Influence of Household Chores on Grades of Undergraduates

Muhammad Azeem[1] and Rida Noor[2]

https://doi.org/10.62345/jads.2025.14.1.139

Abstract

The undergraduate level of education is an important stage of a student's academic career. In developing countries, including Pakistan, the low level of socio-economic status of families may badly influence their children's education. Due to the inability to hire home servants, a majority of parents put the extra burden of different household activities on children. This paper investigates the influence of household chores on the academic grades of undergraduate-level students. The data were obtained from a probability sample of undergraduates at the University of Malakand, Pakistan. The statistical analysis suggests that most of the undergraduates perform household chores regularly, which reduces their study hours. We observed that students who perform household chores are likelier to get poor academic grades. Further, most of the students thought that household chores should be equally divided between family members. We also observed that students with less contribution to household chores tend to show better academic outcomes. The findings have important implications for promoting a supportive environment that allows students to thrive academically and personally.

Keywords: Academic Performance, Education, Grades, Household Chores, Undergraduates.

Introduction

Education refers to the facilitation of learning, values, skills, and habits. It's a lifelong process that assists individuals in developing critical thinking as well as communication skills. Education can be formal, informal, or nonformal and can be obtained through various means, such as schools, colleges, universities, workshops, and online courses. Education is a lifelong process that helps individuals adapt to changing environments and pursue their goals. It is essential for personal and professional growth.

Wentzel et al. (1998) examined how academic and social motivation influence student performance. The study focused on students' beliefs about their abilities, control over learning, achievement goals, and values. Middleton and Murray (1999) investigated how varying levels of classroom technology use affected standardized reading and math scores in grades four and five. Chemers et al. (2001) conducted a year-long study exploring how self-efficacy and optimism influence first-year university students' adjustment. Findings showed that students with higher self-efficacy and optimism performed better, managed stress more effectively, and remained more motivated. Curcio et al. (2006) investigated the effects of sleep deprivation on students' cognitive performance and academic outcomes. Jama and Mapesela (2008) highlighted a gap in higher education research by questioning how well institutions understand the diverse backgrounds of their students.

[1]*Department of Statistics, University of Malakand, Pakistan. Corresponding Author Email: azeemstats@uom.edu.pk*
[2]*Department of Statistics, University of Malakand, Pakistan.*

Compliance with ethical standards: There are no conflicts of interest (financial or non-financial). This study did not receive any funding.

Trudeau and Shephard (2008) conducted a systematic review of studies examining how school-based physical activities relate to academic performance. Yamamoto and Holloway (2010) reviewed how parental expectations affect student achievement across racial and ethnic groups. Farooq et al. (2011) examined academic performance among secondary school students in a major Pakistani city. Richardson et al. (2012) found that performance self-efficacy emerged as the strongest predictor of academic success. Yusuf et al. (2014) studied the impact of collaborative learning on academic performance and anxiety in balancing chemical equations among secondary students in Katsina, Nigeria. Chowdry et al. (2014) assessed how Virtual Learning Environment (VLE) usage influences academic performance. The study called for enhanced digital teaching skills among faculty to maximize the educational value of VLEs. Emmanuel (2015) investigated how household chores affect girls' education in Morogoro's rural secondary schools.

Harris and Al-Bataineh (2015) examined the effects of one-to-one technology on fourth-grade students' academic achievement and motivation. Alshammari and Saguban (2017) surveyed 201 nursing students at the University of Hail to identify academic performance factors using a high-reliability questionnaire. Lau (2017) investigated whether social media use and multitasking predict academic performance among 348 undergraduates in Hong Kong. Kayani et al. (2018) studied the effect of physical activity on academic performance, with self-esteem and depression as mediators. Amali and Bello (2018) found that regular engagement in household chores reduced study time and negatively affected school outcomes. Mushtaq (2018) explored social media's impact on academic performance among 371 students at Alberoni University. Francis and Babu (2019) explored the use of data mining to predict student academic performance. Amez and Baert (2019) conducted the first systematic review examining the link between smartphone use and academic achievement.

Moawd and Elsayed (2020) found a strong positive relation between physical activities, cardiorespiratory fitness, and academic grades. Alani (2021) investigated academic performance factors among 562 university students in Oman. Deng et al. (2022) used Structural Equation Modeling (SEM) to examine how academic and family stress contribute to student depression and learning outcomes. Sultan et al. (2022) conducted a cross-sectional study to identify academic performance influencing factors. McCurdy et al. (2022) examined how emotional and behavioral issues affect spelling achievement among underserved children. Khan et al. (2021, 2022a, 2022b) also studied various aspects of academic issues in educational institutions. Maulid (2023) explored factors affecting girls' academic performance in public secondary schools in Mkoani District, Tanzania.

Aljjafer et al. (2024) found that disciplined study routines and self-motivation were the most influential predictors of achievement, emphasizing the importance of student-centered learning strategies in medical education. Naveed et al. (2024) analyzed the influence of teaching styles on academic outcomes. Shakoor et al. (2024) examined the effect of cold drink consumption on student health and academic performance. Riaz et al. (2024) found that emotionally intelligent students are better equipped to cope with academic challenges. A recent study by Zhao and Tuo (2024) surveyed 8678 students, where it was observed that as much as 87% of students participated regularly in household activities. The sample contained about 52 percent of students from rural areas of China.

Methodology

For this study, a random sample of six disciplines was selected without replacement from the University of Malakand. The selected disciplines include Physics, Psychology, Mathematics,

Statistics, Political Science, and English. Table 1 provides the names of the departments that were sampled. In total, 196 students were enrolled in the selected departments. A meticulously designed questionnaire was utilized as the primary instrument for collecting the requisite data. The questionnaire has 18 thoughtful questions on various subjects, including hours spent on chores, household chores responsibilities, chores frequencies, stress from chores, getting help with household chores, conflict due to household chores, and participation in extracurricular activities.

Table 1: Departments Selected

S. No.	Name of Department	S. No.	Name of department
1	Physics	4	Political science
2	English	5	Psychology
3	Statistics	6	Mathematics

The researcher visited each department and obtained the necessary permission from the relevant authorities before approaching the students. The researcher guided the participants with a concise overview of the research objectives to the students, ensuring they understood the purpose and context of the research. A total of 196 questionnaires were distributed among all of the undergraduate students from the six selected departments. A total of 175 questionnaires were completed and returned by the participants. Once the respondents submitted their questionnaires, the researcher expressed gratitude for their participation in the study.

Descriptive Data Analysis

The data analysis in Table 2 summarizes the collected data of all variables and their categories, frequencies, and percentages.

Table 2: Data analysis of summarized collected data

Variables	Categories	Frequencies	Percentage
Age	18 to 20	125	71.4%
	21 to 22	34	19.4%
	23 to 24	16	9.14
Department	Psychology	18	10.2%
	Mathematics	33	18.8%
	Physics	23	13.1%
	English	27	15.4%
	Statistics	42	24%
	Political science	32	18.2%
Semester	1st	67	38.2%
	3rd	54	30.8%
	5th	20	11.4%
	7th	34	19.4%
Hours spent on household chores	Less than 1	40	22.8%
	1 to 2	52	29.7%
	2 to 3	52	29.7%
	3 to 4	17	9.7%
	More than 4	14	8%
Chores responsibilities	Cooking	82	46.8%

	Laundry	13	7.4 %
	Childcare	20	11.4%
	Washing dishes	43	24.5%
	Home cleaning	72	41.1%
Chores regularities	Always	45	25.7%
	Often	48	27.4%
	Rarely	55	31.4%
	Never	27	15.4%
Stress from chores	Always	21	12%
	Often	39	22.2%
	Rarely	57	32.5%
	Never	58	33.1%
Getting help with household chores.	Yes	83	47.4%
	No	26	14.8%
	Sometime	66	37.7%
Who helps with chores?	Parents	85	48.5%
	Sibling	68	38.8%
	Other family member	22	12.57%
Conflict at home due to household chores	Yes	32	18.2%
	No	50	28.5%
	Rarely	61	34.8%
	Never	32	18.2%
Fair division of chores	Strongly Agree	44	25.1%
	Agree	71	40.5%
	Neutral	33	18.8%
	Disagree	17	9.7%
	Strongly disagree	10	5.7%
Academic performance Satisfaction	Very satisfied	71	40.5%
	Somewhat satisfied	73	41.7%
	Neutral	30	14.1%
	Very dissatisfied	5	2.8%
	Somewhat dissatisfied	6	3.4%
Chores affect results	Strongly Agree	19	10.8%
	Agree	80	45.7%
	Disagree	58	33.1%
	Strongly Disagree	18	10.2%
Hours spent studying	0 to 2	43	24.5%
	2 to 4	81	46.2%
	4 to 6	29	16.5%
	6 or more	22	12.5%
Participation in extracurricular activities	No	85	48.5%
	Yes	90	51.4%
Getting support to prioritize study over chores	Yes, always	107	61.1%
	Yes, sometimes	41	23.4%
	Rarely	12	6.8%
	Never	15	8.5%

In this study, 125 (71.4%) students were aged 18 to 20, and 34 students (19.4%) aged 21 to 22. Additionally, 16 students (9.14%) aged 23 to 24 out of 175 female students. We also observed that 18 students (10.2%), 33 students (18.8%), 23 students (13.1%), 27 students (15.4%), 42 students

(24%) 32 students (18.2%), were enrolled in the Department of Psychology, Mathematics, Physics, English, Statistics and Political science, respectively. The descriptive analysis reveals that out of 175 students, 40 (22.8%) spent less than one hour on household chores, 52 students (29.7%) spent one to two hours on household chores, 52 students (29.7%) spent two to three hours on household chores, 17 students, which is about 9.7%, spent three to four hours on household chores, and 14 students (9.7%) spent more than four hours on household chores, respectively.

The descriptive analysis also reveals that 45 students (27.4%) out of 175 students reported performing household chores. We observed that 48 students (27.4%) often perform household chores, 55 students (13.4%) rarely perform household chores, and 27 students (15.4%) never perform regular household chores. The descriptive analysis related to the stress from chores revealed that out of 175 students, 21 students (12%) always felt stress from chores. Our study shows that 39 students (22.2%) often felt stress from chores. We also observed that 57 students (32.5%) rarely felt stressed from chores. Our study shows that 58 students (33.1%) never felt stress from household chores.

The study regarding conflict at home due to household chores revealed that 32 students (18.2%) experienced conflict at home as a result of household chores. From the collected data we observed that 50 students (28.5%) report that there is no conflict at home due to household chores. The study shows that 61 students (34.8%) rarely experience conflict at home due to household chores, while 32 students (18.2%) never experience conflict at home due to household chores. Out of 175 students, 44 students (25.1%) strongly agree that household chores should be divided fairly among all family members 71 students (40.5%) agree that household chores should be divided fairly among all family members 33 students (18.8%) remain neutral about the division of household chores, neither strongly agreeing nor disagree with the idea of dividing responsibilities among family members. We note that 17 students (9.7%) disagree with the idea of dividing household chores among family members 10 students (5.7%) strongly disagree with the idea of dividing household chores among family members.

The descriptive analysis also reveals that 40 students (40.5) report being very satisfied with their grades. The study shows that 73 students (45.7%) are somewhat satisfied with their grades. The analysis tells us that 20 undergraduates (11.4%) are neutral about their academic performance 5 students (2.8%) are very dissatisfied with their academic performance. We observed that 6 students (3.4%) are somewhat dissatisfied with their academic performance. Out of 175 students, 19 students (10.8%) strongly agree that household chores have an influence on students' grades. The study shows that 80 students (45.7) agree that household chores have an influence on students' grades. We observed that 58 students (33.1%) disagree that household chores have an influence on students' grades. The study reported that 18 students (10.2%) strongly disagree that household chores have an influence on students' grades.

The data show that out of 175 female students, 43 students (24.5%) spend 0 to 2 hours per day studying. We observed that 81 students (46.2%) spend 2 to 4 hours per day studying, suggesting that they dedicated a moderate amount of time to academic pursuits." 29 students (16.5%) spend 4 to 6 hours per day studying, implying that they invest a significant amount of time in their academic studies. The study also shows that 22 students (12.5%) spend 6 or more hours per day studying, indicating that they are highly committed to their academic activities. The finding suggests that out of 175 female students, 85 students (48.5%) do not participate in extracurricular activities besides household chores, indicating that they may not be engaged in other activities besides household chores. We know that 90 students (51.4%) participate in extracurricular activities besides household chores, suggesting that they engage in other activities that can develop

their skills, interests, and social connections outside of their academic and household responsibilities.

The descriptive analysis also revealed that out of 175 female students 107 students (61.1%) always receive support to prioritize their studies over household chores. The study shows that 41 students (23.4%) sometimes receive support to prioritize their studies over household chores. We reported that 12 students (6.8%) rarely receive support to prioritize their studies over household chores. Moreover, 15 students (8.5%) never receive support to prioritize their studies over household chores.

Inferential Data Analysis

Here we provide the inferential statistical analysis of the data collected. We used chi-square test of independence for inferential analysis.

Table 3: Stress vs. Study Hours

Categories	Always	Often	Rarely	Never	Row Total	Chi-Square	p-Value
Less than 1	12 (10.74)	10 (9.4)	5 (10.74)	20 (16.11)	47		
1 to 2 hours	11 (9.14)	6 (8.0)	16 (9.14)	7 (13.71)	40		
2 to 3 hours	14 (13.26)	18 (11.6)	9 (13.26)	17 (19.89)	58	29.810	0.000
3 to 4 hours	3 (6.86)	1 (6.0)	10 (6.86)	16 (10.29)	30		
Total	40	35	40	60	175		

Table 3 displays the chi-square value of 29.810 and a p-value of 0.000. We observe that the p-value is much smaller as compared to the significance 0.05, suggesting the rejection of the hypothesis of independence. Consequently, the results suggest that the variables are associated.

Table 4: Stress vs. Frequency of performing household chores

Categories	Always	Often	Rarely	Never	Row Total	Chi-Square	p-value
Always	11 (9.9)	3 (3.9)	6 (7.7)	10 (8.4)	30		
Often	26 (28.1)	5 (11.1)	21 (21.8)	33 (23.8)	85		
Rarely	7 (10.9)	9 (4.3)	15 (8.6)	2 (9.4)	33	41.9	0.000
Never	14 (8.9)	6 (3.5)	3 (6.9)	4 (7.5)	27		
Column Total	58	23	45	49	175		

Table 4 displays the chi-square value of 41.9, and a p-value of 0.000. We observe that the p-value is much smaller as compared to the significance 0.05, suggesting the rejection of the hypothesis of independence. Consequently, the results suggest that the variables are associated.

Table 5: Stress vs. Getting help in household chores

Categories	Always	Often	Rarely	Never	Row Total	Chi-Square	p-Value
Yes	18 (14.7)	19 (20.2)	15 (16.6)	16 (16.7)	68		
No	6 (11.07)	11 (15.1)	15 (12.2)	19 (12.5)	51	22.891	0.000
Sometimes	14 (12.1)	22 (16.6)	12 (13.4)	8 (13.6)	56		
Total	38	52	42	43	175		

Table 5 displays the chi-square value of 22.891 and a p-value of 0.000. We observe that the p-value is much smaller as compared to the significance 0.05, suggesting the rejection of the hypothesis of independence. Consequently, the results suggest that the variables are associated.

Table 6: Stress vs. Getting help from family members

Categories	Always	Often	Rarely	Never	Row Total	Chi-Square Value	p-Value
Parents	15 (16)	24 (19.1)	10 (9.06)	12 (16.7)	61		
Sibling	10 (13.4)	13 (16)	11 (7.5)	17 (13.9)	51	41.729	0.007
Others	21 (16.5)	18 (19.8)	5 (9.36)	19 (17.2)	63		
Total	46	55	26	48	175		

Table 6 displays the chi-square value of 41.729 and a p-value of 0.007. We observe that the p-value is much smaller as compared to the significance 0.05, suggesting the rejection of the hypothesis of independence. Consequently, the results suggest that the variables are associated.

Table 7: Stress vs. Fair distribution of household chores

Categories	Always	Often	Rarely	Never	Row Total	Chi-Square Value	p-Value
Strongly Agree	12 (13.9)	6 (7.08)	7 (9.6)	15 (9.3)	40		
Agree	18 (9.4)	3 (4.7)	1 (6.4)	5 (6.3)	27		
Neutral	6 (12.5)	17 (6.3)	9 (8.6)	4 (8.4)	36	56.77	0.000
Disagree	15 (12.9)	3 (6.5)	11 (8.9)	8 (8.6)	37		
Strongly Disagree	10 (12.2)	2 (6.2)	14 (8.4)	9 (8.2)	35		
Column Total	61	31	42	41	175		

Table 7 displays the chi-square value of 56.77 and a p-value of 0.000. We observe that the p-value is much smaller as compared to the significance 0.05, suggesting the rejection of the hypothesis of independence. Consequently, the results suggest that the variables are associated.

Table 8: Stress vs. Study Hours

Categories	Always	Often	Rarely	Never	Row Total	Chi-Square Value	p-Value
0 to 2 hours	5 (9.7)	18 (11.4)	20 (15.1)	7 (14)	50		
2 to 4 hours	11 (12.2)	7 (14)	22 (19)	23 (17.6)	63	34.883	0.000
4 to 6 hours	3 (4.8)	5 (5.5)	8 (7.5)	9 (7)	25		
6 or more hours	15 (7.1)	9 (8.2)	3 (11.2)	10 (10.3)	37		
Column Total	34	39	53	49	175		

Table 8 displays the chi-square value of 34.883 and a p-value of 0.000. We observe that the p-value is much smaller as compared to the significance 0.05, suggesting the rejection of the hypothesis of independence. Consequently, the results suggest that the variables are associated.

Table 9: Stress vs. Participation in extracurricular activities

Categories	Always	Often	Rarely	Never	Row Total	Chi-Square Value	p-Value
No	15 (15.06)	22 (19.43)	30 (22.83)	18 (27.69)	85		
Yes	16 (15.94)	18 (20.57)	17 (24.17)	39 (29.31)	90	11.855	0.008
Total	31	40	47	57			

Table 9 displays the chi-square value of 11.855 and a p-value of 0.008. We observe that the p-value is much smaller as compared to the significance 0.05, suggesting the rejection of the hypothesis of independence. Consequently, the results suggest that the variables are associated.

Table 10: Stress vs. Getting support from family members

Categories	Always	Often	Rarely	Never	Row Total	Chi-Square Value	p-Value
Yes always	4 (9.091)	15 (9.58)	16 (16.21)	8 (8.1)	43		
Yes sometime	18 (7.4)	12 (7.8)	3 (13.2)	2 (6.6)	35		
Rarely	6 (12.2)	7 (12.9)	33 (21.8)	12 (10.9)	58	49.607	0.000
Never	9 (8.2)	5 (8.6)	14 (14.7)	11 (7.35)	39		
Total	37	39	66	33	175		

Table 10 displays the chi-square value of 49.607 and a p-value of 0.000. We observe that the p-value is much smaller as compared to the significance 0.05, suggesting the rejection of the hypothesis of independence. Consequently, the results suggest that the variables are associated.

Table 11: Conflicts vs. Hours spent on household chores

Categories	Yes	No	Rarely	Never	Row Total	Chi-Square	p-Value
< 1 hour	7 (6.983)	11 (8.920)	3 (6.091)	5 (4.903)	26		
1 to 2 hours	15 11.817)	21 (13.577)	6 (10.3)	2 (8.297)	44		
2 to 3 hours	11 (7.78)	9 (8.94)	5 (6.79)	4 (5.46)	29	48.755	0.000
3 to 4 hours	1 (10.2)	7 (11.72)	20 (8.903)	10 (7.166)	38		
> 4 hours	13 (10.75)	6 (11.036)	7 (8.82)	12 (7.38)	38		
Total	47	54	41	33	175		

Table 11 displays the chi-square value of 48.755 and a p-value of 0.000. We observe that the p-value is much smaller as compared to the significance 0.05, suggesting the rejection of the hypothesis of independence. Consequently, the results suggest that the variables are associated.

Table 12: Conflicts vs. Getting help in household chores

Categories	Yes	No	Rarely	Never	Row Total	Chi-Square Value	p-Value
Yes	12 (6.58)	8 (4.62)	17 (10.23)	20 (25.58)	57		
No	11 (22.3)	6 (14.88)	41 (33.08)	12 (23.15)	70	34.790	0.000
Sometimes	9 (5.54)	11 (12.31)	13 (8.26)	15 (21.54)	48		
Column Total	32	25	71	47	175		

Table 12 displays the chi-square value of 34.790 and a p-value of 0.000. We observe that the p-value is much smaller as compared to the significance 0.05, suggesting the rejection of the hypothesis of independence. Consequently, the results suggest that the variables are associated.

Table 13: Conflicts vs. Participation in extracurricular activities

Categories	Yes	No	Rarely	Never	Row-Total	Chi-Square Value	p-Value
No	15 (17.49)	44 (27.26)	18 (25.20)	13 (20.06)	90		
Yes	19 (16.51)	9 (25.74)	31 (23.80)	26 (18.94)	85	31.249	0.000
Total	34	53	49	39	175		

Table 13 displays the chi-square value of 31.249 and a p-value of 0.000. We observe that the p-value is much smaller as compared to the significance 0.05, suggesting the rejection of the hypothesis of independence. Consequently, the results suggest that the variables are associated.

Table 14: Chores affect students' grades vs. Getting help in household chores

Categories	Strongly Agree	Agree	Disagree	Strongly Disagree	Row Total	Chi-Square Value	p-Value
Yes	10 (9.214)	16 (21.1)	4 (3.37)	13 (9.214)	43		
No	5 (9.00)	29 (20.700)	2 (3.30)	6 (9.00)	42	11.019	0.088
Sometimes	18 (11.78)	37 (27.107)	9 (4.321)	26 (11.78)	90		
Column Total	33	82	16	45	175		

Table 14 displays the chi-square value of 11.019 and a p-value of 0.088. We observe that the p-value is much larger as compared to the significance 0.05, suggesting the acceptance of the hypothesis of independence. Consequently, the results suggest that no significant relationship exists between variables.

Table 15: Chores affect students' grades vs. Fair distribution of household chores

Categories	Strongly Agree	Agree	Disagree	Strongly Disagree	Row Total	Chi-Square	p-Value
Strongly Agree	13 (11.206)	6 (9.726)	7 (9.303)	11 (6.766)	37		
Agree	15 (13.02)	11 (11.3)	9 (10.811)	8 (7.86)	43		
Neutral	20 (14.23)	4 (12.35)	15 (11.8)	8 (8.59)	47	40.446	0.000
Disagree	4 (5.75)	8 (4.99)	3 (4.777)	4 (3.47)	19		
Strongly Disagree	1 (8.78)	17 (7.62)	1 (5.303)	1 (5.303)	29		
Column Total	53	46	44	32	175		

Table 15 displays the chi-square value of 40.446 and a p-value of 0.000. We observe that the p-value is much smaller as compared to the significance 0.05, suggesting the rejection of the hypothesis of independence. Consequently, the results suggest that the variables are associated.

Table 16: Chores affect students' grades vs. Study Hours

Categories	Strongly Agree	Agree	Disagree	Strongly Disagree	Row Total	Chi-Square	p-Value
0 to 2 hours	6 (11.59)	16 (15.15)	8 (10.40)	22 (14.86)	52		
2 to 4 hours	17 (9.14)	15 (11.59)	6 (8.20)	3 (11.71)	41		
4 to 6 hours	9 (10.70)	4 (13.99)	15 (9.60)	20 (13.71)	48	40.839	0.000
> 6 hours	7 (7.580)	16 (9.91)	6 (6.80)	5 (9.71)	34		
Column Total	39	51	35	35	175		

Table 16 displays the chi-square value of 40.839 and a p-value of 0.000. We observe that the p-value is much smaller as compared to the significance 0.05, suggesting the rejection of the hypothesis of independence. Consequently, the results suggest that the variables are associated.

Table 17: Satisfaction with academic performance vs. Chores regularities

Categories	Very Satisfied	Somewhat Satisfied	Neutral	Very Dissatisfied	Somewhat Dissatisfied	Row Total	Chi-Square	p-Value
Always	12 (7.600)	13 (9.600)	1 (5.00)	5 (4.600)	4 (8.200)	35		
Often	1 (10.64)	15 (13.44)	10 (7.00)	4 (6.44)	19 (11.48)	49		
Rarely	7 (8.25)	8 (10.42)	11 (5.42)	8 (4.99)	4 (8.90)	38	43.37	0.000
Never	18 (11.50)	12 (14.53)	3 (7.57)	6 (6.966)	14 (12.41)	53		
Total	38	48	25	23	41			

Table 17 displays the chi-square value of 43.37 and a p-value of 0.000. We observe that the p-value is much smaller as compared to the significance 0.05, suggesting the rejection of the hypothesis of independence. Consequently, the results suggest that the variables are associated.

Table 18: Satisfaction with academic performance vs. Getting help in household chores

Categories	Very Satisfied	Somewhat Satisfied	Neutral	Very Dissatisfied	Somewhat Dissatisfied	Row Total	Chi-Square	p-Value
Yes	12 (13.02)	4 (7.87)	15 (12.72)	21 (13.93)	1 (5.45)	53		
No	20 (14.01)	15 (8.47)	8 (13.68)	9 (14.98)	5 (5.86)	57	29.407	0.000
Sometimes	11 (15.97)	7 (9.66)	19 (15.60)	16 (17.09)	12 (6.69)	65		
Total	43	26	42	46	18	175		

Table 18 displays the chi-square value of 29.407 and a p-value of 0.000. We observe that the p-value is much smaller as compared to the significance 0.05, suggesting the rejection of the hypothesis of independence. Consequently, the results suggest that a significant relationship exists between variables.

Table 19: Satisfaction with grades vs. Fair distribution of household chores

Categories	Very Satisfied	Somewhat Satisfied	Neutral	Very Dissatisfied	Somewhat Dissatisfied	Row Total	Chi-Square	p-Value
Strongly Agree	4 (4.704)	11 (7.78)	22 (15.12)	4 (7.056)	1 (7.392)	42		
Agree	2 (3.584)	7 (5.88)	8 (11.52)	10 (5.376)	5 (5.362)	32		
Neutral	8 (3.808)	3 (6.256)	5 (12.24)	6 (5.712)	12 (5.984)	34	40.477	0.000
Disagree	16 (13.34)	9 (3.12)	6 (4.43)	18 (7.86)	1 (4.32)	50		
Strongly Disagree	0 (1.904)	2 (3.128)	10 (6.120)	1 (2.856)	4 (2.992)	17		
Total	29	32	51	39	23	175		

Table 19 displays the chi-square value of 40.477 and a p-value of 0.000. We observe that the p-value is much smaller as compared to the significance 0.05, suggesting the rejection of the hypothesis of independence. Consequently, the results suggest that the variables are associated.

Table 20: Satisfaction with academic performance vs. Getting support to prioritize studies

Categories	Very Satisfied	Somewhat Satisfied	Neutral	Very Dissatisfied	Somewhat Dissatisfied	Row Total	Chi-Square	p-Value
Always	4(8.451)	2(6.411)	10 (6.703)	22(18.651)	13 (10.78)	51		
Sometimes	6(4.806)	1(3.646)	0 (3.811)	16(10.606)	6 (6.131)	29		
Rarely	11(6.463)	3(4.903)	6 (5.126)	4(14.263)	15 (8.246)	39	52.134	0.000
Never	8(9.280)	16(7.04)	7 (7.360)	22(20.480)	3 (11.840)	56		
Total	29	22	23	64	37	175		

Table 20 displays the chi-square value of 52.134 and a p-value of 0.000. We observe that the p-value is much smaller as compared to the significance 0.05, suggesting the rejection of the hypothesis of independence. Consequently, the results suggest that the variables are associated.

Conclusion

This study was aimed at analyzing the effects of household chores on students' academic performance. The data were obtained from a random sample of 175 undergraduate level students. Through our descriptive study, we learned that 29.7% of students dedicated 2 to 3 hours to household chores, while a smaller percentage of students spent more than 4 hours. It has also been found that most students feel stressed due to household chores. Moreover, about 47.4 % get help in household chores from family members, usually from parents. Likewise, most of the students strongly agree that there should be a fair distribution of household chores. Furthermore, more than 41.1% of students were satisfied with their academics, while about half of the students were very dissatisfied with their academics. The study reveals that about 61.1% of students were getting support to prioritize study over household chores.

The inferential analysis suggests that undergraduates who are assigned a significant amount of household chores responsibilities experience regular stress from household chores. On the other hand, undergraduate students who get a more equal division of household chores receive support from family members and have a healthy balance between chores and academic responsibilities which tend to result in better academic outcomes. The analysis reveals that household chores can affect student participation, extracurricular activities, and overall academic success. Our findings

have important implications for promoting a supportive environment that allows undergraduates to thrive academically and personally.

Here are some recommendations that can effectively help students manage their responsibilities and improve their academic performance.

- To achieve academic success, it is highly recommended that students prioritize their responsibilities, manage their time effectively, and develop good study habits, such as creating a schedule, setting clear goals, and seeking help when needed.
- It is recommended that students get proper sleep, perform physical exercises on regular basis, and ensure healthy diets to help them stay energized.
- It is recommended that parents encourage their children to take ownership of her space and help with household chores.
- Parents should motivate their daughter to praise and appreciate her efforts, no matter how small, to build her confidence and sense of responsibility.
- The following are some suggestions about some possible future research works.
- Future researchers may use statistical modeling methods to model academic grades against the number of hours spent on household chores.
- The impact of household chores can also be investigated at postgraduate and doctoral level.

References

- Alani, F.S. (2021). Determinants of academic performance: A case study at Sohar University. *Journal of Education and Practice, 12*(3), 34–41.
- Aljaffer, M.A., Almadani, A.H., AlDughaither, A.S., Basfar, A.A., AlGhadir, S.M., AlGhamdi, Y.A., AlHubaysh, B.N., Almayouf, O.A., Alghamdi, S.A., Ahmad, T., & Abdulghani, H.M. (2024). The impact of study habits and personal factors on the academic achievement performances of medical students. *BMC Medical Education, 24*, 888.
- Alshammari, F., & Saguban, R. (2017). Factors affecting academic performance of student nurses in the Kingdom of Saudi Arabia. *International Journal of Education and Research, 5*(5), 69–82.
- Amali, I.O., & Bello, M.B. (2018). Domestic work and academic performance of female students in upper-basic schools in Kwara State, Nigeria. *Nigerian Journal of Educational Research and Evaluation, 17*(2), 30–39.
- Amez, S., & Baert, S. (2019). Smartphone use and academic performance: A literature review. *International Journal of Educational Research, 103,* 101618.
- Chemers, M.M., Hu, L.-T., & Garcia, B.F. (2001). Academic self-efficacy and first-year college student performance and adjustment. *Journal of Educational Psychology, 93*(1), 55–64.
- Chowdhry, S., Sieler, K., & Alwis, L. (2014). A study of the impact of technology-enhanced learning on student academic performance. *Journal of Perspectives in Applied Academic Practice, 2*(3), 3-15.
- Curcio, G., Ferrara, M., & De Gennaro, L. (2006). Sleep loss, learning capacity and academic performance. *Sleep Medicine Reviews, 10*(5), 323–337.
- Deng, Y., Li, X., Zhang, L., Wang, Y., & Chen, H. (2022). The impact of academic and family stress on student depression and academic outcomes: A structural equation modeling approach. *Journal of Affective Disorders, 296*, 123–131. https://doi.org/10.1016/j.jad.2021.09.014

- Emmanuel, L. (2015). The influence of household chores on female academic performance in secondary schools in Morogoro rural district. http://repository.out.ac.tz/1408/
- Farooq, M.S., Chaudhry, A.H., Shafiq, M., & Berhanu, G. (2011). Factors affecting students' quality of academic performance: A case of secondary school level. *Journal of Quality and Technology Management, 7*(2), 1–14.
- Francis, B.K., & Babu, S.S. (2019). A hybrid data mining model to predict students' academic performance. *International Journal of Computer Applications, 178*(7) 1–6.
- Harris, J., & Al-Bataineh, A. (2015). *One to One Technology and its Effect on Student Academic Achievement and Motivation*. In Proceedings of Global Learn Berlin 2015: Global Conference on Learning and Technology (pp. 579-584). Berlin, Germany.
- Jama, M.P., and Mapesela, M.L.E. (2008). Academic development and student support: A South African model. *South African Journal of Higher Education, 22*(1), 123–136.
- Kayani, S., Kiyani, T., Wang, J., Sanchez, M.L.Z., Kayani, S., & Qurban, H. (2018). Physical activity and academic performance: the mediating effect of self-esteem and depression. *Sustainability, 10*(10), 3633.
- Khan, Z., Azeem, M., & Irfan, M. (2021). Habit of study and academic achievement in district Dir lower and district Malakand. *Webology, 18*(6), 4025-4031.
- Khan, Z., Azeem, M., & Hussain, S. (2022a). Markov analysis of student performance in colleges of district lower Dir and district Malakand Pakistan. *Journal of Positive School Psychology, 6*(8), 4707-4710.
- Khan, Z., Asadullah, Ismail, M., Hussain, J., & Azeem, M. (2022b). The impact of salary, job security and workload on teachers satisfaction in private schools. *Journal of Policy Research*, *8*(3), 278-280.
- Lau, W.W. (2017). Effects of social media usage and social media multitasking on the academic performance of university students. *Computers in Human Behavior, 68,* 286-291. https://doi.org/10.1016/j.chb.2016.11.043
- Maulid, M.A. (2023). Factors influencing girls' academic performance in public secondary schools in Mkoani District in Pemba-Zanzibar. *International Journal of Educational Research and Development, 8*(1), 1–10.
- McCurdy, B.H., Scozzafava, M.D., Bradley, T., Matlow, R., Weems, C.F., & Carrion, V.G. (2022). Impact of anxiety and depression on academic achievement among underserved school children: Evidence of suppressor effects. *Current Psychology, 1.* https://doi.org/10.1007/s12144-022-03801-9
- Middleton, B.M., & Murray, R.K. (1999). The impact of instructional technology on student academic achievement in reading and mathematics. *International Journal of Instructional Media, 26*(1), 109.
- Moawd, S.A., & Elsayed, S.H. (2020). Physical activity, cardiorespiratory fitness and academic performance among medical students. *Journal of Advanced Medical and Health Sciences, 4*(2), 48–55.
- Mushtaq, A.J. (2018). The effects of social media on the undergraduate students' academic performances. *Library Philosophy and Practice (e-journal)*, 1779.
- Riaz, T., Ali, A., & Khan, A. (2024). The correlation of emotional intelligence with students academic resilience in University of Malakand, Khyber Pakhtunkhwa. *Global Social Sciences Review, 9*(2), 125-133.

- Richardson, M., Abraham, C., & Bond, R. (2012). Psychological correlates of university students' academic performance: A systematic review and meta-analysis. *Psychological Bulletin, 138*(2), 353–387.
- Shakoor, F., Ismail, M., Hassan, S., Khan, N., Ali, A., Khan, N., Shah, S., & Ullah, K. (2024). Impact of cold drinks on university level students: a case study of university of Malakand Pakistan. *International Journal of Contemporary Issues in Social Sciences, 3*(3), 923–930.
- Sultan, A., Khan, S., & Bibi, A. (2022). The Role and Future of School Nurse in Pakistan. *Journal of Clinical Research and Bioethics, 3*(2), 401.
- Trudeau, F., & Shephard, R.J. (2008). Physical education, school physical activity, school sports and academic performance. *International Journal of Behavioral Nutrition and Physical Activity, 5*(1), 10.
- Ullah, N., Zaman, Q., Iqbal, S., Khan, M.F., Faiz, S., Islam, S.N., Ali, M., & Jan, W. (2024). The impact of teaching styles on student academic performance: a case study at the University of Peshawar, Pakistan. *Migration Letters, 21*(S14), 99–109.
- Wentzel, K.R. (1998). Social relationships and motivation in middle school: The role of parents, teachers, and peers. *Journal of Educational Psychology, 90*(2), 202–209.
- Yamamoto, Y., & Holloway, S.D. (2010). Parental expectations and children's academic performance in the United States: A review of research. *Journal of Educational Research*, *103*(6), 407–427.
- Yusuf, S.D. (2014). Effects of collaborative learning on chemistry students' academic achievement and anxiety level in balancing chemical equations in secondary schools. *Journal of Educational and Vocational Research, 5*(2), 43–48.
- Zhao, J., & Tuo, H. (2024). The impact of housework participation on prosocial behavior development among junior high school students in China. *Scientific Reports, 14,* 32092.