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Support or Interference? Support and Academic Achievements Among Majority and Minority Groups of Undergraduate Students Studying Together

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Abstract: Research indicates differences between the Jewish majority and the Arab minority groups in Israel in terms of academic achievements. Some explanations refer to cultural and social differences between the groups, which are expressed in greater reliance on family support among the students of Arab origin. The present research examined the relationship between social support from family and friends and first-year grades of undergraduates studying together. In order to examine these questions, 204 students studying together were examined, half of them of Arab origin and half of them of Jewish average. For all the subjects, grades over time, the degree of social support, and a number of other variables were examined. The findings indicate a complex association between level of social support and student grades. Among students who sensed a high level of threat, social support actually correlated with lower grade levels. This effect was found mainly regarding family support among the students of Arab origin and mainly regarding support from friends among the students of Jewish origin.

Keywords: minority groups, academic achievements, family support, social support

1. Introduction

The findings of research conducted in Israel [1–3] and in other countries [4–7] have indicated considerable differences between members of majority and minority groups in terms of their academic achievements.

In Israel, there are two main national groups, a Jewish majority and an Arab minority. These groups study separately in elementary and secondary schools, which usually serve students from the same local area. At the presecondary level, they study together in academic institutions throughout Israel. Researchers have tried to understand the source of the above-mentioned gaps in Israel as well as other countries. For example, in a study conducted in Israel, Totry [8] found that for students of Arab origin, the first year of studies was particularly traumatic and had a strong effect on their academic achievements. The difficulties coping with studies, especially at the beginning of their university studies, included a need to adapt to a learning style based largely on independent study, mastering the Hebrew and English languages, and adjustment to a new social climate.

Other explanations found for the disparity were associated with socioeconomic differences [9, 10]. Many students of Arab origin encounter financial hardship; in Israel, the percentage of people under the poverty line is higher among the Arab population than the Jewish population. In addition, differences between these two groups in learning goals have also been indicated as a source of the disparity in achievements [11, 12].

One of the most significant explanations discussed in the literature refers to the differences between social groups in terms of social support. From this perspective, academic success is seen as a combination of personal factors, such as student motivation and personal goals and environmental characteristics. The latter include different systems of influence but particularly support of family and of friends. These support systems fulfill an important role in academic achievements.

One way to understand the findings on the influence of the social environment is based on social capital theory [13–15]. This theory focuses on interpersonal ties or relationships and the exchange of information and mutual commitment within them. Social capital theory deals not only with the existence of such relationships but also with their use. It is an effective perspective for explaining how relationships of people with their social environment (family and peers) are associated with their behavior. According to the theory, these relationships provide individuals with access to important resources, which affect their behavior. Accordingly, undergraduate students with a social network (relationships with friends and/or parents) will succeed more than students with less social support resources do. This is because the social network of the students supplies them with information about academic studies; parents or friends who have experienced

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higher education better understand the strategies required for success in that environment.

The social environments of Jewish and Arab students are likely to differ. Indeed, previous research has indicated differences between members of the Jewish majority and those of the Arab minority in their perception and use of the social environment. One of the factors that many studies have addressed is the difference in the level of collectivism and individualism in these two societies. Compared with Jewish society, Arab society in Israel is characterized as more traditional and collectivist [16]. The more traditional culture of Arab society emphasizes a sense of belonging to the extended family (hamula, or clan) and locality, and recognition of the Arab people. In recent decades, there has been gradual change, and Western influences have begun to make a mark on Arab culture, but the ongoing political situation and Jewish–Arab conflict have heightened the sense of national identity and collectivism among members of the Arab minority [1].

The emphasis on family in Arab society is also expressed in the way individuals seek assistance. According to research findings, requesting external help is more problematic for students of Arab origin, because Arab cultural tradition discourages the sharing of personal information [17]. Thus, individuals tend to rely more on help from their families in other realms, as well, such as finances or career counseling. In a comparison of respondents of Jewish and Arab origin, Pines and Zaidman [18] found that those of Arab origin tended more than their Jewish counterparts to turn to their families for help.

Thus, studies have indicated differences between the Arab and Jewish societies in Israel in terms of the ways in which individuals use social support. However, despite evidence of a gap between the academic achievements of students from these groups, no research to date has examined the contribution of these cultural differences to the disparity in their academic achievements. The present research focused on the contribution of the differences between the groups with respect to social support to the differential achievements of Jewish and Arab undergraduates who study together.

The study also examined the association between social support and academic achievements in these groups in terms of the level of threat and challenge experienced by the students. This variable was included based on an assumption that students have a greater need for social support when they feel threatened and challenged by the task they face – namely academic studies. Academic studies can be intimidating because they include many assignments, tests, and tasks that may create a burden for students, or fear of future failure. Of course, coping with this can also create an experience of challenge. Indeed, previous research showed that the level of threat and challenge experienced by students was a significant mediating factor between their perceptions and their actual coping and behavior [19–22].

In addition to the main research variables discussed above, the present study also considered interpersonal differences among students, in terms of both demographics and central cognitive skills. These variables were included in order to confirm that the associations between the main research variables were not dependent on these factors and existed beyond their association with student achievements. Among the demographic variables, the research focused on mother's and father's education, because parents' academic background is likely to affect a student's ability to receive help from them in the course of studies. Similarly, age is likely to impact students' independence from their parents, as well as the degree to which they seek help from different parties in their social environment. With respect to cognitive skills, research has shown significant correlations between these and academic achievements [23, 24]; therefore, it is important to examine the effects of the research variables beyond possible differences between the groups in these factors.

Based on the existing data, it was hypothesized that (a) the first-year grades of the students of Jewish origin would be higher, on average, than those of the Arab students; (b) the students of Arab origin seeking support would turn more often to their families and less often to friends, compared with the students of Jewish origin, and this trend would be particularly true among students who felt a high level of threat or challenge; and (c) in both groups, students who made greater use of social support would have higher grades. It was also anticipated that this trend would be stronger among students who sensed higher levels of threat and challenge.

2. Method

2.1. Sample

The research cohort consisted of 204 students enrolled at an Israeli college, where both Arab and Jewish students coexisted in shared educational settings. The sample was meticulously divided into two equal groups, with 102 participants identifying as of Arab origin and 102 as of Jewish origin. Importantly, the categorization into these distinct groups hinged upon the participants' self-definition, a delineation that will be expounded upon in subsequent sections. It is imperative to note that the two samples, representing students of Jewish and Arab origin, were methodically matched in terms of age, marital status, and gender. All participants were in the second semester of their inaugural year at the college, and the research transpired during the midpoint of the semester. Among the cohort, 172 individuals (84.3%) identified as women, while 32 individuals (15.7%) identified as men. A chi-square analysis was employed, utilizing statistical processing software (SPSS), to assess potential differences in gender composition between the Arab and Jewish groups. The findings revealed no statistically significant difference in gender distribution among students of Jewish and Arab origin, $\chi^2(1) = 0.59$, $p > 0.05$. Specifically, the Arab student group comprised 84 women and 18 men, while the Jewish student group included 88 women and 14 men.

The age range of the students spanned from 19 to 49 years, with a mean age of 25.19 years and a standard deviation of 4.30. An independent-samples *t*-test was employed to investigate potential differences in age between the two groups. The analysis did not yield any statistically significant distinctions, $t(202) = 1.49$, $p > 0.05$ (Arab students – $M = 24.75$, $SD = 4.16$; Jewish students – $M = 25.64$, $SD = 4.41$). More than half of the students (132; 64.7%) reported being unmarried, while 68 students (33.3%) were married, 2 (0.1%) were divorced, and 2 (0.1%) were widowed. A chi-square analysis was conducted to assess potential group differences in the distribution of marital status. The results revealed no statistically significant disparities between the Arab and Jewish groups, $\chi^2(3) = 2.27$, $p > 0.05$. Specifically, the sample of Arab origin included 65 unmarried, 36 married, and 1 widowed participants, while the sample of Jewish origin comprised 67 unmarried, 32 married, 2 divorced, and 1 widowed participants.

The educational background of the participants' parents was examined in conjunction with the matched variables. Participants were queried about the number of years their parents had pursued education. In relation to the mothers' education, a statistically significant difference emerged between the groups, $t(202) = 3.77$, $p < 0.01$. Specifically, mothers of Jewish students exhibited a higher level of education (Arab students – $M = 11.35$, $SD = 2.83$; Jewish

students – $M = 12.70$, $SD = 2.2$). Conversely, no significant difference was observed between the groups concerning fathers' education, $t(202) = 1.66$, $p > 0.05$ (Arab students – $M = 11.60$, $SD = 3.08$; Jewish students – $M = 12.27$, $SD = 2.74$). These findings regarding mothers' education align with previous research, which has consistently identified varying educational levels between these two population groups, as detailed in the Introduction. In contrast, the finding regarding the father's education contradicts the literature and the research assumptions as presented in the introduction. This may be due to the fact that the level of education of women in Israel is significantly higher than that of men [25].

2.2. Procedure

During their first year in the Faculty of Social Sciences, students were given the option to be exempt from one of their course assignments in exchange for participation in the study. Following an elucidation of the research's objectives, they were assured that their responses would remain confidential, accessible exclusively to the researchers, and utilized solely for research purposes without any impact on their future academic endeavors. The majority of students chose to partake in the study (93.58%, 204 out of 218 students). Prior to completing the questionnaires, participants reaffirmed their informed consent through a signature. Additionally, they provided written authorization allowing researchers to access their first-year grades upon completion of their studies. Six months subsequent to questionnaire completion, the first-year grades of the students were collected. Adhering to the ethical standards set by the college's ethics committee, student details were expunged from the data file following grade entry, ensuring confidentiality and preventing potential errors. Seven students did not complete their studies, and their data were consequently excluded from the research. Following questionnaire completion, students were afforded the opportunity to pose any further inquiries and provide feedback on the study.

2.3. Instruments

The present research was based on three instruments: a questionnaire on cognitive evaluation of threat and challenge [26], a questionnaire on social support, and the comprehension and similarities sections of the Wechsler intelligence test.

2.3.1. Cognitive evaluation of threat and challenge

The participants were given the Hebrew version of the questionnaire [27]. This questionnaire consists of 15 questions, structured on a 5-point Likert scale. Its purpose is to assess the extent to which students perceive coping with their studies either as a challenge or, alternatively, as a threat. Each question is rated on a scale of 1 to 5, with higher scores indicating a greater perception of threat or challenge. The total score is obtained by averaging the responses to questions related to challenge (e.g., "This situation poses a challenge to you") and separately averaging responses to questions related to threat (e.g., "This situation makes you nervous"). The resulting score reflects the overall degree of threat or challenge experienced by the student. The internal consistency of the questionnaire was evaluated using Cronbach's alpha reliability test, yielding a score of 0.71 for the items related to threat and 0.89 for the items related to challenge. These reliability scores indicate a satisfactory level of consistency in the questionnaire's measurement of threat and challenge perceptions among the participants.

2.3.2. The multidimensional scale of perceived social support

The social support questionnaire used in this study is a self-report tool [28] assessing informal support available to individuals (e.g., "There is someone dear to my heart who is near me when I need them."). First introduced in Israel in Hebrew by Chen [29], the questionnaire focuses on three sources of social support: family, friends, and significant others. Comprising 12 items, respondents rated their agreement on a 7-point Likert scale, where 1 indicates strong disagreement and 7 denotes strong agreement. Scores reflect perceived support levels from each source. Cronbach's alpha indicated internal reliability: 0.90 for family support, 0.90 for support from friends, and 0.88 for support from significant others.

2.3.3. Wechsler Intelligence Test

The Wechsler Intelligence Test [30] stands as one of the most widely employed tools for assessing cognitive abilities. It has undergone standardization, and Israeli norms for the Hebrew version have been established [31]. Grading keys for each subtest enable the conversion of respondents' accumulated points into standard scores, following the established norms. Lieblich et al. [32] reported robust reliability coefficients for the Hebrew version of the test. In this study, participants underwent the similarities test and the comprehension test from the Wechsler Intelligence Test, recognized as a comprehensive measure of general mental abilities.

2.3.4. Similarities test

In the similarities test, the examiner presents pairs of words representing familiar concepts to the respondent (e.g., "eye and ear"), who is then required to elucidate the perceived similarities between the given pair. The objective is to assess the individual's cognitive ability, abstract conceptualization, long-term memory, capacity to comprehend and generate concepts, associative thinking, and overall general knowledge. The outcome is an evaluation of the respondent's proficiency in discerning and articulating meaningful relationships between two objects or concepts. Recognized as a widely accepted tool, the similarities test serves as a general measure of intelligence.

2.3.5. Comprehension test

During the comprehension test, respondents are presented with a series of questions that necessitate the application of daily problem-solving skills and an understanding of general social concepts (e.g., "Why do people wash clothes"). The primary objective is to assess the respondent's sense of judgment and social functioning, specifically their capacity for a reality check. The test items encompass both familiar, day-to-day situations and those related to social values, which are more abstract in nature. Answering these questions demands significant processing and integration of the respondent's information regarding ethics, values, and social aspects. Widely acknowledged as a valuable tool, the comprehension test serves as an effective measure of both verbal ability and general intelligence.

2.3.6. Demographic questionnaire

Additionally, the research participants were administered a demographic questionnaire encompassing inquiries about various personal characteristics, including ethnic origin, age, gender, marital status, and the educational backgrounds of both their mothers and fathers.

3. Results

3.1. Differences between students of Arab and Jewish origin in the measures

To examine the differences between Jewish and Arab students on the similarities and comprehension tests, as well as the questionnaires related to threat, challenge, and social support, one-way MANOVA analyses were conducted. A *t*-test was employed to assess the differences in first-year grades between the two groups.

The MANOVA comparing the results of intelligence tests in the two groups revealed a significant difference between Arab and Jewish students, $F(2, 201) = 59.64$, $p < 0.01$, $\text{Eta}^2 = 0.37$. The means and standard deviations obtained from the similarities and comprehension tests are presented for each measure in Table 1.

Table 1
Means and standard deviations on similarities and comprehension tests

	Origin					
	Arabs ($n = 102$)		Jews ($n = 102$)			
Measure	*M*	*SD*	*M*	*SD*	*I*(1, 202)	Eta^2
Similarities	16.74	5.90	23.48	4.24	***87.85	0.30
Comprehension	15.22	7.03	24.09	6.29	***90.36	0.31

*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$

As illustrated in the table, there were statistically significant differences between students of Arab and Jewish origin in both measures. Students of Jewish origin achieved higher scores on both the similarities and comprehension tests compared to their counterparts of Arab origin. The MANOVA analysis examining differences between Jewish and Arab students in levels of threat and challenge indicated statistical significance, $F(2, 202) = 13.49$, $p < 0.01$, $\text{Eta}^2 = 0.12$. The means and standard deviations of the threat and challenge measures, along with the results of the analyses for each measure separately, are presented in Table 2.

Table 2
Means and standard deviations of sense of threat and challenge

	Origin					
	Arabs ($n = 102$)		Jews ($n = 102$)			
Measure	*M*	*SD*	*M*	*SD*	*F*(1, 202)	Eta^2
Threat	4.31	1.00	3.74	0.95	***16.73	0.08
Challenge	3.61	1.14	3.19	0.97	**9.17	0.04

*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$

As indicated in Table 2, there were statistically significant differences between Arab and Jewish students in terms of threat and challenge, with students of Arab origin having higher average scores in both measures.

The MANOVA analysis examining differences between Jewish and Arab students in social support revealed a significant difference between the groups, $F(3, 202) = 6.68$, $p < 0.01$, $\text{Eta}^2 = 0.09$. The means and standard deviations of the social support measures, along with the results of the analysis of variance for each measure separately, are presented in Table 3.

Table 3
Means and standard deviations of the measures of social support

	Origin					
	Arabs ($n = 102$)		Jews ($n = 102$)			
Measure	*M*	*SD*	*M*	*SD*	*F*(1, 202)	Eta^2
Family support	5.13	1.18	5.19	0.95	1.22	0.01
Support from friends	4.62	1.43	5.14	1.08	**8.36	0.04
Support from significant others	5.02	1.30	5.62	0.72	***16.43	0.08

*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$

As shown in Table 3, there were significant differences between the Arabs and Jews in terms of support of friends and of significant others, where the students of Jewish origin scored higher than those of Arab origin in both measures.

In addition, an independent-samples *t*-test was performed to examine whether there were differences between the Jews and Arabs in first-year grades. The results indicated significant differences between the groups in first-year grades, $t(202) = 4.46$, $p < 0.001$, where the average first-year grade of the students of Jewish origin was higher than that of the students of Arab origin (Arabs: $M = 80.06$, $SD = 8.73$; Jews: $M = 85.26$, $SD = 7.90$).

As noted earlier, the two groups of students differed in the education of their parents. To examine whether these differences accounted for the differences found between the students of Jewish and Arab origin on the intelligence tests, level of threat and challenge, and measures of social support, MANCOVA analyses were also performed and the variables of parents' education were entered as covariates. These analyses showed very similar differences to those obtained in the analyses without covariates.

3.2. Relationships among the research variables

The relationships among the research variables and between them and the first-year grades were examined by means of Pearson correlations, which were calculated for each group of variables. The correlations between social support and first-year grades are presented in Table 4.

Table 4
Pearson correlations between social support variables and first-year grade ($N = 204$)

Variable	First-year grade	Family support	Support of friends
Family support	004.		
Support of friends	−0.03	0.43***	
Support of a significant other	−0.15*	0.43***	0.57***

*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$

As shown in Table 4, a weak positive correlation was found between support from a significant other and the final first-year grade. Furthermore, significant positive correlations were found between all the components of social support.

The correlations between threat and challenge and between them and the first-year grade are presented in Table 5.

Table 5
Pearson correlations between threat and challenge and first-year grade ($N = 204$)

Variable	First-year grade	Threat
Threat	−0.06	
Challenge	−0.23**	0.01

*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$

As shown, a negative correlation was found between challenge and the first-year grade; in other words, the higher the level of challenge, the lower the first-year grade. Analysis of the correlations between the similarities and comprehension tests and the first-year grade indicated strong, significant positive correlations for the similarities and comprehension tests with the first-year grade (similarities: $r = 0.38$, $p < 0.001$; comprehension: $r = 0.35$, $p < 0.001$), indicating that higher scores on these tests correspond to higher first-year grades.

3.3. Regression analysis of the explained variance of the first-year grades among the students of Jewish and Arab origin

Regression analyses were conducted separately for each group to explore the collective impact of the research variables on the explained variance of the first-year grades. In both analyses, the first stage involved a multiple regression where all mentioned variables, including those not initially associated with the first-year grade, were entered. This initial analysis aimed to identify potential contributions of these variables in interaction with others. Subsequently, a hierarchical regression analysis was performed in the second stage. All variables found to be associated with the first-year grade, either as main effects or in interaction, were included. The regression comprised of five steps. The first step incorporated socioeconomic traits of the student – age, father's education, and mother's education. In the second step, the similarities and comprehension tests were entered. The third step included the level of threat and challenge perceived by the student. The fourth step involved measures of the student's social support. In the fifth step, interactions between threat and support and the student's social support measures were added. This allowed an examination of whether the contribution of social support measures depended on the student's level of perceived threat and challenge. In the first four steps, variables were force-entered; in the fifth step, interactions that significantly contributed ($p < 0.05$) to the explained variance were entered. The regression results for students of Arab origin indicated a 32% explained variance, while for students of Jewish origin, the explained variance was 23%. The beta coefficients of explained variance for each regression are detailed in Table 6.

As evident from the table, in the first step, where the socioeconomic traits of the student – age, father's education, and mother's education – were entered, none of the regressions indicated a significant contribution to the explained variance in the first-year grade. In the second step, where the intelligence tests were entered, the regression for students of Arab origin showed a significant contribution of 18% to the explained variance in first-year grades. However, in the regression for students of Jewish origin, no significant contribution to the explained variance of the first-year grade was found. In the regression for students of Arab origin, the scores on the similarities test were found to be

Table 6
Coefficients of the hierarchical regression analysis of explained variance in first-year grades among students of Arab origin ($N = 102$) and students of Jewish origin ($N = 102$)

	Origin			
	Arab		Jewish	
Predictor	ΔR^2	β	ΔR^2	β
Step 1	0.02		0.00	
Age		0.01		−0.01
Father's education		−0.16		−0.06
Mother's education		0.01		0.00
Step 2	0.18***		0.05	
Similarities		0.42***		−0.05
Comprehension		0.05		0.23*
Step 3	0.01		0.06*	
Threat		0.05		−0.01
Challenge		−0.10		−0.26*
Step 4	0.02		0.05	
Family support		0.03		0.17
Support of friends		−0.21		−0.20
Support of significant other		0.08		0.09
Step 5	0.09**		0.07*	
Threat × Family support		−0.25*		
Challenge × Support of friends				−0.26*
Total R^2	0.32***		0.23*	

*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$

significantly associated positively with the first-year grade. In other words, the higher the score on the similarities test, the higher the first-year grade. In the regression for students of Jewish origin, the comprehension test score was found to be significantly associated positively with the first-year grade. In other words, the higher the score on the comprehension test, the higher the first-year grade.

In the third step, in which the student's sense of threat and challenge was entered, the regression regarding the students of Arab origin indicated no significant contribution to the explained variance in first-year grades. The result of the regression regarding students of Jewish origin indicated a significant contribution of 6% to the explained variance in first-year grades. Among these students, challenge was found to be associated significantly and negatively with the first-year grade; in other words, the higher the level of challenge, the lower the first-year grade.

In the fourth step, where the measures of social support were assessed, no significant contribution to the explained variance in first-year grades was observed in either group. Moving to the fifth step, involving the introduction of interactions between social support and threat, as well as between social support and challenge, a significant contribution of the interaction between family support and threat emerged in the regression for students of Arab origin. However, among the students of Jewish origin, this interaction did not reach statistical significance. Additionally, a significant contribution of the interaction between support from friends and challenge was identified in the regression for students of Jewish origin. In contrast, among students of Arab origin, this interaction did not attain statistical significance. These interactions contributed an additional 7% to the explained variance in first-year grades for students of Jewish origin and 9% for students of Arab origin.

To further elucidate the interactions, Aiken and West's [33] approach was employed by separately addressing the high and low level of one of the variables.

As Figure 1 illustrates, regarding the students of Arab origin who sensed a low level of threat, no association was found between family support and first-year grades. The statistical analysis revealed that $\beta = 0.17$, $p > 0.05$. In comparison, a significant negative association between family support and first-year grades was found among the students with a high level of threat. The statistical analysis revealed that $\beta = -0.21$, $p < 0.05$. In other words, in this group, the more family support a student reported, the lower their first-year grades.

Figure 1
The relationship between family support and first-year grades among students of Arab origin with a high and low level of threat

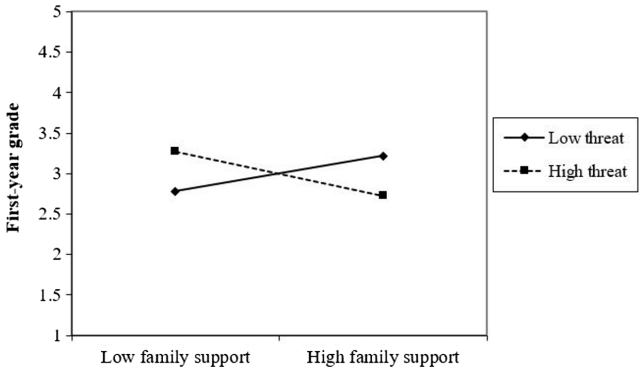
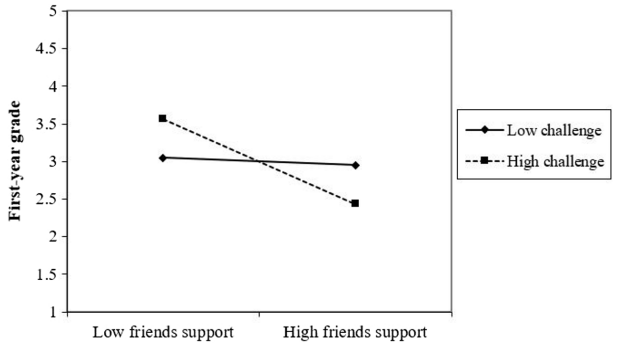


Figure 2 provides a graphic description of the interaction between support of friends and challenge, among students of Jewish origin.

Figure 2
The relationship between support of friends and first-year grades among Jewish students with a high and low level of challenge



As Figure 2 illustrates, among the students of Jewish origin who had a low level of challenge, no association was found between the support of friends and first-year grade. The statistical analysis revealed that $\beta = -0.03$, $p > 0.05$. In comparison, among the Jewish students with a high level of challenge, a high and significant negative association was found between the support of friends and first-year grades. The statistical analysis revealed that $\beta = -0.42$, $p < 0.01$. In other words, in this group, the higher the level of support of friends, the lower the first-year grades.

4. Discussion

The data analysis indicated several findings; some confirmed the research hypotheses, and others did not. The first research hypothesis, regarding the difference in first-year grades of the students of Jewish and Arab origin, was supported by the findings. The first-year grades of the students of Jewish origin were significantly higher than those of the students of Arab origin. These data are consistent with the findings of previous research, as presented in the Introduction, which indicated considerable and consistent disparity between the groups in terms of several measures of academic achievements.

In addition to the disparity between the groups in first-year grades, there was also a difference in the level of threat and challenge that the students from the two groups experienced. An explanation of this finding might be based on the difference between the groups in first-year grades. As the findings show, the grades of the Arab students were lower; this suggests that it was more complex and difficult for them, compared with their Jewish classmates, to cope with studies. There may be several reasons for this, such as the disparity in language skills, because the courses in Israeli institutions of higher education are taught in Hebrew. Such difficulty can lead to a sense of threat, that is, a feeling that studies jeopardize the student's self-image and future. However, it could also lead to a sense of challenge, that is, to a sense that with the right effort it is possible to cope, express oneself, and succeed. Thus, facing difficulty can be expressed in negative feelings of threat or positive feelings of challenge.

Against this background, it should be noted that a positive correlation was found between level of challenge and first-year grades among the students of Jewish origin. In this group, a higher level of challenge was associated with higher academic achievements. However, such an association was not found among the students of Arab origin. Several explanations can be suggested for this finding. First, according to the data, the levels of both threat and challenge were higher, on average, among the students of Arab origin compared with those of Jewish origin. It is possible, then, that the high level of threat among these students prevented the beneficial impact of sense of challenge. It would be interesting to examine this explanation of the findings in further research among students from both groups of origin and high and low levels of threat, to establish whether the association between level of challenge and first-year grades varies by level of threat.

Second, according to the findings, the level of challenge was higher among the students of Arab origin compared with their classmates of Jewish origin. This might be the result of a threshold effect. According to this explanation, interpersonal differences in level of challenge could be expressed in an impact on studying, particularly among those with relatively low levels of challenge. In this case, a very high level of challenge produces "a flood" that prevents the manifestation of the beneficial effects of the challenge. In further research, this explanation should be examined by investigating the effect of different levels of challenge on the study habits of students. In addition, this suggestion could be investigated by means of qualitative interviews with students, in order to clarify their perception of the challenge posed by studies and of its influence on them.

Regarding the second hypothesis, the findings provided partial support. It was anticipated that the students of Arab origin would turn for support to their families more and their friends less, compared with the students of Jewish origin. Indeed, the findings indicated that the students of Jewish origin asked their friends for support in their studies more than their Arab classmates did. As noted, this is consistent with the findings of previous research that Arab society

is more traditional and places greater emphasis on family support than Jewish society in Israel.

However, contrary to the hypothesis, no difference was found between the groups in family support. This finding contradicts the research literature on Arab society in Israel, which revealed the family as the individual's main source of support. Perhaps the reason the present research findings differed from those of earlier research is that the previous studies referred to support of the individual, in general, and the present one focused on support of the individual in an academic institution. As presented in the section on the research participants, most of the Arab origin students represented the first generation in their family to pursue an academic education. The average mother's education of the Arab origin students was 11.36 years of school, and for the fathers, it was 11.60 years. In other words, most of the parents of the Arab origin students had not completed high school (12 years of study), although the difference in parents' education was only between the mothers in the two groups. Against this background, it may be that despite the natural tendency of students to turn to their families for help, when it came to academic studies, the families did not seem an adequate source of support in this respect. Further research might include a similar comparison among students of Arab and Jewish origin where the parents in both groups have an academic education, to examine whether the groups still differ in the level of parental support for academic studies. Furthermore, it would be interesting in future research to examine and compare both academic and other types of support of students in these two groups.

The third research hypothesis, that the students from both groups who utilized social support would have higher grades, was also not supported by the research findings. In fact, the results actually show that in some cases, the opposite was true: among the students of Arab origin who expressed a greater sense of threat, there was a negative correlation between family support and first-year grades. In other words, students of Arab origin who experienced a higher level of threat and received more help from their families had lower first-year grades. In comparison, among the Jewish students who sensed a greater sense of challenge, a negative correlation was found between support of friends and first-year grades. That is, the students of Jewish origin who experienced a higher level of challenge and received more support from their friends had lower first-year grades. It should be noted that in both interactions, social support was associated with lower – not higher – grades.

The interaction among the students of Arab origin referred to family support and the interaction among the students of Jewish origin referred to support from friends; this is consistent with other findings of the present research and with the existing literature on this subject. In the present research, the Jewish students sought more support from friends, and the findings of previous studies highlighted the role of family support in Arab society.

The findings that the interaction among the students of Arab origin referred to threat, and the interaction among the students of Jewish origin referred to challenge might be explained in light of the findings of previous research [34]. The earlier study, which examined different types of motivation among Arab and Jewish students, revealed a significant positive correlation between "personal-avoidance achievement goals" and first-year grades among students of Arab origin, and between "personal-approach achievement goals" and first-year grades among the students of Jewish origin. Personal-approach achievement goals refer to the focus of students, compared with their peers, on attaining academic achievements, such as grades, and being perceived by those around them as smart and successful. In comparison, personal-avoidance achievement goals refer to the focus of students on avoiding low academic achievements and being perceived by those around them as poor students. Among the Arab students, the personal-avoidance achievement goal was found to be the more important of the two. This goal involves matters related to a sense of threat (fear of low grades and a negative image in society); thus, based on these findings, it seems reasonable that it was threat that was most relevant to this research group. Similarly, in light of the finding that the personal-approach achievement goal was more important to the Jewish students, and this goal involves matters associated with a sense of challenge (desire for achievement and self-fulfillment), it also follows that challenge would be more relevant for this research group.

This reference to the findings of previous research may also be helpful in understanding the differences between the groups in terms of a sense of threat and challenge, and with regard to sources of support (parents or friends). However, these findings do not help us understand why the correlation found in the present study was in the opposite direction to that hypothesized. Several possible explanations might be suggested. For example, the request for help from family and friends may necessitate investment of time and attention. Thus, turning to these parties might be at the expense of other, more effective means of learning, such as memorizing material or furthering one's understanding of it. Another explanation that might be suggested is that in some of the cases, those asked for help might have limited ability to actually help the students with their academic studies. Of course, these are but preliminary suggestions, and further research is needed to examine whom the students actually turn to for help and the type of assistance they receive, in order to obtain a fuller picture and explain the data.

5. Limitations and Further Research

The findings of the present research are interesting, but it is important to note its limitations, as well. First, this was a correlative study, and therefore it is impossible to determine the causality of the associations found. Naturally, there is an inherent difficulty in conducting operations research on the subject of academic achievement. Nevertheless, some of the effects, such as seeking support for studies, could also be examined using simulations under laboratory conditions; it is hoped that future studies will be devoted to such research. Second, although the present research is part of the broader international research on the subject of minorities, it is important to note the very significant differences between minority and majority groups in different countries and different education systems. Something can be learned from every study published on this subject; each one contributes new ideas and perspectives. However, more comparative studies that examine the same factors in different circumstances and in different directions are needed. Research of this type would provide a broader view, enabling comparison of minority groups in different countries and identification of their similarities and differences. For this reason, the current study is limited in terms of how broadly these findings can be generalized beyond the specific educational and cultural context of the study. Third, the present research examined the degree to which students reported that they received help from their social environment, but did not measure the actual number of requests they made for help or the nature of the help they requested and/or received. In the absence of this information, it is very difficult to draw broad conclusions from the correlations found in the study. Against this background, it is important to consider this study as an additional step in understanding this important subject, which may lead to additional research that will shed further light on the subject.

Another limitation of the research, which is common to most studies that compare the Jewish majority and Arab minority in Israel,

is the language difference. As noted, the research was conducted in Hebrew, despite the language gap between the groups. The reason for this choice, which many researchers have made, is that it has been found that students of Arab origin almost always prefer to answer questionnaires and take tests in Hebrew. They usually study, take exams, and complete administrative forms in Hebrew, so they are more accustomed to responding to written questions in this language. Furthermore, there is a significant difference between spoken and literary Arabic, and in many cases, the written language is not the same language that Arabic-speakers are used to. This issue represents a serious challenge for any researcher seeking to compare these groups. However, research in this area is essential to identifying the sources of disparity between Hebrew- and Arabic-speaking students and developing tools to reduce it. In this situation, the language issue is a significant impediment to understanding the causes of the differences and correlations found between these groups.

Lastly, another limitation of the study is that this study did not include a multi-stage model for explaining the variance in academic achievements, since this is a preliminary study that addresses these variables. In follow-up studies, it will be interesting to create a multi-stage model of the relationships between the variables, and we hope that this paper can serve as a basis for this in the future.

These shortcomings notwithstanding, the present research makes a significant contribution to the field. In terms of methodology, the study examined associations, in practice and over time, between social support and type of social support of students. Such examination over time is essential to understanding the source of differences between majority and minority groups, and such understanding is particularly important in light of the central role of academic education in the social and professional advancement of individuals.

Another methodological contribution of the present research lies in its examination of disparities between minority and majority groups by considering diverse variables associated with educational background of mother and father, several cognitive skills of the student, age, marital status of the student, and the student's sense of threat and challenge. The inclusion of diverse variables helps elucidate their impact on the differences between minority and minority groups.

From a practical perspective, the present research might help people involved in narrowing gaps between majority and minority groups construct evidence-based intervention programs. For example, such programs informed by the findings might consider support from parents and friends as a means for improving first-year grades, which might, in turn, help narrow the gap between minority and majority groups in daily life, in different aspects of society and career.

The present research also contributes to theory. This is, in fact, because the findings did not support the third research hypothesis but indicated a negative association between family support and first-year grades among the students of Arab origin and between support from friends and first-year grades among the students of Jewish origin. Provided that additional studies confirm this finding, it could inform the methods used by systems designed to help students, in general, and students from minority groups, in particular, regarding the role of social support in promoting academic success.

Conflicts of Interest

The authors declare that they have no conflicts of interest to this work.

Data Availability Statement

Data sharing is not applicable to this article as no new data were created or analyzed in this study.

Author Contribution Statement

Oz Guterman: Conceptualization, Methodology, Software, Validation, Formal analysis, Investigation, Resources, Data curation, Writing – original draft, Writing – review & editing, Visualization, Supervision, Project administration. **Ari Neuman:** Conceptualization, Methodology, Software, Validation, Formal analysis, Investigation, Resources, Data curation, Writing – original draft, Writing – review & editing, Visualization, Supervision, Project administration. **Efrat Gill:** Conceptualization, Methodology, Software, Validation, Formal analysis, Investigation, Resources, Data curation, Writing – original draft, Writing – review & editing, Visualization, Supervision, Project administration.

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