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The Influence of Self-Esteem, Subjective Well-Being and Teacher Relationship on Academic Success Among UG and PG Students

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Abstract

The purpose of this study is to investigate the relationships between self-esteem, subjective well-being and teacher-student relationship satisfaction in predicting academic performance of undergraduate (UG) and postgraduate (PG) students. The data was gathered from 539 students of universities in Vadodara, Gujarat, using the quantitative research design. Key psychological constructs such as students' Self-esteem, Subjective Wellbeing, and Relationship Satisfaction were measured using standardized psychometric tools such as the Rosenberg Self Esteem Scale, Subjective Wellbeing Inventory and Burns Relationship Satisfaction Scale, while academic performance was measured through the student's Cumulative Grade Point Average (CGPA).

Findings show that there is a weak but statistically significant positive correlation between CGPA ($r = 0.164$ $p < 0.01$), which means that students competent in subjective well-being do not have the same well-being academically. Likewise, CGPA also had a small but statistically significant correlation ($r = 0.091$, $p < 0.05$) with teacher-student relationship satisfaction, suggesting that good relationships with our educators help us fulfil better preparation skills. Despite this, the influence of self-esteem was not significantly related to CGPA ($r = 0.009$, $p = 0.835$), contradicting the assumptions as to how it could correlate to the academic outcome. In addition, UG and PG students were compared and it was found that the average CGPA score in PG students was significantly higher ($p = 0.048$) than UG students, but no significant difference was found in terms of self-esteem, well-being or relationship satisfaction.

These results imply that although psychological and relational variables are related to academic success, these effects are small and that other unexplored variables may have a stronger role. The study calls for the establishment of such good well-being programs and positive teacher-student relationships in educational institutions to make students' academic experiences better. Future research should investigate these relationships and their implications for student achievement using longitudinal and mixed methods.

Keywords: Self-esteem, Subjective Well-being, Relationship Satisfaction, Student-Teacher relationship, Academic Performance, Young Adults

1. Introduction

Students develop better academic engagement and motivation and improve performance through their self-esteem levels. The way people evaluate their value determines their capacity to handle obstacles and maintain consistent effort in academic work (Rosenberg, 1965). Academic achievements thrive alongside self-esteem elevation but student underachievement emerges from low self-esteem levels (Fiorilli et al., 2014; Lim & Lee, 2017). Researchers prove that students who have high self-esteem achieve superior grades as well as demonstrate stronger resilience (Yanti Rosli, 2012; Pal & Choudhuri, 2024; Abuzar & Purwandari, 2024).

Educational environments from various contexts demonstrate how self-esteem affects stronger academic achievement. The research of Пахомов & Kostina (2024) along with Pacifico et al. (2024) demonstrates that students with appropriate self-esteem achieve better academic achievements than students with lower self-esteem. Outside elements such as socio-economic factors together with institutional backing and support systems work together with self-esteem. Students who receive adequate system support from low self-esteem tend to achieve better results than those who show high overly confident tendencies. The level of impact that self-esteem has on undergraduate students differs from how it affects postgraduate students. Postgraduate students handle academic research tasks together with developing their careers while undergraduate students mainly confront self-identity formation challenges. People with strong self-esteem handle stress more effectively and develop resilience to create goals that help sustain their academic focus. Studies must analyze the connection between self-esteem and self-efficacy with educational approaches to understand their combined effects on academic performance to build successful student achievement strategies. Teachers together with policymakers should create learning environments that improve student outcomes using self-esteem development strategies.

Academic engagement, along with student motivation and educational outcomes, relies on the

psychological concept known as Subjective Well-Being (SWB). A comprehensive framework of SWB comprises both life satisfaction and emotional well-being, as it shapes students' educational experiences and their capacity to manage adversities (Diener, 1984; Suldo, Riley, & Shaffner, 2006). Students exhibiting higher levels of SWB engage in more persistent academic behaviour, demonstrating intrinsic motivation and effective stress management skills. Various studies reveal conflicting evidence regarding the direct impact of SWB on academic achievements. Researchers have reported inconsistent results concerning the relationship between students' SWB and academic outcomes, presenting both positive correlations and findings of no statistical significance (Steinmayr et al., 2015; Huebner & Alderman, 1993). Lower-achieving students do not consistently have low SWB, while high-achieving students might exhibit either high or low SWB (Bücker, 2018).

Student success depends heavily on SWB because this factor supports resilience relationships with others and coping patterns in education (OECD, 2017). SWB operates differently between undergraduate students who face academic and personal pressures and postgraduate students who do so to varying extents. UG students encounter various issues regarding their identity development social life transitions and academic adjustment yet PG students must meet research obligations while planning their careers and practising independent study. Research shows that superior SWB leads students to build stronger stress management abilities and goal-setting capabilities and enhances their academic engagement both at the undergraduate and postgraduate levels. Situations of poor SWB have been shown to pull students toward experiencing anxiety as well as burnout leading them to lose their commitment to academic work.

Research needs to analyze the exact pathways between well-being and learning and achievement results at different educational levels because SWB holds major importance in educational settings. Caring for student well-being enables educators and policymakers to build environments where educational success matches personal development effectively. The implementation of mental health resources within positive academic cultures and balanced learning strategies will produce enhanced student well-being which leads to better long-term educational success.

Educational success is enhanced when teacher-student relationships maintain positivity because it build productive learning conditions (Omodan & Tsotetsi, 2018). Research indicates that strong relationships between teachers and students show a positive correlation to student achievement outcomes and these positive interactions lead students toward increased motivation and higher engagement as well as academic success (Mustary, 2020). These professional bonds generate supportive learning conditions where students experience respect and acknowledgment which encourages their active participation throughout education sessions.

Academic motivation and student engagement develop through the intermediate influence of teacher support between students and teachers. Through emotional teacher support, students develop favourable academic emotions that increase their commitment to studies according to Wentzel (2015). Academic achievement rises when students interact informally with their faculty members since these interactions strengthen intrinsic motivation. The benefits that come from strong relationships between teachers and students in different educational stages extend past early education to support students in their academic success and well-being during higher education (Dhaqane & Afrah, 2016).

Various research investigates how student-teacher relationships affect academic involvement as well as student performance. The research community has neglected to study how student academic performance reacts when students feel satisfied with their student-teacher relationships.

Future studies need to investigate the teaching-learning effects of such relationships throughout different education levels because teacher-student relationships are important in education research. Educators and policymakers need to establish positive relationships between students and teachers to create educational settings that support academic goals and help individuals develop personally. Focusing on educational strategies that fortify faculty-student relationships and adopting balanced learning approaches leads to improved long-term educational performance.

The ratio of teacher relationship satisfaction shows variations between undergraduate and postgraduate students. The close engagement of faculty members with undergraduate students leads to enhanced academic motivation that promotes both engagement and the development of student belonging (Hagenauer & Volet, 2014). Postgraduate students might experience interactive sessions with faculty primarily revolving around research activities rather than instruction-based work so their satisfaction with teacher relationships shows a decreased correlation with academic performance results. The learning style of most postgraduate students consists of self-led independence alongside peer support during research investigations (Pyhältö et al., 2012). The power of mutual influence between these components and CGPA may vary as well. At the undergraduate level, the effect of teacher-student bonding on academic achievements

might be stronger because students heavily depend on their educators for learning assistance.

The research investigates how student self-esteem together with student satisfaction about teacher interactions alongside subjective well-being determines their academic GPA performance and whether these relationships change between undergraduate and postgraduate students. The research examines three key elements: how self-esteem affects academic performance and measures satisfaction levels with student-teacher relationships as well as assessing subjective well-being as an academic success indicator. The research will inspect the relationship variations between undergraduate and postgraduate students to guide educational and policy decisions regarding learning environments that help students succeed academically.

Several studies have investigated student-teacher relationship quality and educational outcomes but research about students' levels of satisfaction stands insufficient. Researchers have not established a direct connection between how satisfied students are with their teachers and their academic achievements. The evaluation of student-teacher relationship satisfaction stands as an essential need since it enables researchers to realize insights about educational spaces which jointly support academic accomplishment alongside student well-being.

2. Methodology

In this study, the researcher has independently varied Self-esteem, Subjective well-being and Relationship satisfaction in Student-Teacher Relationships. The dependent variable is Academic Performance.

2.1 Operational Definitions of Variables

2.1.1 Self-Esteem:

As a view of the self, Rosenberg (1965) self-esteem is considered to be positive or negative. It is based on the score obtained on the Rosenberg Self-Esteem Scale (RSES) which is a 10-item test where a person responding is asked to rate his / her 'liking' for certain behaviour or perceptions of self-using a four-point Likert scale of 0 to 3 'strongly agree' to 'strongly disagree.' A higher score means more positive self-esteem.

2.1.2 Subjective Wellbeing

A response from the WHO Well-Being Index or a similar Dr R. Nagpal multidimensional scale is rated. This scale measures positive mental health in domains such as life satisfaction, sense of achievement, interpersonal relationships, and emotional stability. All responses are evaluated using the Likert scale, and a higher score corresponds to a higher level of subjectively assessed well-being.

2.1.3. Relationship Satisfaction in Student-Teacher Relationship

Relationship satisfaction represents the complete scores achieved through the seven-point Burns Relationship Satisfaction Scale (BRSS, 1993). This survey evaluates how participants feel about their relationship in different aspects by assessing their connection and communication. Participants score their satisfaction between 0 (very dissatisfied) and 6 (very satisfied) for every item in the questionnaire. Each point improvement on the BRSS scale points to a stronger degree of relationship contentment.

2.1.4. Academic Performance (CGPA): Student academic results are evaluated through their Cumulative Grade Point Average (CGPA) which represents an overall measure of their course performance. The academic results together with the intellectual capability and educational performance capacity of learners can be observed through CGPA assessment. The participants submitted their CGPA information during the demographic inquiry.

Quantitative research design is used in the present study to quantify variables and then analyze the relations between them using statistical methods. The study investigates the effects of self-esteem, subjective well-being and relationship satisfaction on academic performance while taking into consideration demographic factors as moderators by comparing correlational and predictive analyses.

2.2. Sample

The study was carried out with a representative sample of 539 students between 18 to 28 age from universities and colleges of Vadodara, Gandhinagar, and Ahmedabad in the state of Gujarat, India. Sampling of the sample was done via convenience random sampling.

2.2.1. Inclusion Criteria

The inclusion criteria for the study participants were that they volunteered to participate willingly and were from 18 to 60 years old and proficient in English. Moreover, they had to be enrolled in undergraduate, postgraduate or Ph.D. programs.

2.2.2. Exclusion Criteria

On the contrary, the exclusion criteria included people aged 18 to 60 years and those who did not speak English. Additionally, students who worked on diploma or certification courses were excluded unless they were registered in undergraduate, postgraduate, or PhD programs.

2.3. Hypotheses of the study

i. Self-esteem at greater levels demonstrates a positive relationship with students' academic performance measured through CGPA.

ii. Students who experience higher satisfaction from their teacher's relationships tend to have better CGPA results.
iii. Student CGPA increases when their subjective well-being grows.
iv. Overall CGPA prediction is most powerful when self-esteem joins subjective well-being and teacher relationship satisfaction in a comprehensive analysis model.
v. The relationship between self-esteem and CGPA becomes stronger through subjective well-being as the mediating factor.
vi. Subjective well-being acts as a mediator that links relationship satisfaction towards teachers to CGPA results.
vii. Response rates of self-esteem to CGPA receive stronger effects when students demonstrate higher relationship satisfaction with teachers.
viii. The relationship between subjective well-being and CGPA receives stronger influence from self-esteem.
ix. The relationship between subjective well-being and CGPA receives moderation from the extent of teachers' relationship satisfaction.
x. Self-esteem exhibits better relationships with CGPA among undergraduate students rather than among postgraduate students.
xi. Postgraduate students demonstrate lower relationships between their teaching relationship satisfaction and Grade Point Average when compared to undergraduate students.
xii. The strength of the connection between CGPA and subjective well-being shows no difference between students who are undergraduates and those who are postgraduates.
xiii. Self-esteem and subjective well-being levels are expected to be stronger among PG students than UG students according to this hypothesis.
xiv. The strength of CGPA outcomes based on teacher-student relationships proves higher for undergraduate students than for postgraduate students.
xv. A stronger relationship between subjective well-being and CGPA exists for UG students because PG students primarily depend on their independent learning approaches.
xvi. Graduate students who both have positive self-esteem along strong teacher relationships demonstrate peak levels of subjective well-being.
xvii. Teenagers who have strong self-esteem as well as positive subjective well-being tend to manage their time efficiently resulting in higher academic grade point averages.
xviii. Self-esteem together with subjective well-being and teacher relationships maintains a direct impact on CGPA even when demographic factors including age, socioeconomic status and field of study are controlled for.

2.4. Tools

Tools were selected for the study based on objectives, availability of time, reliability of the test and that investigators can administer and interpret results. In Student-Teacher Relationships, three standardized psychometric measures were used in measuring subjective well-being, self-esteem, and relationship satisfaction, as detailed in Appendix B, C, and D. Basic information about respondents based on age, gender, occupation, education, family structure, and monthly income were taken for creating demographic data sheet (Appendix A).
The following tools were chosen:

2.4.1. The Rosenberg Self-Esteem Scale

Development of the Rosenberg Self-Esteem Scale (1965) is a widely used self-report scale of global self-esteem. The 10 items are rated on a four-point Likert scale from 'strongly agree' to 'strongly disagree' and five are worded positively (I am satisfied with myself) and five negatively (I am nervous and stressed). RSES is reliable (Cronbach's alpha 0.77 to 0.88; test-retest 0.82+) and valid (negatively correlated to depression and positively correlated to well-being).
2.4.2. The Subjective Well-being Inventory scale better known as the Subjective Well-being Inventory scale (SUBI).
Created by Sell, H., & Nagpal, R. (1992), the Subjective Well-being Inventory (SUBI) is extensive research in psychological tools. Its purpose is to appraise the degree to which an individual or group is feeling good or looking down at many elements of everyday life. The scale to measure subjective well-being includes 40 items and has a high level of validity and reliability with Cronbach's alpha of 0.968 and composite reliability of 0.971.
2.4.3. Relationship Satisfaction Relationship Satisfaction and Assessment Tool)
The Burns Relationship Satisfaction Scale (BRSS) is a tool that measures relationship satisfaction within both romantic, friendship and familial popularity. The Likert Scale reflects on the important areas with the composition of seven items communication, conflict resolution, affirmation, love, affection and intimacy, role satisfaction, and general satisfaction. Each item has 7 points Likert scale (0 to 6) with 0 to 42 total scores and a higher total score indicates that an item is more satisfied.
The psychometric properties associated with the BRSS are similarly strong (Cronbach's alpha = 0.94) and valid correlations with other relationship relationship satisfaction measures are observed. There is a correlation of r 0.80 with the Locke Wallace Marital Adjustment Test and r 0.89 with the Dyadic Adjustment Scale. The scale can measure the underlying construct of relationship satisfaction and its relationship to emotional well-being.
2.5 Data collection

We used convenience random sampling, by visiting universities in Vadodara, Gandhinagar and Ahmedabad. On campus, we approached students, told them what the purpose of our study was, and offered them self-administered tools. This allowed for a representative sample for the research.

3. Data Analysis

The responses of the subjects to the four psychological tests were scored as per the instructions given in the corresponding manuals. The responses were scored once and Statistical Package for the Social Sciences (SPSS, version 26) was employed to arrive at the following: Descriptive and Inferential Statistics. Analyses of data are based on set forth results and then the results were arranged in different tables below:

Table 1: presents the descriptive statistics for self-esteem, subjective well-being, Relationship satisfaction with Teachers, and Academic Performance (CGPA).

Values	Self-esteem	Subjective Wellbeing	RS Teacher	CGPA
Valid	539	539	539	539
Missing	-	-	-	-
Mean	15.17	89.93	21.54	7.13
Std. Deviation	2.58	12.26	11.02	1.16
Shapiro-Wilk	0.954	0.997	0.957	0.712
P-value of Shapiro-Wilk	0.000**	0.294 (NS)	0.000**	0.000**
Minimum	8	53	0	3
Maximum	34	120	42	8

p<0.05 is statistically significant, **p<0.01 is statistically highly significant, NS= not significant.

Table 1 provides the descriptive statistics for the four key variables in the study: Self-Esteem, Subjective Well-being, Relationship Satisfaction with Teachers, and Academic Performance (CGPA). The analysis includes the mean, standard deviation, normality test results (Shapiro-Wilk), and data range (minimum and maximum values).

In this study, the used dataset is complete the values of all four variables are relevant and have a valid sample size of 539 and there are no missing data thus, maintenance of data integrity and reliability. Self-Esteem Mean (± SD) scores of 15.17 ± 2.58 suggest that most of the participants had moderate levels of self-esteem. The mean subjective well-being score was 89.93± 12.26 and relatively high. The mean of relationship satisfaction with teachers was 21.54 ± 11.02 which indicates much variability in students' experiences with their teachers. The mean of CGPA 7.13 ± 1.16 indicates the basic academic performance of the participants.

The Shapiro—Wilk (p = 0.000) for normality assessment indicated that self-esteem (p = 0.000), relationship satisfaction with teachers (p = 0.000) and CGPA (p =.000) were not normally distributed and non-parametric statistical tests were used for further analysis. By contrast, subjective well-being (p = 0.294) followed a normal distribution, such that parametric tests could be used in relevant comparisons. Further variations were shown based on the minimum and maximum scores in participant responses whereby self-esteem ranged between 8 to 34, subjective well-being 53 to 120, relationship satisfaction with teachers 0 to 42, and CGPA 3 to 8. One interesting aspect is the wide distribution of scores across various aspects related to happiness and also well-being such as relationship satisfaction. Finally, since these datasets are robust and complete, variations of normality require a proper selection of statistical tests. Because subjective well-being is distributed normally, it permits parametric testing, while self-esteem, its relationship with teachers, and CGPA require non parametric analyses since they are non-normal distributions. The variability seen across all measures indicates the wide span of experiences that the participants experienced, especially in the relational and psychological ones.

Table 2: Correlation to assess the relationship between self-esteem and CGPA among students.

Correlation		SE Student	CGPA
SE Student	**Pearson Correlation**	1	.009
	P value		.835
	N	539	539

p<0.05 is statistically significant, **p<0.01 is statistically highly significant, NS= not significant, Pearson correlation applied.

Table 2 presents the results of the **Pearson correlation test** assessing the relationship between **self-esteem (SE) and CGPA** among students.
The value of Pearson correlation coefficient (r) is 0.009, indicating there is an extremely weak positive correlation of self esteem and CGPA (Cumulative Grade Point Average). The p value is 0.835 (not statistically significant (NS) $p > 0.05$).
This means that the relationship between villagers' self-esteem and CGPA is very low (0.009) and hence virtually no relationship exists between self-esteem and CGPA among students. Additionally, the lack of statistical significance is also supported by the p value of non-significant (0.835).
Therefore, this means that high academic performance (CGPA) has no effect on a student´s self-esteem, and vice versa. The results of this study show that there is no significant difference between self-esteem and CGPA, which means that academic performance has little effects on self-esteem among students. Rather, other forms of personal, psychological, or environmental factors should be more strongly linked to self-esteem levels.

Table 3: Correlation to examine the relationships between CGPA and subjective well-being

Correlation		**CGPA**	**SWB**
CGPA	**Pearson Correlation**	1	.164**
	P Value		.000
	N	539	539

p<0.05 is statistically significant, **p<0.01 is statistically highly significant, NS= not significant, Pearson correlation applied.

Table 3 presents the results of the **Pearson correlation test**, examining the relationship between **students' CGPA and their subjective well-being (SWB)**.

It has a Pearson correlation coefficient of 0.164, which denotes a weak positive correlation between CGPA and subjective well-being. This correlation has a p-value of 0.000, which if not $p < 0.01$ is highly significant.
This positive correlation ($r = 0.164$) implies that those with higher subjective well-being are slightly better scholars in terms of grades of their dependent academic performance. The correlation is statistically significant ($p = 0.000$), but weak, which indicates that if subjective well-being does relate to academic success, then other factors also have an important role.
The main results imply that students who are happier, more satisfied and psychologically well-being, to a limited extent, are slightly more likely to succeed academically. The results in general show that CGPA is negatively and significantly affected by anger and depression, and have a small but statistically significant positive influence on subjective well-being, thus suggesting that mental and emotional fitness positively influence academic outcomes. Nevertheless, since the correlation is not strong, study habits, motivation, and some external academic support may greatly affect CGPA.

Table 4: Correlation to examine the relationships between CGPA and relationship satisfaction with teachers

Correlation		**CGPA**	**Relationship satisfaction teachers**
CGPA	**Pearson Correlation**	1	.091*
	P Value		.035
	N	539	539

p<0.05 is statistically significant, **p<0.01 is statistically highly significant, NS= not significant, Pearson correlation applied.

Table 4 presents the results of the Pearson correlation test**,** examining the relationship between students' CGPA and their satisfaction with their relationship with teachers**.**
Therefore, the Pearson correlation coefficient (r) of CGPA and relationship satisfaction with teachers is weak positive 0.091. The p-value of 0.035 is statistically significant<0.05). The positive correlation of this implies that students reporting greater satisfaction in their relationship with teachers have score slightly higher CGPA. Although one finds positive teacher-student relationships may have contributed to academic performance, other factors have a stronger effect.
Although the effect is marginally (given a p-value of 0.035 and a $p < 0.05$) statistically significant, this effect size is very small. These findings imply that relationships with teachers are positively associated with slight increases in CGPA. Other factors, such as academic, personal or academic nature may have a more significant effect on students' CGPA.

Table 5: Correlations table showing the correlation of the dependent & independent variable of the multiple regression analysis.

Correlations		CGPA	SE Student	SWB	RS Teachers
Pearson Correlation	CGPA	1.000	.009	.164	.091
	SE Student	.009	1.000	-.035	-.010
	SWB	.164	-.035	1.000	.371
	RS Teachers	.091	-.010	.371	1.000
P Value	CGPA	.	.418	.000	.017
	SE Student	.418	.	.206	.404
	SWB	.000	.206	.	.000
	RS Teachers	.017	.404	.000	.

p<0.05 is statistically significant, **p<0.01 is statistically highly significant, NS= not significant, Multiple regression applied.

Table 5 presents the **Pearson correlation coefficients** between the **dependent variable (CGPA)** and the **independent variables (Self-Esteem, Subjective Well-Being, and Relationship Satisfaction with Teachers)**, along with their **statistical significance (p-values)**.

The study investigates the relationship between Cumulative Grade Point Average (CGPA) as the dependent variable and several independent variables. Analysis of the relationship between CGPA and self-esteem (SE) was initially done and a correlation coefficient r = 0.009. Furthermore, CGPA had a strong correlation with the subjective well-being (SWB; r = 0.164 and p < 0.000). This shows that there is a slight positive correlation between academically better performance and more subjective well being, but that correlation is weak. Additionally, the CGPA relationship satisfaction with teacher relationship (RS Teachers) relationship revealed a small but statistically significant correlation of r = 0.091 and p value of 0.017; that is, had a marginally higher CGPA pertaining to more positive interaction with teachers.

The correlations of the independent variables were analysed and no significant correlation was found between self-esteem and subjective wellness (r= -0.035, 0.206), so there was no strong relation in that particular sample. Similarly, the correlation between self-esteem and relationship satisfaction with teachers was -0.010 and p-value 0.404 and was not significant in influencing relationship satisfaction with teachers. Finally, a weak positive correlation was found between relationship satisfaction with teachers and subjective well-being with an R-value of 0.371 and p-value of 0.000, meaning students who feel more subjective well-being also have more relationship with their teachers.

It was observed that only CGPA and relationship satisfaction with teachers (RS Teachers) were found to have a significant correlation to CGPA. While academic performance is positively related to CGPA, self-esteem is not significantly related to it, indicating it does not act as a strong predictor of CGPA. We observe an approximate mild positive correlation (r = 0.371) between SWB and RS Teachers, suggesting that there is a tendency for RS Teachers to have better psychological well-being, who, in turn, tend to foster higher psychological well-being interactions with them. Nevertheless, the weak correlations between the CGPA and the independent variables indicate that SWB, self-esteem, and RS Teachers could not be good predictors in the multiple regression model. Overall, the correlation shows that both subjective well-being and teacher-student relationships have a weak but significant positive correlation with academic performance while self-esteem does not. Specifically, it implies that factors like mental well-being and social support somewhat relate to academic success but that most untested variables are probably play a more significant role in predicting CGPA.

Table 6: Model summary table showing the effect of the independent variable on the dependent variable.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	P Value
1	.167[a]	.028	.023	1.15407	.028	5.145	3	535	.002
a. Predictors: (Constant), RS Teachers, SE Student, SWB									
b. Dependent Variable: CGPA									

p<0.05 is statistically significant, **p<0.01 is statistically highly significant, NS= not significant, Multiple regression applied.

Table 6 presents the model summary for the multiple regression analysis, assessing the combined effect of Self-Esteem (SE Student), Subjective Well-Being (SWB), and Relationship Satisfaction with Teachers (RS Teachers) on CGPA.

The result of the analysis shows the multiple correlation coefficient ® which is 0.167, this represents the weak positive relation (i.e., the correlation) between the predictor variables, namely SE Student, SWB and RS Teachers with dependent variable CGPA. This is a low value indicating that the sum of the independent variables has a very small contribution to CGPA. The R-squared value of the equation (also known as R^2) equals 0.028, which indicates that out of the 100 variability of CGPA, we are only limited to 2.8% variability by these predictor variables. Thus, these predictors are not strong determinants of academic performance as a substantial 97.2% of the variation is due to other unmeasured factors. Additionally, the model's squared R-value adjusted with the number of predictors in the model is 0.023, which even more confirms that the R-value of the model is low. It is interesting to note that the standard error of the estimate is very high with a mean CGPA in the order of approximately 7.13. Thus, it indicates a high variability in the prediction made by the model, showing it to be an inaccurate model. Although these limitations are to be considered, the change statistics state that the model as a whole is statistically significant (p = 0.002) and that at least one independent variable has a significant effect on CGPA. However, the magnitude of the overall effect size is still very small and even these variables have some small effect on CGPA, but their practical influence is mildly small.

A p-value of 0.002 in the model and 2.8% variation explained suggests a statistically significant model though the explainable variation is low. Additionally, low values of R and R^2 indicate that factors like self-esteem, subjective well-being and quality of the teacher-student relationships significantly fail to account for academic performance in terms of CGPA. Moreover, the unexplained variance amounts to 97.2% which indicates that other factors such as study habits, intelligence, socio-economic background, and motivation have a greater influence in determining CGPA. In conclusion, although these results in the multiple regression model were significant, its limited predictive ability in terms of CGPA shows the poor relationship between self-esteem, subjective well-being and satisfaction with teacher's relationship with academic performance.

Table 7: Coefficient table showing the effect of the independent variable on the dependent variable.

Model		Unstandardized Coefficients		Standardized Coefficients	t	P Value	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	5.661	.480		11.788	.000			
	SE Student	.007	.019	.015	.344	.731	.009	.015	.015
	SWB	.014	.004	.151	3.289	.001	.164	.141	.140
	RS Teachers	.004	.005	.035	.766	.444	.091	.033	.033

a. Dependent Variable: CGPA

***p<0.05 is statistically significant, **p<0.01 is statistically highly significant, NS= not significant, Multiple regression applied.**

Table 7 presents the regression coefficients from the multiple regression analysis, assessing the influence of Self-Esteem (SE Student), Subjective Well-Being (SWB), and Relationship Satisfaction with Teachers (RS Teachers) on CGPA (Dependent Variable).

In the regression analysis of this input, the coefficient of 5.661 represents the constant (intercept) and has a p-value of 0.000 which indicates a very significant result (p < 0.01). However, this is a finding that when all the independent variables are set to zero (social environment, SE; subjective well-being, SWB; relationships with teachers, RS Teachers), the predicted CGPA would be 5.661.

Concerning the analysis of how the worth of self-esteem may impact CGPA, it is found that there exists a rather weak relationship between them. In particular, the unstandardized coefficient indicates that a one-unit increase in self-esteem increased CGPA by 0.007, which is insignificant. This finding is bolstered by the finding that the standardized beta is extremely small, or 0.015; this implies that self-esteem has almost no effect on academic performance. This relationship is not statistically significant because the t-value of 0.344 and p-value of 0.731 indicate that self-esteem does not substantially play a role in CGPA. In addition, the zero-order correlation of 0.009 suggests that there is a negligible correlation between self-esteem and CGPA. Generally, this evidence suggests that CGPA does not depend greatly on self-esteem.

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independent variables are set to zero (social environment, SE; subjective well-being, SWB; relationships with teachers, RS Teachers), the predicted CGPA would be 5.661.

For the analysis of how the worth of self-esteem may impact CGPA, it is found that there exists a rather weak relationship between them. In particular, the unstandardized coefficient indicates that a one-unit increase in self-esteem increased CGPA by 0.007, which is insignificant. This finding is bolstered by the finding that the standardized beta is extremely small, or 0.015; this implies that self-esteem has almost no effect on academic performance. This relationship is not statistically significant because the t-value of 0.344 and p-value of 0.731 indicate that self-esteem does not substantially play a role in CGPA. In addition, the zero-order correlation of 0.009 suggests that there is a negligible correlation between self-esteem and CGPA. Generally, this evidence suggests that CGPA does not depend greatly on self-esteem.

The analysis shows that Subjective Well-being (SWB) is a significant predictor of CGPA using a p-value of 0.001, but the small effect size (β = 0.151) shows that even though the two variables are related, the relationship is weak. Unlike that, CGPA is not influenced by self-esteem (SE) and Relationship Satisfaction with Teachers (RS Teachers). The low values of the coefficients indicate that these psychological and relational aspects might not be crucial in establishing academic performance, and hence some other academic, social or personal factor could have a much stronger effect on the CGPA outcomes.

The regression analysis shows that apart from CGPA, self-esteem and satisfaction with teachers as a relationship do not make any significant difference, however, subjective well-being positively influences academic performance. Yet, we should note that such variables have little or no effect on CGPA. Low scores in reading comprehension indicate that the determinants of academic success surpass those that are related to teachers, including study habits, motivation, intelligence and socioeconomic background. An awareness of these dynamics allows educators and students to use our resources to direct their efforts towards the aspects that most contribute to a higher CGPA.

Table 9: Comparison of the effects of self-esteem, relationship satisfaction with teachers, CGPA and subjective well-being between UG and PG students.

Variables	Student Education	N	Mean	Std. Deviation	Std. Error Mean	T value	P value
CGPA	**PG**	85	7.3647	.84300	.09144	1.978	0.048*
	UG	454	7.0925	1.21444	.05700		
Self-Esteem	**PG**	85	15.2471	2.35991	.25597	0.297	0.767 (NS)
	UG	454	15.1564	2.62350	.12313		
Subjective Well Being	**PG**	85	88.8353	12.87009	1.39596	-0.899	0.369 (NS)
	UG	454	90.1388	12.15011	.57023		
Relationship Satisfaction Teachers	**PG**	85	23.2118	11.22613	1.21765	1.519	0.129 (NS)
	UG	454	21.2357	10.96611	.51467		

***p<0.05 is statistically significant, **p<0.01 is statistically highly significant, NS= not significant, independent t test applied.**

Table 9 presents the results of the independent t-test**,** comparing the means **of** CGPA, self-esteem, subjective well-being (SWB), and relationship satisfaction with teachers (RS Teachers) between undergraduate (UG) and postgraduate (PG) students**.**

Recently done analysis of the Cumulative Grade Point Averages (CGPA) of postgraduate (PG) and undergraduate (UG) students showed that there has been a significant difference in their academic performance. The mean CGPA of PG students was 7.3647 and for UG students, it was 7.0925. The T-value for the statistical test was 1.978 and the corresponding p-value was 0.048; hence we can state that the difference in scores is statistically significant at the 0.05 level. By this, it is observed that the post graduate students rate higher in CGPA scores than the undergraduate students. Although the performance difference is rather trivial, it is still significant in confirming a trend that PG students perform slightly better than UG students. Therefore, it is mentioned that there is a major variation in CGPA between two groups with PG students achieving generally better results.

Overall, no significant differences in the levels of self-esteem between the undergraduate (UG) and postgraduate (PG) students were observed. For PG students factor mean self-esteem score was 15.2471 and for UG students it was 15.1564. These results have a t-value of 0.297 and a p-value of 0.767 which implies that the difference in the self-esteem levels is not statistically significant. The effect of academic level (UG or PG level) on assessing self-esteem is not significant. Finally, it is shown that the self-esteem level of the two groups of students (UG and PG) is relatively the same.

There was no significant difference found between undergraduate (UG) and postgraduate (PG) student levels on subjective well-being (SWB). The average SWB for PG students was 88.8353 and that of UGs was 90.1388. The statistical analysis resulted in a T value of -0.899 and a p-value of 0.369, which illustrated that the observed differences were not statistically significant (NS). This implies that well-being among UG and PG students are comparable, with differences in mean scores so minor that indicate no large discrepancy. The findings are, finally, that subjective well-being is not significantly different between the UG and PG samples.

In analysing relationship satisfaction of subjects with teachers no significant differences were found between undergraduate and postgraduate students. Mean satisfaction score reported by PG students was 23.2118 while UG students 21.2357. Since the T value is 1.519 and p value is 0.129, this difference is not statistically significant, it implies that UG and PG students perceive their relationships with teachers equally.

Overall, the results indicated that the only difference between the two groups was the cumulative grade point average (CGPA) achieved by PG with a slightly higher p-value of 0.048. Opting to study the solution space, there were no significant variations in the factors of self-esteem, subjective well-being and relationship consolation with teachers between the two academic levels. Academic level may have a minor effect on performance but little effect on psychological or relational factors of students.

Overall, the results of the independent t-test reveal that postgraduate students are significantly more than undergraduate students. Nevertheless, the two groups have no significant differences in their self-esteem, subjective well-being or relationship satisfaction with teachers. This implies that there exists a consistency in psychological and relational factors irrespective of the level in the educational hierarchy, which is yet to be improved by the performance benefits derived from academic advancement.

4. Discussion

The present research investigated the connections between student academic results (CGPA) and their self-esteem levels and subjective well-being in addition to their teacher relationship satisfaction. Study findings disclose important elements that shape the success rates of students in education.

According to descriptive statistics, the participants showed a moderately high self-esteem level with a mean score of 15.221 (SD = 2.046). The participants demonstrated average subjective well-being that reached 89.933 (SD = 12.263) while indicating positive feelings most of the time. Student-teacher relationship satisfaction averaged 21.547 (SD = 11.021) which demonstrates the wide-ranging quality of student-faculty interactions. The participants showed a mean academic achievement of 7.1354 (SD = 1.16733) which indicated their successful academic performance.

Shapiro Wilk test was conducted on the assumption of normality. It turned out that self-esteem ($p < .001$) and teacher relationship satisfaction ($p < .001$) do not have a normal distribution. No significant deviation was found in the subjective well-being ($p = .294$) meaning it follows a normal distribution. Nevertheless, CGPA had a very large departure from normality ($p = .000$). These findings were further supported by the Normal P-P plot, which indicated deviations of the residuals from the diagonal line (i.e. the residuals deviated from the diagonal line primarily where the ends were involved, which indicated that the residuals were not normal). It can thus be deduced that some parametric assumptions of specific analysis might not be fully warranted and then statistical adjustments, for example, transformations or non-parametric tests, must be implemented (Field, 2018).

Impact of Non-Normality on Interpretation

This may be because of the non-normal distribution of key variables such as self-esteem, relationship satisfaction with teachers, and CGPA, that may have skewed the results. Given that parametric tests are assumed to come from normal distributions, the absence of the normality of the data indicates that the strength and direction of the correlations may not fully reflect the true relationship between variables. For instance, the weak correlations of self-esteem for CGPA and that of relationship satisfaction with CGPA may be caused to some extent by the skewed distribution of these two variables. Moreover, CGPA can be non-normal, and in such cases, it might be a symptom of the presence of academic performance variations that are not evenly spread over students and it can be attributable to external factors that are determined by differences in institutions or personal situations. Future research should focus on applying strong statistical approaches, such as bootstrapping, structural equation modelling, or other methods for overcoming non-normal distribution effects and better capturing underlying relationships.

However, given the non-normality of certain key variables, it would be appropriate for future studies to include using robust statistical methods like bootstrapping or Structural Equation modelling to capture the relationship underlying. Furthermore, the use of self-reported measures used in the current study could introduce response biases, and therefore future research needs to use a mixed method approach.

Overall the findings further solidify work that has focused on the multitude of factors determining academic performance. More work is needed to

understand other contextual factors such as socioeconomic status and institutional support to understand more fully the role of context in student success.

5. Implications

Specifically, this study has several implications for educators, policymakers, and institutions in general as a whole. One first will be strategies that implement that would create a greater environment in which students would have a positive self-esteem which would then influence students' engagement and their performance. Student-teacher relationship quality has a significant role in student engagement in academics and, therefore, the researchers should focus on improving this relationship quality. Subjective welfare should also be promoted for students since there is a strong relationship between the welfare of the students and their academic success. The programs on mental health and stress management workshops that would help students keep their well-being in school and university could be done and then run to be successful in academic performance.

6. Limitations

There are some limitations in this study. Response biases at first could have been owing to students providing responses that did not correspond with reality, i.e., some students could have overstated their self-esteem, well-being and teachers' satisfaction. The sample may not be completely representative of all student populations, making it difficult to generalize the findings. Finally, the key variables in the property are distributed nonnormally, and this may have influenced their statistical analysis. In future research, other methods can be established such as longitudinal studies or experimental designs to further investigate the determinant causal relationship between these variables.

7. Conclusion

Finally, this study highlights the important role of student-teacher relationships and self-esteem among others, in making academic performance. The results show that students with higher self-esteem and well-being as well as good relationships with teachers are more likely to succeed academically. Nevertheless, future research employing more rigorous methodologies is required to further validate these findings as some variables have a non-normal distribution and are based on self-reported data. Focusing targeted interventions in addressing these factors in educational institutions can also result in better academic outcomes, which would also add to students' long-term success.

References: