------------|--------------------|
| Valid          | always    | 7         | 16.7    | 17.5          | 17.5               |
|                | Some time | 17        | 40.5    | 42.5          | 60.0               |
|                | never     | 16        | 38.1    | 40.0          | 100.0              |
|                | Total     | 40        | 95.2    | 100.0         |                    |
| Missing System |           | 2         | 4.8     |               |                    |
| Total          |           | 42        | 100.0   |               |                    |

Our investigation into "Guidance on School Diversity and Future Goals" provides valuable insights. The dataset showcases "always" as the least frequent sample, occurring 7 times, accounting for 18% of the data. Conversely, "sometimes" emerges as the most frequent sample, appearing 17 times and constituting 43% of the dataset. Furthermore, the last sample occurs 16 times, representing 40% of the data.

**15- you think that the racial composition of your school affected the way teachers interacted with students**

|                |           | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------------|-----------|-----------|---------|---------------|--------------------|
| Valid          | always    | 17        | 40.5    | 42.5          | 42.5               |
|                | Some time | 15        | 35.7    | 37.5          | 80.0               |
|                | never     | 8         | 19.0    | 20.0          | 100.0              |
|                | Total     | 40        | 95.2    | 100.0         |                    |
| Missing System |           | 2         | 4.8     |               |                    |
| Total          |           | 42        | 100.0   |               |                    |

The exploration of "Racial Dynamics: Impact on Teacher-Student Interaction" reveals insightful data trends. Here, the least occurring sample,

"never," occurs 8 times, representing 20% of the dataset. Conversely, the most prevalent sample, "always," appears 17 times, making up 43% of the data. Equally noteworthy, the last sample occurs 15 times, constituting 38% of the dataset.

**16- you think that there are any differences in teaching methods between single-sex schools and co-educational schools**

|                |           | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------------|-----------|-----------|---------|---------------|--------------------|
| Valid          | always    | 12        | 28.6    | 30.0          | 30.0               |
|                | Some time | 10        | 23.8    | 25.0          | 55.0               |
|                | never     | 18        | 42.9    | 45.0          | 100.0              |
|                | Total     | 40        | 95.2    | 100.0         |                    |
| Missing System |           | 2         | 4.8     |               |                    |
| Total          |           | 42        | 100.0   |               |                    |

In examining Teaching Methods: Single-Sex vs. Co-Ed Schools, sometimes emerges as the lowest sample, occurring 10 times, constituting 25% of the data. Conversely, never appears most frequently, with 18 instances, comprising 45% of the dataset, while the last sample, occurs 12 times, representing 30%.

**17- you think that there are any differences in extracurricular activities or opportunities between single-sex and co-educational schools**

|                |           | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------------|-----------|-----------|---------|---------------|--------------------|
| Valid          | always    | 15        | 35.7    | 37.5          | 37.5               |
|                | Some time | 14        | 33.3    | 35.0          | 72.5               |
|                | never     | 11        | 26.2    | 27.5          | 100.0              |
|                | Total     | 40        | 95.2    | 100.0         |                    |
| Missing System |           | 2         | 4.8     |               |                    |
| Total          |           | 42        | 100.0   |               |                    |

"Extracurricular Differences: Single-Sex vs. Co-Ed Schools" uncovers intriguing data trends. Here, "never" appear 11 times each, constituting 28% and "sometimes" appear 14 times, constituting 35% of the dataset. Furthermore, "always" emerges as the most frequent sample, appearing 15 times and constituting 37% of the data.



### Conclusion:

The boys' school's male pupils exhibit a critical understanding of how their educational environment influences their academic and personal results. The majority of students believe that single-sex and coeducational environments differ significantly, particularly in terms of social dynamics, academic resources, and long-term professional effects, even though some students seem neutral or unaffected. These results underline the necessity of more inclusive policies, fair resource distribution, and continuous discussion regarding the consequences of school design.

### 3-Frequency Tab for mixed' high schools

#### Gender

|       |        | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|--------|-----------|---------|---------------|--------------------|
| Valid | female | 44        | 55.0    | 55.0          | 55.0               |
|       | Male   | 36        | 45.0    | 45.0          | 100.0              |
|       | Total  | 80        | 100.0   | 100.0         |                    |

#### type of school

|       |              | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|--------------|-----------|---------|---------------|--------------------|
| Valid | mixed school | 80        | 100.0   | 100.0         | 100.0              |

#### level of education

|       |          | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----------|-----------|---------|---------------|--------------------|
| Valid | 10 grade | 30        | 37.5    | 37.5          | 37.5               |
|       | 11 grade | 49        | 61.3    | 61.3          | 98.8               |
|       | 12 grade | 1         | 1.3     | 1.3           | 100.0              |
|       | Total    | 80        | 100.0   | 100.0         |                    |

**1- you think that you feel more comfortable expressing yourself and participating in classroom discussions in a single-sex school than in a co-ed school**

|       |           | Frequency | Percent | Valid<br>Percent | Cumulative<br>Percent |
|-------|-----------|-----------|---------|------------------|-----------------------|
| Valid | always    | 36        | 45.0    | 45.0             | 45.0                  |
|       | Some time | 38        | 47.5    | 47.5             | 92.5                  |
|       | never     | 6         | 7.5     | 7.5              | 100.0                 |
|       | Total     | 80        | 100.0   | 100.0            |                       |

This figure illustrates Comfort and Expression: Single-Race vs. Co-Ed Schools. The sample with the lowest frequency is Never, at 6 and 7.5%. The highest sample is Always, at 45 and 45%. Another sample shows a frequency of 38 and a percentage of 47.5.

## 2- you notice any differences in the learning environment between single-sex and co-educational schools

|       |           | Frequency | Percent | Valid<br>Percent | Cumulative<br>Percent |
|-------|-----------|-----------|---------|------------------|-----------------------|
| Valid | always    | 21        | 26.3    | 26.3             | 26.3                  |
|       | Some time | 46        | 57.5    | 57.5             | 83.8                  |
|       | never     | 13        | 16.3    | 16.3             | 100.0                 |
|       | Total     | 80        | 100.0   | 100.0            |                       |

## 3- you think the racial composition of the school affects mental health and emotional well-being

|       |           | Frequency | Percent | Valid<br>Percent | Cumulative<br>Percent |
|-------|-----------|-----------|---------|------------------|-----------------------|
| Valid | always    | 23        | 28.7    | 28.7             | 28.7                  |
|       | Some time | 41        | 51.2    | 51.2             | 80.0                  |
|       | never     | 16        | 20.0    | 20.0             | 100.0                 |
|       | Total     | 80        | 100.0   | 100.0            |                       |

This figure shows School Diversity: Impact on Mental Health & Well-being. The sample with the lowest frequency is Never, with 16 instances and a percentage of 20. The highest sample is Sometimes, with 41 instances and a percentage of 51.2. Another sample has a frequency of 23 and a percentage of 28.7.

## 4-you experience any pressures or pressures related to racial dynamics in your school environment

|       |           | Frequency | Percent | Valid<br>Percent | Cumulative<br>Percent |
|-------|-----------|-----------|---------|------------------|-----------------------|
| Valid | always    | 23        | 28.7    | 28.7             | 28.7                  |
|       | Some time | 39        | 48.8    | 48.8             | 77.5                  |

|       |    |       |       |       |
|-------|----|-------|-------|-------|
| never | 18 | 22.5  | 22.5  | 100.0 |
| Total | 80 | 100.0 | 100.0 |       |

This figure depicts Racial Dynamics: Pressures in School Environment. The sample with the lowest frequency is Never, with 18 instances and a percentage of 28%. The highest sample is Sometimes, with 39 instances and a percentage of 49%. There is also a sample with a frequency of 23 and a percentage of 29%.

**5- you think that the segregation of male and female students in high schools and single-sex schools affects the overall school culture and climate**

|       |           | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|-----------|---------|---------------|--------------------|
| Valid | always    | 24        | 30.0    | 30.0          | 30.0               |
|       | Some time | 43        | 53.8    | 53.8          | 83.8               |
|       | never     | 13        | 16.3    | 16.3          | 100.0              |
|       | Total     | 80        | 100.0   | 100.0         |                    |

This data shows Segregation Impact: Single-Sex vs. Co-Ed Schools on School Culture & Climate. The lowest sample is Never, with a frequency of 13 and a percentage of 16.3. The highest sample is Always, with a frequency of 24 and a percentage of 30. Another sample has a frequency of 43 and a percentage of 53.

**6- you observe differences in social interactions and relationships between students in single-sex and coeducational schools**

|       |           | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|-----------|---------|---------------|--------------------|
| Valid | always    | 17        | 21.3    | 21.3          | 21.3               |
|       | Some time | 45        | 56.3    | 56.3          | 77.5               |
|       | never     | 18        | 22.5    | 22.5          | 100.0              |
|       | Total     | 80        | 100.0   | 100.0         |                    |

This data shows Social Dynamics: Single-Sex vs. Co-Ed School Interactions. The lowest sample is Always, with a frequency of 17 and a percentage of 21.2. The highest sample is Sometimes, with a frequency of 45 and a percentage of 56.3. Another sample has a frequency of 18 and a percentage of 22.5.

**7- you think that the presence of the opposite sex in class affect your concentration and concentration on academic tasks**



|       |           | Frequency | Percent | Valid<br>Percent | Cumulative<br>Percent |
|-------|-----------|-----------|---------|------------------|-----------------------|
| Valid | always    | 21        | 26.3    | 26.3             | 26.3                  |
|       | Some time | 48        | 60.0    | 60.0             | 86.3                  |
|       | never     | 11        | 13.8    | 13.8             | 100.0                 |
|       | Total     | 80        | 100.0   | 100.0            |                       |

The figure presents Gender Dynamics: Impact on Academic Focus and Tasks. The lowest sample is Never, with 11 instances and a percentage of 13.8. The highest sample is Sometimes, with 48 instances and a percentage of 60. Additionally, there is a sample with a frequency of 21 and a percentage of 26.3.

**8- you think that the segregation of male and female students in high schools affects overall academic achievement and student well-being**

|       |           | Frequency | Percent | Valid<br>Percent | Cumulative<br>Percent |
|-------|-----------|-----------|---------|------------------|-----------------------|
| Valid | always    | 24        | 30.0    | 30.0             | 30.0                  |
|       | Some time | 42        | 52.5    | 52.5             | 82.5                  |
|       | never     | 14        | 17.5    | 17.5             | 100.0                 |
|       | Total     | 80        | 100.0   | 100.0            |                       |

This figure illustrates Segregation Impact: High School Academic Achievement & Well-being. The sample with the lowest frequency is Never, at 14 and 17.5%. The highest sample is Sometimes, at 42 and 52.5%. There is also a sample with a frequency of 24 and 30%.

**9- you think that attending a single-sex school or co educational schools will affect your academic performance**

|       |           | Frequency | Percent | Valid<br>Percent | Cumulative<br>Percent |
|-------|-----------|-----------|---------|------------------|-----------------------|
| Valid | always    | 14        | 17.5    | 17.5             | 17.5                  |
|       | Some time | 51        | 63.7    | 63.7             | 81.3                  |
|       | never     | 15        | 18.8    | 18.8             | 100.0                 |
|       | Total     | 80        | 100.0   | 100.0            |                       |

Here we see the data for Academic Performance: Single-Sex vs. Co-Ed Schools. The lowest sample is Always with a frequency of 14 and a percentage of 17.5. The highest sample is Sometimes with a frequency of 51 and a percentage of 63.7. Another sample has a frequency of 15 and a percentage of 18.8.



**10- you feel that the availability of academic resources and support differs between single-sex and coeducational schools**

|       |           | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|-----------|---------|---------------|--------------------|
| Valid | always    | 25        | 31.3    | 31.3          | 31.3               |
|       | Some time | 40        | 50.0    | 50.0          | 81.3               |
|       | never     | 15        | 18.8    | 18.8          | 100.0              |
|       | Total     | 80        | 100.0   | 100.0         |                    |

The data for Academic Support: Single-Sex vs. Co-Ed Schools is depicted here. The lowest sample is Never, with 15 occurrences and a percentage of 18.8. The highest sample is Sometimes, with 40 occurrences and a percentage of 50. Another sample shows 25 occurrences with a percentage of 31.3.

**11- you notice any differences in the quality of educational resources and facilities between single-sex and co educational schools**

|       |           | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|-----------|---------|---------------|--------------------|
| Valid | always    | 28        | 35.0    | 35.0          | 35.0               |
|       | Some time | 38        | 47.5    | 47.5          | 82.5               |
|       | never     | 14        | 17.5    | 17.5          | 100.0              |
|       | Total     | 80        | 100.0   | 100.0         |                    |

This figure shows Educational Resources: Single-Sex vs. Co-Ed Schools sample data. The lowest sample is Never, with a frequency of 14 and a percentage of 17.5. The highest sample is Sometimes, with a frequency of 38 and a percentage of 47.5. There is also a sample with a frequency of 28 and a percentage of 35.

**12- you think that the segregation of male and female students in high schools and single-sex schools affect career aspirations and future opportunities for students**

|       |           | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|-----------|---------|---------------|--------------------|
| Valid | always    | 20        | 25.0    | 25.0          | 25.0               |
|       | Some time | 44        | 55.0    | 55.0          | 80.0               |
|       | Never     | 16        | 20.0    | 20.0          | 100.0              |
|       | Total     | 80        | 100.0   | 100.0         |                    |

This data presents Guidance on School Diversity and Future Goals. The

sample with the lowest frequency is Always, at 20 and 25%. The highest sample is Sometimes, at 44 and 55%. There is also a sample with a frequency of 16 and 20%.

**13- you receive any guidance or advice from school counselors or teachers about how your school's racial composition affects your future goals**

|       |           | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|-----------|---------|---------------|--------------------|
| Valid | always    | 15        | 18.8    | 18.8          | 18.8               |
|       | Some time | 41        | 51.2    | 51.2          | 70.0               |
|       | never     | 24        | 30.0    | 30.0          | 100.0              |
|       | Total     | 80        | 100.0   | 100.0         |                    |

This data presents Guidance on School Diversity and Future Goals. The sample with the lowest frequency is Always, at 15 and 18.8%. The highest sample is Sometimes, at 41 and 51.2%. There is also a sample with a frequency of 24 and 30%.

**14-you think that the racial composition of your school affected the way teachers interacted with students**

|       |           | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|-----------|---------|---------------|--------------------|
| Valid | always    | 28        | 35.0    | 35.0          | 35.0               |
|       | Some time | 46        | 57.5    | 57.5          | 92.5               |
|       | never     | 6         | 7.5     | 7.5           | 100.0              |
|       | Total     | 80        | 100.0   | 100.0         |                    |

The figure illustrates Racial Dynamics: Impact on Teacher-Student Interaction sample data. The lowest sample is Never, with a frequency of 6 and a percentage of 7.5. The highest sample is Sometimes, with a frequency of 46 and a percentage of 57.5. Another sample has a frequency of 28 and a percentage of 35.

**15- you think that there are any differences in teaching methods between single-sex schools and co-educational schools**

|       |           | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|-----------|---------|---------------|--------------------|
| Valid | always    | 30        | 37.5    | 37.5          | 37.5               |
|       | Some time | 35        | 43.8    | 43.8          | 81.3               |
|       | Never     | 15        | 18.8    | 18.8          | 100.0              |



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|       |    |       |       |  |
|-------|----|-------|-------|--|
| Total | 80 | 100.0 | 100.0 |  |
|-------|----|-------|-------|--|

This figure shows Teaching Methods: Single-Sex vs. Co-Ed Schools sample data. The lowest sample is Sometimes with a frequency of 35 and a percentage of 43.8, while the highest sample is Never with a frequency of 15 and a percentage of 18.8. Additionally, there is a sample with a frequency of 30 and a percentage of 37.5 .

**16- you think that there are any differences in extracurricular activities or opportunities between single sex and co-educational schools**

|              | Frequency | Percent | Valid Percent | Cumulative Percent |
|--------------|-----------|---------|---------------|--------------------|
| Valid always | 18        | 22.5    | 22.5          | 22.5               |
| Some time    | 50        | 62.5    | 62.5          | 85.0               |
| never        | 12        | 15.0    | 15.0          | 100.0              |
| Total        | 80        | 100.0   | 100.0         |                    |

Here we see the data for Extracurricular Differences: Single-Sex vs. Co-Ed Schools. The lowest sample is Never with a frequency of 12 and a percentage of 15. The highest sample is Sometimes with a frequency of 50 and a percentage of 62.5. Additionally, there is a sample with a frequency of 18 and a percentage of 22.5.

Overall Views of Students (Summary):

The most frequent answer to practically every question was "Sometimes," suggesting that:

- Although many students believe the effects are contextual rather than universal, they are perceptive and aware of variations in school dynamics.
- Comfort, involvement, academic concentration, opportunity, and teacher behavior are all thought to be impacted by racial and gender compositions, though not always in the same way.
- Although they appreciate diversity, students are also aware of its drawbacks, particularly in regards to support, fairness, and expression.

Conclusion Based on Data:

The influence of gender segregation on academic achievement and school

experience is not consistent across contexts, according to an analysis of 180 students' responses from mixed, boys', and girls' schools in Sulaimani.

With 55% of students saying they occasionally detect variations in learning environments and 42.5% believing that segregation influences school culture, the majority of students in girls' schools reported feeling better at ease and attentive in single-sex settings. However, there were differing views on future prospects and academic success, with almost equal proportions choosing "always," "sometimes," and "never."

Most pointed out that segregation had a greater impact on social dynamics, resources, and career goals in schools for boys. For instance, 47.5% of male students noted inequalities in school culture, and 50% of them thought segregation affected their chances in the future. At the same time, responses about academic performance and focus were balanced, indicating that roughly one-third selected each option ("always," "sometimes," and "never").

The most common response in almost all questions (often exceeding 50%) was "sometimes," indicating that pupils in mixed schools tended to give middle-ground answers. This suggests that rather than viewing the effects of gender composition as absolute, pupils in mixed schools perceive them as situational. For instance, 56.3% observed variations in social interactions, and 63.7% said that attending mixed or single-sex schools "sometimes" affects academic achievement.

Overall, the evidence indicates that although gender segregation might influence students' comfort levels, focus, and views of school culture, its effects on academic performance and future goals vary from student to student. Variability is the main tendency; many students believe that the impacts are context-dependent rather than always either positive or negative. This implies that when it comes to influencing student results, educational quality, instructional strategies, and resource distribution are more important than segregation alone.

## **Chapter- 5**

### **5-1 Suggestions:**

1-Conduct similar research at a different educational stage, such as primary or university levels, to explore whether school type impacts academic performance differently across age groups.







2-Replicate the study in other cities or regions to enhance the generalizability of the findings and account for cultural or socioeconomic differences.

3- Provide specialized teacher training programs in both single-sex and co-educational schools, especially since teaching methods were found to vary significantly by school type.

4- Increase academic counseling and support services for students in all school types, particularly to address challenges related to gender dynamics and student well-being.

5- Incorporate broader social and psychological variables in future studies, such as family background, peer influence, and cultural expectations, to gain a more comprehensive understanding of factors affecting student performance.

### 5-2 Recommendations:

1 .Conduct a study on the level of this variable at another stage.

2.Doing this challenge in another city

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### Appendix Appendix NO (1)

#### Panel of experts

| No. | Rank    | Name           | specialization  | Place of work                                      |
|-----|---------|----------------|-----------------|--|
| 1   | Doctor  | Azhi Hama Qazi | Social Sciences | University of Suleimani College of basic Education |
| 2   | Teacher | Hezha Abdulla  | Social Sciences | University of Suleimani College of basic Education |
| 3   | Doctor  | Zana Aziz      | Teaching method | University Of Suleimani College Of Education       |
| 4   | Teacher | Shena Ibrahim  | Teaching method | University of Suleimani college Of Education       |
| 5   | Teacher | Brwska Barzan  | Teaching method | University of Suleimani college Of Education       |

### Appendix NO (2)

| Number | First time | Second time |
|--------|------------|-------------|
| 1      | 111        | 103         |
| 2      | 109        | 112         |
| 3      | 122        | 132         |
| 4      | 120        | 126         |



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|    |     |     |
|----|-----|-----|
| 5  | 114 | 116 |
| 6  | 125 | 131 |
| 7  | 92  | 94  |
| 8  | 121 | 117 |
| 9  | 111 | 119 |
| 10 | 123 | 123 |
| 11 | 93  | 95  |
| 12 | 111 | 114 |
| 13 | 105 | 110 |
| 14 | 114 | 117 |
| 15 | 108 | 126 |
| 16 | 118 | 128 |
| 17 | 91  | 101 |
| 18 | 123 | 124 |
| 19 | 101 | 104 |
| 20 | 105 | 107 |
|    |     |     |

### Appendix NO (3)

|    | Question   | Always | Some time | Never |
|----|--|--------|-----------|-------|
| 1. | you think that you feel more comfortable expressing yourself and participating in classroom discussions in a single-race school than in a co-ed school |        |           |       |
| 2. | you notice any differences in the learning environment between single-sex and co-educational schools   |        |           |       |
| 3. | you think the racial composition of the school affects mental health and emotional well-being  |        |           |       |
| 4. | you experience any pressures or pressures related to racial dynamics in your school environment  |        |           |       |
| 5. | you think that the segregation of male and female students in high schools and single-sex schools affects the overall school culture and climate       |        |           |       |

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|    |  |  |  |  |
|----|--|--|--|--|
| 6. | you think the there is a difference in parental involvement and support between families with children in single-sex and co-educational high schools |  |  |  |
| 7. | you observe differences in social interactions and relationships between students in single-sex and coeducational schools                            |  |  |  |

|     |  |  |  |  |
|-----|--|--|--|--|
| 8.  | you think that the presence of the opposite sex in class affect your concentration and concentration on academic tasks   |  |  |  |
| 9.  | you think that the segregation of male and female students in high schools affects overall academic achievement and student well-being                             |  |  |  |
| 10. | you think that attending a single-sex school or co-educational schools will affect your academic performance   |  |  |  |
| 11. | you feel that the availability of academic resources and support differs between single-sex and coeducational schools  |  |  |  |
| 12. | you notice any differences in the quality of educational resources and facilities between single-sex and co-educational schools                                    |  |  |  |
| 13. | you think that the segregation of male and female students in high schools and single-sex schools affects career aspirations and future opportunities for students |  |  |  |
| 14. | you receive any guidance or advice from school counselors or teachers about how your school's racial composition affects your future goals                         |  |  |  |

|     |   |  |  |  |
|-----|---|--|--|--|
| 15. | you think that the racial composition of your school affected the way teachers interacted with students |  |  |  |
|-----|---|--|--|--|



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|     |   |  |  |  |
|-----|---|--|--|--|
| 16. | you think that there are any differences in teaching methods between single-sex schools and co-educational schools                    |  |  |  |
| 17. | you think that there are any differences in extracurricular activities or opportunities between single-sex and co-educational schools |  |  |  |

