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Research Paper

A Study on Socio-Economic Factors and its association with Stress, Anxiety, Depression, and Sleep Quality

Mr. Anirudh Ramesh[1]*, Dr. Ramesha. K[2], Ms. Manisha Patil[3], Mr. Rajavelesh SenthilKumar[4]

ABSTRACT

This research examines the correlation between socio-economic factors specifically monthly family income, parental education, and occupation and psychological outcomes including stress, anxiety, depression, and sleep quality among a sample of 201 participants. The research used descriptive statistics, ANOVA, Tukey HSD post hoc testing, and multiple regression analysis, revealing no statistically significant variations in psychological well-being across income categories. Regression analysis revealed that socio-economic factors had little explanatory power, with only the mother's employment substantially correlating with anxiety levels. Despite the observation of variances in mean scores across groups, these differences were not statistically significant. The results highlight the need of investigating further psychological and environmental factors beyond socio-economic position to enhance the comprehension of mental health outcomes.

Keywords: *Mental health, Socio-economic factors, Anxiety, Stress, Depression, Sleep quality, Regression analysis, Parental occupation*

Mental health disorders, particularly stress, anxiety, and depression, have witnessed a marked rise in prevalence over recent decades, becoming salient public health challenges in both developed and developing societies. Concomitantly, disturbances in sleep quality have emerged as critical concerns, often existing in a bidirectional relationship with psychological distress. Collectively, these conditions impair cognitive functioning, diminish quality of life, and impose considerable socio-economic burdens on individuals and health systems alike (WHO, 2021).

[1]Assistant Professor, Department of Psychology, School of Humanities and Social Sciences, JAIN (Deemed-to-be University), Jayanagara, Bengaluru.
[2]Associate Professor, Department of Economics, School of Humanities and Social Sciences, JAIN (Deemed-to-be University), Jayanagara, Bengaluru.
[3]Assistant Professor, Department of Psychology, School of Humanities and Social Sciences, JAIN (Deemed-to-be University), Jayanagara, Bengaluru.
[4] 3rd SEM, 2nd Year, PSE, School of Humanities and Social Sciences, JAIN (Deemed-to-be University), Jayanagara, Bengaluru.
*Corresponding Author

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The etiology of mental health conditions and sleep disturbances is inherently multifactorial, with growing attention directed toward the role of social determinants of health. Among these, socio-economic status (SES)—operationalized through variables such as household income, parental education, and occupational status—is widely regarded as a pivotal contextual factor influencing mental well-being. These variables are believed to shape access to material resources, educational opportunities, healthcare services, social capital, and resilience-building environments, all of which collectively influence psychological outcomes (Adler et al., 1994; Marmot, 2005).

Despite the extensive theorization surrounding socio-economic influences on mental health, the empirical evidence remains inconclusive and context-sensitive, with variability observed across demographic profiles, cultural frameworks, and geographic regions. Furthermore, while income and parental background have been extensively studied in isolation, fewer studies have concurrently examined their predictive efficacy across multiple domains of psychological functioning and sleep quality using rigorous statistical frameworks.

To address this gap, the present study investigates the predictive strength of monthly family income, parental education, and parental occupation in relation to four interrelated psychological outcomes: perceived stress, anxiety, depression, and sleep quality. By employing robust inferential statistical techniques, including Analysis of Variance (ANOVA) and Multiple Regression Analysis, the study aims to elucidate whether these background variables serve as significant predictors of psychological distress and impaired sleep.

This research seeks to contribute to the expanding discourse on mental health by providing empirically grounded insights into the socio-economic gradients of psychological well-being. The findings are expected to inform evidence-based policymaking, enhance targeted mental health interventions, and support equitable strategies in public health planning, especially in socio-economically diverse populations.

Importance of the Study:

Comprehending the impact of socio-economic determinants on psychological outcomes is crucial for formulating mental health policy, developing effective therapies, and guiding educational and community support initiatives. This research interrogates the conventional belief that wealth and education serve as protective variables by analysing their actual predictive significance. The results assist in determining whether socio-economic background only accounts for variances in mental health, or if other dimensions such as emotional, family, or behavioural factors should be included. Such findings are essential for the more efficient and equitable allocation of mental health resources.

REVIEW OF LITERATURE

The examined literature underscores a persistent correlation among stress, anxiety, depression, and sleep disorders, with differing emphasis on socio-economic factors. Wheatley (1993) identified first connections between sleep disturbance and psychiatric illnesses, although omitted socio-economic background (Wheatley, 1993). Luo et al. (2025) and Gravante et al. (2025) discovered that depression and anxiety substantially moderate the association between stress and sleep quality in healthcare professionals, with both research prioritising occupational stressors above socio-economic ones (Luo et al., 2025; Gravante et al., 2025). Liyanage et al. (2024) established a distinct correlation between national

economic crises and inadequate sleep as well as psychological discomfort among medical students, emphasising the macroeconomic influence (Liyanage et al., 2024). Dülger and Ayaz-Alkaya (2025) also identified a significant incidence of mental distress among Turkish young, although they did not conduct an in-depth analysis of socioeconomic status factors (Dülger & Ayaz-Alkaya, 2025). Zhang et al. (2024) emphasised that psychological distress mediates the relationship between inadequate sleep and suicidal ideation, whereas Rassolnia and Nobari (2024) were among the few to directly link lower socio-economic status with both diminished mental health and sleep quality, underscoring the significance of socio-economic analysis (Zhang et al., 2024; Rassolnia & Nobari, 2024). Jónsdóttir (2015) and Alam et al. (2019) investigated women and senior populations, respectively, discovering significant psychological predictors of inadequate sleep, while they lacked socio-economic data (Jónsdóttir, 2015; Alam et al., 2019). Finally, Athira et al. (2023) concentrated on epilepsy patients, providing valuable clinical insights but delivering little socio-economic discourse (Athira et al., 2023).

Certain research persist in examining the relationship between psychological discomfort and sleep, with others offering more explicit insights into socio-economic factors. Lee et al. (2019) discovered that sleeplessness, in conjunction with recent life stresses, was significantly correlated with sadness and anxiety; however, the research did not explicitly account for socio-economic background (Lee et al., 2019). Alwhaibi and Al Aloola (2023) investigated healthcare students and found significant relationships among stress, anxiety, depression, and inadequate sleep quality; however, socioeconomic status was not included into their framework (Alwhaibi & Al Aloola, 2023). A 2019 research on college students confirmed that psychological mood greatly influences sleep, while socio-economic aspects were not included. Alrashed et al. (2022) evaluated stress and mental health among medical students, establishing a connection between academic pressure and mental discomfort, although neglected to include the economic background (Alrashed et al., 2022). Conversely, Dehvan et al. (2019) explicitly assessed the correlation among stress, anxiety, depression, and sleep quality in nursing students, providing pertinent insights for targeted therapies, however omitting a socio-economic perspective (Dehvan et al., 2019). Anders et al. (2014) conducted a thorough study demonstrating a substantial correlation between lower socio-economic status and poorer sleep quality in an urban German population, rendering it especially relevant to your issue. Zhang et al. (2019) elucidated that academic stress mediates the association between sleep disturbances and mental health symptoms in Chinese teenagers, with socio-economic factors being only indirectly suggested. Gao et al. (2024) investigated anxiety, depression, and sleep among vocational students during the COVID-19 pandemic. Although the research addressed several contextual stresses, it did not isolate socioeconomic status as a variable (Gao et al., 2024).

Several research provide a more profound and consistent examination of socio-economic status (SES) as a driver of psychological health and sleep outcomes. Virtanen et al. (2007) highlighted the interplay between adverse work circumstances and low socioeconomic status in influencing psychological well-being and sleep, identifying workplace dynamics as a critical mechanism. Liu et al. (2022) similarly discovered that socioeconomic status-related work–family conflict exacerbates sleep disruptions, with despair and anxiety serving as mediation factors. Martínez-Lorca et al. (2021) correlated mental health and sleep among students with socioeconomic status, indicating that impoverished origins intensify psychological symptoms and sleep disturbances. Hysing et al. (2016) corroborated this with teenage data demonstrating socioeconomic status and demographic variations in sleep

quality among those experiencing severe stress (Hysing et al., 2016). Bagley et al. (2020) and El-Sheikh et al. (2013) investigated the impact of economic hardship and family turmoil on children's sleep, mediated by parental stress and mental health. Wallace et al. (2018) and Hale et al. (2010) presented multilevel data indicating that socioeconomic status gaps are significantly associated with inadequate sleep health in urban populations. Stamatakis et al. (2012) shown that financial distress in older persons independently predicts sleep length and quality, irrespective of health condition. Tomfohr et al. (2015) provided longitudinal data that connects chronic stress and socioeconomic status with inadequate sleep, illustrating cumulative disadvantage over time.

Objectives of the Study:

1. To assess the mean levels of stress, anxiety, depression, and quality of sleep among participants.
2. To examine whether these psychological outcomes vary significantly across different monthly family income groups.
3. To determine the predictive power of socio-economic factors (monthly income, parental education, and occupation) on each psychological outcome.
4. To identify which, if any, socio-economic variables significantly contribute to anxiety, stress, depression, and sleep quality using regression analysis.

Hypothesis of the Study:

1. **H_0:** There is no significant difference in stress levels across different monthly family income groups.
2. **H_0:** There is no significant difference in anxiety levels across different monthly family income groups.
3. **H_0:** There is no significant difference in depression levels across different monthly family income groups.
4. **H_0:** There is no significant difference in quality of sleep across different monthly family income groups.
5. **H_0:** Socio-economic factors (monthly family income, parental education, and occupation) do not significantly predict depression levels.
6. **H_0:** Socio-economic factors do not significantly predict anxiety levels.
7. **H_0:** Socio-economic factors do not significantly predict stress levels.
8. **H_0:** Socio-economic factors do not significantly predict quality of sleep.

Descriptive Statistics for Stress, Anxiety, Depression, and Quality of Sleep

Table–1: Descriptive Statistics for Stress, Anxiety, Depression, and Quality of Sleep

	N	Mean	Std. Deviation
Stress Level	201	2.1244	1.04377
Anxiety Level	201	3.3234	1.56841
Depression Level	201	2.6915	1.45065
QOS Level	201	1.8657	.68328
Valid N (listwise)	201		

Source: Own Calculation from primary data.

The descriptive analysis revealed a mean stress level of 2.12 (SD = 1.04), indicating a comparatively modest perception of stress among respondents. The average anxiety level was determined to be 3.32 (SD = 1.57), indicating a substantially high presence of moderate

anxiety symptoms across the group. The average depression level was 2.69 (SD = 1.45), indicating significant depressed symptoms. Simultaneously, the mean score for Quality of Sleep (QOS) was 1.87 (SD = 0.68), suggesting that the majority of respondents had inadequate sleep quality.

Table–2: Levene's Test for Homogeneity of Variances across Monthly Family Income Groups

Test of Homogeneity of Variances				
	Levene Statistic	**df1**	**df2**	**Sig.**
Stress	.757	6	194	.604
Anxiety	.951	6	194	.460
Depression	1.620	6	194	.143
Quality of_Sleep	.749	6	194	.611

Source: Own Calculation from primary data.

It was necessary to carry out Levene's test for homogeneity of variances in order to guarantee that the assumption of equal variances was not broken before to moving on to the analysis of variance section. The results of the test did not show any significant differences between any of the variables, including Stress (p =.604), Anxiety (p =.460), Depression (p =.143), and Quality of Sleep (p =.611). Due to the fact that every single p-value was higher than.05, we are able to draw the conclusion that the condition of homogeneity of variances was satisfied for every single variable.

Table–3: One-Way ANOVA Results for Psychological Outcomes across Monthly Family Income Groups

ANOVA						
		Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Stress	Between Groups	337.140	6	56.190	.778	.588
	Within Groups	14018.204	194	72.259		
	Total	14355.343	200			
Anxiety	Between Groups	927.924	6	154.654	1.931	.078
	Within Groups	15534.564	194	80.075		
	Total	16462.488	200			
Depression	Between Groups	822.997	6	137.166	1.268	.274
	Within Groups	20977.998	194	108.134		
	Total	21800.995	200			
Quality_of_Sleep	Between Groups	688.046	6	114.674	.969	.447
	Within Groups	22956.113	194	118.330		
	Total	23644.159	200			

Source: Own Calculation from primary data.

The purpose of this study was to evaluate whether or not there were significant variations in levels of stress, anxiety, depression, and the quality of sleep across the various monthly income groups by doing a one-way analysis of variance. It was found that there were no significant differences between the income groups in terms of stress (F(6,194) = 0.778,

p =.588), depression (F(6,194) = 1.268, p =.274), or quality of sleep (F(6,194) = 0.969, p =.447). These findings were published in the journal Psychological Research. The levels of anxiety, on the other hand, came close to reaching a significant level (F(6,194) = 1.931, p =.078), which suggests that there may be a tendency in which wealth may affect anxiety more than the other outcomes.

POST HOC TESTS

Post hoc analyses using Tukey's Honestly Significant Difference (HSD) test were used to identify the particular income groups that exhibited differences in stress, anxiety, depression, and sleep quality levels. The comparisons indicated that none of the pairwise mean differences were statistically significant for the dependent variables (all p-values > .05).

The most substantial mean difference in stress was seen between the Lower Class (M = 11.00) and Lower Middle Class (M = 17.89) groups, yielding a mean difference of -6.89 (p = .930), which lacked statistical significance. In a similar vein, the Lower Class group (M = 7.00) exhibited a difference from the Lower Middle Class group (M = 18.42), resulting in a mean difference of -11.42 (p = .606), which was likewise not statistically significant.

The most pronounced disparity in depression levels was seen between the Lower Class (M = 5.00) and the Lower Middle Class (M = 18.42), resulting in a mean difference of -13.42 (p = .593), indicating a lack of significance. In terms of sleep quality, the Higher Upper Class exhibited the greatest mean score (M = 63.04), while the Lower Class recorded the lowest mean score (M = 56.00). However, the mean difference of -7.04 was not statistically significant (p = .973). The results demonstrate that although there are measurable numerical disparities among income categories, none reached statistical significance at the 0.05 level, indicating that income group does not significantly influence stress, anxiety, depression, or sleep quality in this sample as evaluated through pairwise comparisons.

Table–4: Tukey HSD Post Hoc Test for Stress, Anxiety, Depression and Quality of Sleep across Monthly Family Income Groups

Multiple Comparisons							
Tukey HSD							
Dependent Variable	**(I) Monthly Family Income**	**(J) Monthly Family Income**	**Mean Difference (I-J)**	**Std. Error**	**Sig.**	**95% Confidence Interval**	
						Lower Bound	**Upper Bound**
Stress	Higher Upper Class	Upper class	.95636	1.66102	.997	-3.9927	5.9054
		Upper Middle Class	.84727	2.17478	1.000	-5.6326	7.3271
		Middle Class	-.38000	2.44159	1.000	-7.6548	6.8948
		Lower Middle Class	-1.77474	2.29091	.987	-8.6006	5.0511
		Upper Lower Class	2.60649	1.84340	.794	-2.8860	8.0990
		Lower Class	5.12000	6.12981	.981	-13.1440	23.3840
	Upper class	Higher	-.95636	1.66102	.997	-5.9054	3.9927

		Upper Class					
		Upper Middle Class	-.10909	2.14436	1.000	-6.4983	6.2801
		Middle Class	-1.33636	2.41453	.998	-8.5306	5.8578
		Lower Middle Class	-2.73110	2.26205	.891	-9.4710	4.0088
		Upper Lower Class	1.65012	1.80741	.970	-3.7351	7.0354
		Lower Class	4.16364	6.11908	.994	-14.0684	22.3957
	Upper Middle Class	Higher Upper Class	-.84727	2.17478	1.000	-7.3271	5.6326
		Upper class	.10909	2.14436	1.000	-6.2801	6.4983
		Middle Class	-1.22727	2.79297	.999	-9.5490	7.0945
		Lower Middle Class	-2.62201	2.66225	.957	-10.5543	5.3103
		Upper Lower Class	1.75921	2.28854	.988	-5.0596	8.5780
		Lower Class	4.27273	6.27805	.994	-14.4330	22.9784
	Middle Class	Higher Upper Class	.38000	2.44159	1.000	-6.8948	7.6548
		Upper class	1.33636	2.41453	.998	-5.8578	8.5306
		Upper Middle Class	1.22727	2.79297	.999	-7.0945	9.5490
		Lower Middle Class	-1.39474	2.88431	.999	-9.9887	7.1992
		Upper Lower Class	2.98649	2.54345	.903	-4.5918	10.5648
		Lower Class	5.50000	6.37539	.978	-13.4957	24.4957
	Lower Middle Class	Higher Upper Class	1.77474	2.29091	.987	-5.0511	8.6006
		Upper class	2.73110	2.26205	.891	-4.0088	9.4710
		Upper Middle Class	2.62201	2.66225	.957	-5.3103	10.5543
		Middle Class	1.39474	2.88431	.999	-7.1992	9.9887
		Upper Lower Class	4.38122	2.39917	.532	-2.7672	11.5297
		Lower Class	6.89474	6.31922	.930	-11.9336	25.7231
	Upper Lower Class	Higher Upper Class	-2.60649	1.84340	.794	-8.0990	2.8860
		Upper class	-1.65012	1.80741	.970	-7.0354	3.7351
		Upper Middle Class	-1.75921	2.28854	.988	-8.5780	5.0596
		Middle Class	-2.98649	2.54345	.903	-10.5648	4.5918

		Lower Middle Class	-4.38122	2.39917	.532	-11.5297	2.7672
		Lower Class	2.51351	6.17109	1.000	-15.8735	20.9005
	Lower Class	Higher Upper Class	-5.12000	6.12981	.981	-23.3840	13.1440
		Upper class	-4.16364	6.11908	.994	-22.3957	14.0684
		Upper Middle Class	-4.27273	6.27805	.994	-22.9784	14.4330
		Middle Class	-5.50000	6.37539	.978	-24.4957	13.4957
		Lower Middle Class	-6.89474	6.31922	.930	-25.7231	11.9336
		Upper Lower Class	-2.51351	6.17109	1.000	-20.9005	15.8735
Anxiety	Higher Upper Class	Upper class	3.33818	1.74855	.477	-1.8717	8.5480
		Upper Middle Class	3.19273	2.28938	.804	-3.6286	10.0140
		Middle Class	4.29500	2.57025	.636	-3.3632	11.9532
		Lower Middle Class	-.50105	2.41163	1.000	-7.6866	6.6845
		Upper Lower Class	4.83892	1.94054	.167	-.9430	10.6208
		Lower Class	10.92000	6.45283	.622	-8.3065	30.1465
	Upper class	Higher Upper Class	-3.33818	1.74855	.477	-8.5480	1.8717
		Upper Middle Class	-.14545	2.25736	1.000	-6.8714	6.5804
		Middle Class	.95682	2.54177	1.000	-6.6165	8.5301
		Lower Middle Class	-3.83923	2.38126	.675	-10.9343	3.2558
		Upper Lower Class	1.50074	1.90266	.986	-4.1683	7.1698
		Lower Class	7.58182	6.44154	.902	-11.6110	26.7746
	Upper Middle Class	Higher Upper Class	-3.19273	2.28938	.804	-10.0140	3.6286
		Upper class	.14545	2.25736	1.000	-6.5804	6.8714
		Middle Class	1.10227	2.94015	1.000	-7.6580	9.8626
		Lower Middle Class	-3.69378	2.80254	.843	-12.0441	4.6565
		Upper Lower Class	1.64619	2.40914	.993	-5.5319	8.8243
		Lower Class	7.72727	6.60888	.905	-11.9641	27.4187
	Middle	Higher	-4.29500	2.57025	.636	-11.9532	3.3632

	Class	Upper Class					
		Upper class	-.95682	2.54177	1.000	-8.5301	6.6165
		Upper Middle Class	-1.10227	2.94015	1.000	-9.8626	7.6580
		Lower Middle Class	-4.79605	3.03631	.696	-13.8429	4.2507
		Upper Lower Class	.54392	2.67748	1.000	-7.4337	8.5216
		Lower Class	6.62500	6.71135	.956	-13.3717	26.6217
	Lower Middle Class	Higher Upper Class	.50105	2.41163	1.000	-6.6845	7.6866
		Upper class	3.83923	2.38126	.675	-3.2558	10.9343
		Upper Middle Class	3.69378	2.80254	.843	-4.6565	12.0441
		Middle Class	4.79605	3.03631	.696	-4.2507	13.8429
		Upper Lower Class	5.33997	2.52560	.348	-2.1852	12.8651
		Lower Class	11.42105	6.65222	.606	-8.3995	31.2416
	Upper Lower Class	Higher Upper Class	-4.83892	1.94054	.167	-10.6208	.9430
		Upper class	-1.50074	1.90266	.986	-7.1698	4.1683
		Upper Middle Class	-1.64619	2.40914	.993	-8.8243	5.5319
		Middle Class	-.54392	2.67748	1.000	-8.5216	7.4337
		Lower Middle Class	-5.33997	2.52560	.348	-12.8651	2.1852
		Lower Class	6.08108	6.49629	.966	-13.2749	25.4370
	Lower Class	Higher Upper Class	-10.92000	6.45283	.622	-30.1465	8.3065
		Upper class	-7.58182	6.44154	.902	-26.7746	11.6110
		Upper Middle Class	-7.72727	6.60888	.905	-27.4187	11.9641
		Middle Class	-6.62500	6.71135	.956	-26.6217	13.3717
		Lower Middle Class	-11.42105	6.65222	.606	-31.2416	8.3995
		Upper Lower Class	-6.08108	6.49629	.966	-25.4370	13.2749
Depression	Higher Upper Class	Upper class	2.39273	2.03193	.902	-3.6615	8.4470
		Upper Middle Class	4.52000	2.66043	.618	-3.4068	12.4468
		Middle Class	.64500	2.98681	1.000	-8.2543	9.5443
		Lower	-.90105	2.80249	1.000	-9.2512	7.4491

		Middle Class					
		Upper Lower Class	3.35784	2.25504	.751	-3.3612	10.0768
		Lower Class	12.52000	7.49865	.637	-9.8225	34.8625
	Upper class	Higher Upper Class	-2.39273	2.03193	.902	-8.4470	3.6615
		Upper Middle Class	2.12727	2.62321	.984	-5.6887	9.9432
		Middle Class	-1.74773	2.95372	.997	-10.5484	7.0530
		Lower Middle Class	-3.29378	2.76719	.897	-11.5387	4.9512
		Upper Lower Class	.96511	2.21102	.999	-5.6227	7.5529
		Lower Class	10.12727	7.48552	.826	-12.1761	32.4307
	Upper Middle Class	Higher Upper Class	-4.52000	2.66043	.618	-12.4468	3.4068
		Upper class	-2.12727	2.62321	.984	-9.9432	5.6887
		Middle Class	-3.87500	3.41666	.917	-14.0551	6.3051
		Lower Middle Class	-5.42105	3.25675	.640	-15.1247	4.2826
		Upper Lower Class	-1.16216	2.79959	1.000	-9.5037	7.1793
		Lower Class	8.00000	7.67999	.944	-14.8828	30.8828
	Middle Class	Higher Upper Class	-.64500	2.98681	1.000	-9.5443	8.2543
		Upper class	1.74773	2.95372	.997	-7.0530	10.5484
		Upper Middle Class	3.87500	3.41666	.917	-6.3051	14.0551
		Lower Middle Class	-1.54605	3.52840	.999	-12.0591	8.9670
		Upper Lower Class	2.71284	3.11142	.976	-6.5578	11.9834
		Lower Class	11.87500	7.79906	.731	-11.3626	35.1126
	Lower Middle Class	Higher Upper Class	.90105	2.80249	1.000	-7.4491	9.2512
		Upper class	3.29378	2.76719	.897	-4.9512	11.5387
		Upper Middle Class	5.42105	3.25675	.640	-4.2826	15.1247
		Middle Class	1.54605	3.52840	.999	-8.9670	12.0591
		Upper Lower Class	4.25889	2.93493	.773	-4.4858	13.0036
		Lower Class	13.42105	7.73035	.593	-9.6118	36.4539
	Upper Lower Class	Higher Upper Class	-3.35784	2.25504	.751	-10.0768	3.3612

		Upper class	-.96511	2.21102	.999	-7.5529	5.6227
		Upper Middle Class	1.16216	2.79959	1.000	-7.1793	9.5037
		Middle Class	-2.71284	3.11142	.976	-11.9834	6.5578
		Lower Middle Class	-4.25889	2.93493	.773	-13.0036	4.4858
		Lower Class	9.16216	7.54914	.888	-13.3308	31.6551
	Lower Class	Higher Upper Class	-12.52000	7.49865	.637	-34.8625	9.8225
		Upper class	-10.12727	7.48552	.826	-32.4307	12.1761
		Upper Middle Class	-8.00000	7.67999	.944	-30.8828	14.8828
		Middle Class	-11.87500	7.79906	.731	-35.1126	11.3626
		Lower Middle Class	-13.42105	7.73035	.593	-36.4539	9.6118
		Upper Lower Class	-9.16216	7.54914	.888	-31.6551	13.3308
Quality_of_Sleep	Higher Upper Class	Upper class	2.47636	2.12558	.906	-3.8569	8.8096
		Upper Middle Class	6.08545	2.78303	.308	-2.2067	14.3776
		Middle Class	.29000	3.12446	1.000	-9.0195	9.5995
		Lower Middle Class	2.77684	2.93164	.964	-5.9581	11.5118
		Upper Lower Class	2.20216	2.35897	.967	-4.8265	9.2308
		Lower Class	7.04000	7.84422	.973	-16.3322	30.4122
	Upper class	Higher Upper Class	-2.47636	2.12558	.906	-8.8096	3.8569
		Upper Middle Class	3.60909	2.74411	.844	-4.5671	11.7853
		Middle Class	-2.18636	3.08984	.992	-11.3927	7.0199
		Lower Middle Class	.30048	2.89472	1.000	-8.3244	8.9254
		Upper Lower Class	-.27420	2.31292	1.000	-7.1656	6.6172
		Lower Class	4.56364	7.83050	.997	-18.7676	27.8949
	Upper Middle Class	Higher Upper Class	-6.08545	2.78303	.308	-14.3776	2.2067
		Upper class	-3.60909	2.74411	.844	-11.7853	4.5671
		Middle Class	-5.79545	3.57412	.669	-16.4447	4.8538
		Lower	-3.30861	3.40684	.960	-13.4594	6.8422

		Middle Class					
		Upper Lower Class	-3.88329	2.92861	.839	-12.6092	4.8426
		Lower Class	.95455	8.03392	1.000	-22.9828	24.8919
	Middle Class	Higher Upper Class	-.29000	3.12446	1.000	-9.5995	9.0195
		Upper class	2.18636	3.08984	.992	-7.0199	11.3927
		Upper Middle Class	5.79545	3.57412	.669	-4.8538	16.4447
		Lower Middle Class	2.48684	3.69101	.994	-8.5107	13.4844
		Upper Lower Class	1.91216	3.25481	.997	-7.7857	11.6100
		Lower Class	6.75000	8.15849	.982	-17.5585	31.0585
	Lower Middle Class	Higher Upper Class	-2.77684	2.93164	.964	-11.5118	5.9581
		Upper class	-.30048	2.89472	1.000	-8.9254	8.3244
		Upper Middle Class	3.30861	3.40684	.960	-6.8422	13.4594
		Middle Class	-2.48684	3.69101	.994	-13.4844	8.5107
		Upper Lower Class	-.57468	3.07019	1.000	-9.7224	8.5731
		Lower Class	4.26316	8.08660	.998	-19.8312	28.3575
	Upper Lower Class	Higher Upper Class	-2.20216	2.35897	.967	-9.2308	4.8265
		Upper class	.27420	2.31292	1.000	-6.6172	7.1656
		Upper Middle Class	3.88329	2.92861	.839	-4.8426	12.6092
		Middle Class	-1.91216	3.25481	.997	-11.6100	7.7857
		Lower Middle Class	.57468	3.07019	1.000	-8.5731	9.7224
		Lower Class	4.83784	7.89705	.996	-18.6917	28.3674
	Lower Class	Higher Upper Class	-7.04000	7.84422	.973	-30.4122	16.3322
		Upper class	-4.56364	7.83050	.997	-27.8949	18.7676
		Upper Middle Class	-.95455	8.03392	1.000	-24.8919	22.9828
		Middle Class	-6.75000	8.15849	.982	-31.0585	17.5585
		Lower Middle Class	-4.26316	8.08660	.998	-28.3575	19.8312
		Upper Lower Class	-4.83784	7.89705	.996	-28.3674	18.6917

Source: Own Calculation from primary data.

HOMOGENEOUS SUBSETS FOR STRESS – TUKEY HSD:

The homogeneous subset analysis for stress levels, using Tukey HSD, and categorized income brackets according to analogous mean scores at an alpha level of 0.05. Despite the absence of a statistically significant difference across income categories (p = .562), the categorization indicates a progressive rise in stress levels correlated with income.

Participants from the Lower Class (N = 2) exhibited the lowest mean stress score (M = 11.00), followed by the Upper Lower Class (N = 37, M = 13.51). Income categories include the Upper Class (M = 15.16), Upper Middle Class (M = 15.27), and Higher Upper Class (M = 16.12) exhibited moderate levels. The Middle Class (M = 16.50) and Lower Middle Class (M = 17.89) had the greatest mean stress levels within the subgroup.

Notwithstanding this observable trend, the significance value (p = .562) suggests that these differences lack statistical significance, implying that any detected variances may result from random chance rather than genuine disparities in stress levels within income groups. This outcome necessitates cautious interpretation owing to disparate group sizes, especially since the Lower Class group had just two respondents, hence diminishing the trustworthiness of comparisons. Nonetheless, these descriptive tendencies may potentially feed future study ideas or direct larger-scale investigations.

Table-5. Homogeneous Subsets for Stress Based on Monthly Family Income

Stress		
Tukey HSD		
Monthly Family Income	**N**	**Subset for alpha = 0.05**
		1
Lower Class	2	11.0000
Upper Lower Class	37	13.5135
Upper class	55	15.1636
Upper Middle Class	22	15.2727
Higher Upper Class	50	16.1200
Middle Class	16	16.5000
Lower Middle Class	19	17.8947
Sig.		.562
Means for groups in homogeneous subsets are displayed.		
a. Uses Harmonic Mean Sample Size = 9.645.		
b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.		

Source: Own Calculation from primary data.

HOMOGENEOUS SUBSETS FOR ANXIETY – TUKEY HSD

The homogeneous subset analysis of anxiety levels, using Tukey's HSD test, categorized individuals according to monthly family income, revealing groups with statistically comparable mean anxiety ratings. Despite the test not producing a significant result (p = .080), the value approaches the traditional significance threshold, indicating a potential trend towards substantial variations in anxiety across income groups.

The Lower Class (N = 2) had the lowest mean anxiety score (M = 7.00), indicating comparatively low anxiety levels. The Upper Lower Class (M = 13.08) and the Middle Class (M = 13.63) thereafter constituted the lower end of the anxiety spectrum. Individuals in the Upper Class (M = 14.58) and Upper Middle Class (M = 14.73) had considerably elevated anxiety levels. The Higher Upper Class (M = 17.92) and Lower Middle Class (M = 18.42) had the greatest levels of anxiety within the subgroup.

Although anxiety levels exhibited an increasing trend from lower to higher income groups, no statistically significant subgroups were established, since the p-value of .080 exceeded the .05 threshold. The pattern indicates that people from affluent homes may report somewhat greater anxiety levels than those from lower-income backgrounds, contradicting prevalent notions. This discovery, although not statistically validated, may have significance in practical or experimental situations and might indicate sociocultural or occupational pressures linked to elevated income levels. It further emphasizes the need for higher sample numbers, especially for under-represented groups such as the Lower Class (N = 2), to derive more dependable results.

Table-6. Homogeneous Subsets for Anxiety Based on Monthly Family Income

Anxiety		
Tukey HSD		
Monthly Family Income	**N**	**Subset for alpha = 0.05**
		1
Lower Class	2	7.0000
Upper Lower Class	37	13.0811
Middle Class	16	13.6250
Upper class	55	14.5818
Upper Middle Class	22	14.7273
Higher Upper Class	50	17.9200
Lower Middle Class	19	18.4211
Sig.		.080
Means for groups in homogeneous subsets are displayed.		
a. Uses Harmonic Mean Sample Size = 9.645.		
b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.		

Source: Own Calculation from primary data.

HOMOGENEOUS SUBSETS FOR DEPRESSION – TUKEY HSD:

The homogeneous subset analysis for depression levels, using Tukey's HSD test, examined whether average depression scores substantially differed within monthly family income categories. The test produced a p-value of .074, just above the conventional significance threshold of .05, suggesting a borderline non-significant difference. Although not statistically validated, the findings indicate a significant trend in the data.

Participants from the Lower Class (N = 2) had the lowest mean depression score (M = 5.00), followed by those in the Upper Middle Class (M = 13.00) and Upper Lower Class (M = 14.16). The Upper Class (M = 15.13), Middle Class (M = 16.88), Higher Upper Class (M =

17.52), and Lower Middle Class (M = 18.42) exhibited a progressive escalation in reported depression levels, with the Lower Middle Class demonstrating the highest mean.

The observable correlation between rising depression ratings and income levels is clear; nevertheless, the absence of statistical significance necessitates cautious interpretation of these findings. The limited sample size of the Lower Class group (N = 2) further constrains the trustworthiness of this comparison. Nonetheless, the persistent rising trend indicates a possible positive correlation between income and depressive symptoms, perhaps reflecting underlying reasons such as social isolation, occupational stress, or performance pressure among higher-income groups. This conclusion, although not statistically definitive, is practically relevant and may provide a foundation for additional targeted investigations with more balanced group sizes and bigger samples to ascertain if income levels really affect depression among respondents.

HOMOGENEOUS SUBSETS FOR DEPRESSION – TUKEY HSD:

Tukey's HSD test for homogenous subsets was used to analyze depression levels among various monthly family income categories. Despite the finding not achieving statistical significance at the 0.05 level (p = .074), the proximity to significance indicates a noteworthy trend that may merit additional investigation.

The Lower Class group (N = 2) had the lowest mean depression score (M = 5.00), while the Lower Middle Class group (N = 19) recorded the highest mean (M = 18.42). The Upper Middle Class (M = 13.00), Upper Lower Class (M = 14.16), Upper Class (M = 15.13), Middle Class (M = 16.88), and Higher Upper Class (M = 17.52) exhibited a gradual and continuous rise in mean depression scores correlating with rising income levels.

Despite the absence of statistically significant differences in the grouping, the evident upward trend indicates that depressive symptoms may be more common among higher-income groups, potentially attributable to increased work-related stress, pressure to uphold social status, or diminished community/social engagement. Nonetheless, the minimal sample size in the Lower Class group (N = 2) may have affected the overall statistical power of the test. In conclusion, while the test did not reveal significant differences between groups, the trend in mean scores is constant and practically meaningful. These results underscore the need for further research using bigger and more uniformly dispersed samples to ascertain if income level is really correlated with depression levels throughout the community.

Table-7. Homogeneous Subsets for Depression Based on Monthly Family Income

Depression		
Tukey HSD		
Monthly Family Income	**N**	**Subset for alpha = 0.05**
		1
Lower Class	2	5.0000
Upper Middle Class	22	13.0000
Upper Lower Class	37	14.1622
Upper class	55	15.1273
Middle Class	16	16.8750
Higher Upper Class	50	17.5200
Lower Middle Class	19	18.4211

Sig.		.074
Means for groups in homogeneous subsets are displayed.		
a. Uses Harmonic Mean Sample Size = 9.645.		
b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.		

Source: Own Calculation from primary data.

HOMOGENEOUS SUBSETS FOR QUALITY OF SLEEP – TUKEY HSD

The homogeneous subset analysis of sleep quality, using Tukey's HSD test, assessed whether average sleep scores varied substantially within monthly family income categories. The outcome was not statistically significant (p = .790), suggesting that any variations in sleep quality across income groups are largely attributable to chance and lack substantial evidence.

Although lacking statistical significance, a discernible increased trend in sleep quality correlating with wealth is seen in the mean ratings. The Lower Class (N = 2) had the lowest mean sleep score (M = 56.00), closely followed by the Upper Middle Class (M = 56.95). Sleep quality improved incrementally throughout the Lower Middle Class (M = 60.26), Upper Class (M = 60.56), Upper Lower Class (M = 60.84), and Middle Class (M = 62.75), with the Higher Upper Class (M = 63.04) exhibiting the greatest mean sleep score.

Despite the p-value (p = .790) indicating statistical homogeneity, the rising trend may imply that superior sleep quality correlates with elevated income levels, maybe attributable to enhanced living circumstances, less financial stress, or improved access to health services. Nonetheless, the very small sample size in the Lower Class (N = 2) further constrains the credibility and generalizability of the results. In conclusion, while the data do not indicate any statistically significant group differences, the trend in means offers valuable descriptive information and may inform future study on the correlation between economic statuses and sleep health.

Table-8. Homogeneous Subsets for Quality of Sleep Based on Monthly Family Income

Quality_of_Sleep		
Tukey HSD		
Monthly Family Income	**N**	**Subset for alpha = 0.05**
		1
Lower Class	2	56.0000
Upper Middle Class	22	56.9545
Lower Middle Class	19	60.2632
Upper class	55	60.5636
Upper Lower Class	37	60.8378
Middle Class	16	62.7500
Higher Upper Class	50	63.0400
Sig.		.790
Means for groups in homogeneous subsets are displayed.		
a. Uses Harmonic Mean Sample Size = 9.645.		
b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.		

Source: Own Calculation from primary data.

MULTIPLE REGRESSION ANALYSIS FOR DEPRESSION LEVEL

A multiple regression analysis was performed to see whether monthly family income, parental education, and parental employment substantially predicted depression levels among participants. The comprehensive model lacked statistical significance, $F(5, 195) = 0.971$, $p = .437$, and accounted for about 2.4% of the variation in depression ratings ($R^2 = .024$; Adjusted $R^2 = –.001$), indicating little explanatory capacity. None of the individual predictors achieved statistical significance: father's education ($\beta = –.066$, $p = .474$), father's employment ($\beta = –.109$, $p = .216$), mother's education ($\beta = .024$, $p = .778$), mother's occupation ($\beta = –.052$, $p = .468$), and monthly family income ($\beta = –.027$, $p = .718$). The collinearity diagnostics indicated that multicollinearity was not an issue, since all Variance Inflation Factor (VIF) values were far below 2 and Tolerance values were elevated. Five. The results indicate that the chosen socio-economic factors do not substantially predict depression levels in this population, and the model lacks both statistical and practical relevance.

Table-9. Model Summary of Multiple Regression for Depression

Model Summary				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.156[a]	.024	-.001	1.45118
a. Predictors: (Constant), Monthly Family Income, Mothers Occupation, Fathers Education, Mothers Education, Fathers Occupation				

Source: Own Calculation from primary data.

Table-10. ANOVA Table for Regression Model Predicting Depression

ANOVA[a]						
Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	10.219	5	2.044	.971	.437[b]
	Residual	410.657	195	2.106		
	Total	420.876	200			
a. Dependent Variable: DepressionLevel						
b. Predictors: (Constant), Monthly Family Income, Mothers Occupation, Fathers Education, Mothers Education, Fathers Occupation						

Source: Own Calculation from primary data.

Table-11. Coefficients Table for Predictors of Depression

Coefficients[a]								
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**	**Collinearity Statistics**	
		B	**Std. Error**	**Beta**			**Tolerance**	**VIF**
1	(Constant)	3.209	.324		9.902	.000		
	Fathers Education	-.051	.070	-.066	-.717	.474	.584	1.713
	Fathers Occupation	-.078	.063	-.109	-1.241	.216	.645	1.549
	Mothers Education	.020	.070	.024	.282	.778	.677	1.477

	Mothers Occupation	-.031	.043	-.052	-.727	.468	.976	1.024
	Monthly Family Income	-.021	.058	-.027	-.361	.718	.879	1.138
a. Dependent Variable: DepressionLevel								

Source: Own Calculation from primary data.

Table-12. Collinearity Diagnostics for Predictors of Depression

Collinearity Diagnostics[a]									
Model	**Dimension**	**Eigenvalue**	**Condition Index**	**Variance Proportions**					
				(Constant)	**Fathers Education**	**Fathers Occupation**	**Mothers Education**	**Mothers Occupation**	**Monthly Family Income**
1	1	5.010	1.000	.00	.01	.01	.01	.01	.01
	2	.414	3.480	.01	.03	.07	.02	.47	.00
	3	.240	4.565	.00	.07	.12	.00	.06	.68
	4	.152	5.743	.00	.05	.53	.50	.01	.11
	5	.106	6.879	.00	.78	.27	.43	.00	.04
	6	.078	8.007	.98	.06	.00	.05	.45	.15
a. Dependent Variable: Depression Level									

Source: Own Calculation from primary data.

MULTIPLE REGRESSION ANALYSIS FOR ANXIETY:

A multiple linear regression analysis was performed to ascertain whether monthly family income, parental education, and parental employment might substantially predict anxiety levels among participants. The regression model was statistically significant, $F(5, 195) = 3.474$, $p = .005$, explaining 8.2% of the variation in anxiety levels ($R^2 = .082$; Adjusted $R^2 = .058$), suggesting a modest but substantial impact.

Among the variables, the mother's work emerged as the only statistically significant individual contributor, with a standardized coefficient of $\beta = .177$ ($p = .012$), indicating that respondents with employed moms reported somewhat elevated levels of anxiety. Additional factors, such as paternal education ($\beta = –.074$, $p = .411$), paternal occupation ($\beta = .037$, $p = .668$), maternal education ($\beta = –.144$, $p = .086$), and monthly family income ($\beta = –.063$, $p = .389$), did not substantially influence anxiety levels.

Collinearity diagnostics verified the lack of multicollinearity, as all VIF values were below 2 and Tolerance values above 0.5, hence confirming the stability and independence of the regression results. In conclusion, the regression model suggests that while the majority of socio-economic factors do not substantially affect anxiety, maternal work status may serve as a relevant predictor, maybe indicating the impact of caring responsibilities or familial dynamics on mental health.

Table-13. Model Summary of Multiple Regression for Anxiety

Model Summary				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.286[a]	.082	.058	1.52205
a. Predictors: (Constant), Monthly Family Income, Mothers Occupation, Fathers Education, Mothers Education, Fathers Occupation				

Source: Own Calculation from primary data.

Table-14. ANOVA Table for Regression Model Predicting Anxiety

ANOVA[a]						
Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	40.238	5	8.048	3.474	.005[b]
	Residual	451.742	195	2.317		
	Total	491.980	200			
a. Dependent Variable: AnxietyLevel						
b. Predictors: (Constant), Monthly Family Income, Mothers Occupation, Fathers Education, Mothers Education, Fathers Occupation						

Source: Own Calculation from primary data.

Table-15. Coefficients Table for Predictors of Anxiety

Coefficients[a]								
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**	**Collinearity Statistics**	
		B	**Std. Error**	**Beta**			**Tolerance**	**VIF**
1	(Constant)	3.568	.340		10.497	.000		
	Fathers Education	-.061	.074	-.074	-.825	.411	.584	1.713
	Fathers Occupation	.028	.066	.037	.429	.668	.645	1.549
	Mothers Education	-.126	.073	-.144	-1.724	.086	.677	1.477
	Mothers Occupation	.114	.045	.177	2.549	.012	.976	1.024
	Monthly Family Income	-.053	.061	-.063	-.864	.389	.879	1.138
a. Dependent Variable: AnxietyLevel								

Source: Own Calculation from primary data.

Table-16. Collinearity Diagnostics for Predictors of Anxiety

Collinearity Diagnostics[a]									
Model	Dimension	Eigenvalue	Condition Index	Variance Proportions					
				(Constant)	Fathers Education	Fathers Occupation	Mothers Education	Mothers Occupation	Monthly Family Income
1	1	5.010	1.000	.00	.01	.01	.01	.01	.01
	2	.414	3.480	.01	.03	.07	.02	.47	.00
	3	.240	4.565	.00	.07	.12	.00	.06	.68
	4	.152	5.743	.00	.05	.53	.50	.01	.11
	5	.106	6.879	.00	.78	.27	.43	.00	.04
	6	.078	8.007	.98	.06	.00	.05	.45	.15
a. Dependent Variable: AnxietyLevel									

Source: Own Calculation from primary data.

MULTIPLE REGRESSION ANALYSIS FOR STRESS:

A multiple regression analysis was conducted to evaluate the predictive relationship of monthly family income, parental education, and parental employment on participants' stress levels. The comprehensive model lacked statistical significance, $F(5, 195) = 0.806$, $p = .547$, and accounted for just 2.0% of the variation in stress ratings ($R^2 = .020$; Adjusted $R^2 = –.005$), indicating inadequate model fit and restricted predictive power.

None of the individual predictors had statistically significant impacts. Specifically, father's education ($\beta = –.023$, $p = .801$), father's occupation ($\beta = –.062$, $p = .480$), mother's education ($\beta = –.030$, $p = .731$), mother's occupation ($\beta = .086$, $p = .232$), and monthly family income ($\beta = –.014$, $p = .852$) did not exhibit significant correlations with stress levels. The standardized coefficients were minimal, and p-values significantly above the customary alpha threshold of .05.

Collinearity diagnostics indicated that all Variance Inflation Factor (VIF) values were below 2 and Tolerance values were much above 0.5, indicating an absence of multicollinearity issues. In conclusion, the regression model indicates that the chosen socio-economic factors do not substantially account for variability in stress levels among the research participants. This suggests that psychological, situational, or lifestyle factors may be more significant predictors of stress than the background variables studied in this study.

Table-17. Model Summary of Multiple Regression for Stress

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.142[a]	.020	-.005	1.04631
a. Predictors: (Constant), Monthly Family Income, Mothers Occupation, Fathers Education, Mothers Education, Fathers Occupation				

Source: Own Calculation from primary data.

Table-18. ANOVA Table for Regression Model Predicting Stress

ANOVA[a]						
Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	4.412	5	.882	.806	.547[b]
	Residual	213.478	195	1.095		
	Total	217.891	200			
a. Dependent Variable: StressLevel						
b. Predictors: (Constant), Monthly Family Income, Mothers Occupation, Fathers Education, Mothers Education, Fathers Occupation						

Source: Own Calculation from primary data.

Table-19. Coefficients Table for Predictors of Stress

Coefficients[a]								
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**	**Collinearity Statistics**	
		B	**Std. Error**	**Beta**			**Tolerance**	**VIF**
1	(Constant)	2.202	.234		9.425	.000		
	Fathers Education	-.013	.051	-.023	-.252	.801	.584	1.713
	Fathers Occupation	-.032	.045	-.062	-.708	.480	.645	1.549
	Mothers Education	-.017	.050	-.030	-.344	.731	.677	1.477
	Mothers Occupation	.037	.031	.086	1.198	.232	.976	1.024
	Monthly Family Income	-.008	.042	-.014	-.187	.852	.879	1.138
a. Dependent Variable: StressLevel								

Source: Own Calculation from primary data.

Table-20. Collinearity Diagnostics for Predictors of Stress

Collinearity Diagnostics[a]									
Model	**Dimension**	**Eigenvalue**	**Condition Index**	**Variance Proportions**					
				(Constant)	**Fathers Education**	**Fathers Occupation**	**Mothers Education**	**Mothers Occupation**	**Monthly Family Income**
1	1	5.010	1.000	.00	.01	.01	.01	.01	.01
	2	.414	3.480	.01	.03	.07	.02	.47	.00
	3	.240	4.565	.00	.07	.12	.00	.06	.68
	4	.152	5.743	.00	.05	.53	.50	.01	.11
	5	.106	6.879	.00	.78	.27	.43	.00	.04
	6	.078	8.007	.98	.06	.00	.05	.45	.15
a. Dependent Variable: StressLevel									

Source: Own Calculation from primary data.

MULTIPLE REGRESSION ANALYSIS FOR QUALITY OF SLEEP (QOS):

A multiple regression analysis was performed to see whether monthly family income, parental education, and parental employment might substantially predict participants' quality of sleep (QOS). The total model lacked statistical significance, $F(5, 195) = 1.141$, $p = .340$, with a R^2 of .028 and an adjusted R^2 of .004, showing that just 2.8% of the variation in QOS was elucidated by the predictors implying a feeble and statistically unsubstantiated model.

None of the factors attained statistical significance. The standardized coefficients for paternal education ($\beta = –.003$, $p = .974$), paternal occupation ($\beta = .147$, $p = .095$), maternal education ($\beta = .018$, $p = .838$), maternal occupation ($\beta = .047$, $p = .512$), and monthly family income ($\beta = –.111$, $p = .140$) were all statistically non-significant. Nonetheless, the father's profession exhibited marginal significance ($p = .095$), indicating a potential mild positive correlation between the kind of father's work and improved sleep quality.

Collinearity diagnostics revealed no issues, as Variance Inflation Factor (VIF) values remained below 2, and Tolerance values above 0.5, indicating that the predictors were statistically independent. In conclusion, the model produced no statistically significant findings, and the socio-economic factors examined though perhaps pertinent in wider contexts did not meaningfully account for variability in sleep quality within this sample. Additional study including psychological, environmental, or health-related factors may provide enhanced understanding of the drivers of sleep quality.

Table-21. Model Summary of Multiple Regression for Quality of Sleep

Model Summary				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.169[a]	.028	.004	.68208
a. Predictors: (Constant), Monthly Family Income, Mothers Occupation, Fathers Education, Mothers Education, Fathers Occupation				

Source: Own Calculation from primary data.

Table-22. ANOVA Table for Regression Model Predicting Quality of Sleep

ANOVA[a]						
Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	2.654	5	.531	1.141	.340[b]
	Residual	90.719	195	.465		
	Total	93.373	200			
a. Dependent Variable: QOSLevel						
b. Predictors: (Constant), Monthly Family Income, Mothers Occupation, Fathers Education, Mothers Education, Fathers Occupation						

Source: Own Calculation from primary data.

Table-23. Coefficients Table for Predictors of Quality of Sleep

Coefficients[a]								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.773	.152		11.640	.000		
	Fathers Education	-.001	.033	-.003	-.032	.974	.584	1.713
	Fathers Occupation	.050	.030	.147	1.678	.095	.645	1.549
	Mothers Education	.007	.033	.018	.204	.838	.677	1.477
	Mothers Occupation	.013	.020	.047	.657	.512	.976	1.024
	Monthly Family Income	-.040	.027	-.111	-1.480	.140	.879	1.138
a. Dependent Variable: QOSLevel								

Source: Own Calculation from primary data.

Table-24. Collinearity Diagnostics for Predictors of Quality of Sleep

Collinearity Diagnostics[a]									
Model	Dimension	Eigenvalue	Condition Index	Variance Proportions					
				(Constant)	Fathers Education	Fathers Occupation	Mothers Education	Mothers Occupation	Monthly Family Income
1	1	5.010	1.000	.00	.01	.01	.01	.01	.01
	2	.414	3.480	.01	.03	.07	.02	.47	.00
	3	.240	4.565	.00	.07	.12	.00	.06	.68
	4	.152	5.743	.00	.05	.53	.50	.01	.11
	5	.106	6.879	.00	.78	.27	.43	.00	.04
	6	.078	8.007	.98	.06	.00	.05	.45	.15
a. Dependent Variable: QOSLevel									

Source: Own Calculation from primary data.

FINDINGS OF THE STUDY:

The research examined the correlation between socio-economic variables namely monthly family income, parental education, and parental occupation and psychological outcomes including stress, anxiety, depression, and sleep quality. Descriptive data indicated moderate anxiety and depression levels, low stress, and somewhat inadequate sleep quality among subjects. ANOVA findings revealed no statistically significant changes in these outcomes across income groups, while anxiety exhibited a near-significant variance ($p = .078$). Post hoc and homogenous subgroup analyses revealed numerical patterns, indicating that lower-income groups reported reduced psychological distress, whereas higher-income groups exhibited somewhat elevated mean scores; however, none of these changes reached statistical significance. Multiple regression analysis indicated that the socio-economic

variables accounted for just a little fraction of the variation in all four outcomes. Mother's employment was the only significant predictor, strongly correlated with anxiety levels (β = .177, p = .012). All other variables such as paternal education and employment, maternal education, and income were not significant predictors of any outcome. Collinearity diagnostics validated the integrity of the models. The research indicates that socio-economic determinants had little predictive capability regarding psychological well-being in this group, with mother work identified as a minor but significant effect on anxiety.

SUGGESTIONS OF THE STUDY:

The paper proposes many avenues for further research and practical applications based on its results. Initially, given that socio-economic factors like income and parental education did not substantially forecast psychological outcomes, subsequent research should integrate psychological, behavioural, and environmental variables such as coping strategies, social support, work-life equilibrium, and screen time to achieve a more thorough comprehension of stress, anxiety, depression, and sleep quality. The substantial influence of a mother's career on anxiety underscores the need to investigate family dynamics, caregiving duties, and emotional connections more thoroughly, particularly in dual-income or working-mother families. Third, considering the limited sample size in certain income groups (e.g., Lower Class), further research should aim for more balanced and bigger samples to enhance statistical power and representation. Finally, initiatives designed to enhance mental health and sleep quality should take into account non-economic factors, including personal habits, availability of mental health services, and educational programs that foster emotional well-being, rather than concentrating only on socio-economic status.

CONCLUSION

This research sought to investigate the correlations between socio-economic factors namely monthly family income, parental education, and parental occupation and psychological outcomes such as stress, anxiety, depression, and sleep quality. The findings indicated that while individuals experienced considerable psychological distress and suboptimal sleep quality, these results were not substantially affected by socio-economic status. Of all variables, only the mother's work was identified as a meaningful factor, adding moderately to anxiety levels. The results indicate that conventional socio-economic variables may possess restricted explanatory capacity regarding psychological well-being in the examined group. This highlights the need of acknowledging multi-dimensional influences such as personal, family, and psychological factors when tackling mental health and sleep-related issues. The study enhances the existing data about the intricacies of mental health determinants and advocates for more refined, context-specific strategies in research and policy interventions.

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Conflict of Interest

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