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Does self-esteem lead to high achievement of the science college's students? A study from the six health science colleges

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ABSTRACT

Background and objective: Self-esteem refers to a degree to which a person esteem himself or herself, the summation in light of cognizant self-evaluative considerations and feeling or in short as global emotional placement of self. This study investigates the relationship between self-esteem, social factors, and academic achievement in the form of grade point average (GPA) standing for academic achievement in the health science colleges.

Methods: This study is a quantitative cross-sectional design. The study was conducted at Princess Nourah bint Abdulrahman University (PNU), and the participants were health Science Colleges' undergraduate students. The questionnaire is composed of 24 questions in 4 main sections. The self-esteem was evaluated by using a validated Rosenberg Self-Esteem 7-questions Scale used only.

Results: A total of 551 questionnaires were distributed to the students, and 507 of them responded. Out of 507 responded, 7 were excluded due to a lack of the information. 47 (9.4%) were Foundation year students, 109 (21.8%) Medical students, 44 (8.8%) Dental students, 97 (19.4%) Pharmacy students, 101 (20.2%) Nursing students and 102 (20.4%) from Applied science. The students' overall responses demonstrated that most of the health science students agreed in a positive way of self-esteem (1.68 ± 0.31).

Conclusion: The findings from the current study contribute to the resources to better oversee projects to upgrade health sciences students' self-esteem, some short term courses (i.e. English, personality development and motivation) are requested to boost the academic career and confidence by lifting self-esteem; it indirectly helps to better academic performance. Students also need special counseling for how to deal with stress, anxiety and depression.

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1. Introduction

Self-esteem refers to a degree to which a person esteem himself or herself, the summation in light of cognizant self-evaluative considerations and feeling or in short as global emotional placement of self (Robin et al., 2001; Baccus et al., 2004; Frost and McKelvie, 2005). It can be either positive (high self-esteem) prompts more

prominent happiness or negative (low self-esteem) and self-question, possibly leads to depression. The way people evaluate their various abilities and attributes on a scale between negative and positive is known as self-esteem (Brown et al., 2006). Understudies students with high academic achievement will in general feel increasingly certain about difference to the individuals who need trust in them achieves less (Aryana, 2010). It is also defined as "the disposition to experience oneself as being competent to cope with the basic challenges of life" (Nathaniel, 1992). Studies had shown that self-esteem has a remarkable impact on important life outcomes, including relationship and job satisfaction, occupational status, physical and mental health (Orth et al., 2012). There is a long-standing view among many educators that the beliefs and feelings students have about themselves are a key determinant of academic success (Beane, 1994; Cvencek et al., 2018). The academic achievement shows performance outcomes that indicate a student's accomplishment of specific goals, specifically in school,

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college, and university (Crede et al., 2015). The grade point average (GPA) is now used by most of the tertiary institutions as a classical summary measure of the academic performance of their students. It is considered as an appropriate measurement because it provides greater insight into the relative level of performance of individuals and different groups of students (Khosrow-pour, 2008). (Wood et al., 1994), Found that there are close relationships between self-esteem and a high level of academic achievement. Previous studies have concluded that self-esteem and academic achievement are positively correlated (Hansford et al., 1982; Hattie, 1992; West et al., 1980; Zimmerman, 1995). The self-esteem is a very important role play with academic achievement, if self-esteem increases than the academic achievement also increases (Jirdehi et al., 2018). A study of 593 high school students in the US examined the relationship between academic achievement and self-esteem, gender, race, and guardianship. They used several academic measures including GPA, self-perceived academic standing and progress. They concluded that self-esteem is related significantly to academic achievement even when the effects of gender, race, and guardianship are removed (Filozof et al., 1998). (El-Anzi, 2005), carried out a study among 400 male and female students of the basic education college in Kuwait to examine the relationship between academic achievement and anxiety, self-esteem, optimism, and pessimism. This study revealed a positive correlation between self-esteem and academic achievement. On an extensive internet-based literature search, we found that many studies have been conducted to investigate the relationship between self-esteem and academic achievement internationally, but there was no local study that has investigated such an important issue in Saudi Arabia. Therefore, this study investigates the relationship between self-esteem, social factors, and academic achievement in the form of grade point average (GPA) standing for academic achievement in the health science colleges.

2. Material and methods

This study is a quantitative cross-sectional design. It was conducted at Princess Nourah bint Abdulrahman University (PNU), and the participants were health Science Colleges' undergraduate students. The questionnaire is composed of 24 questions in 4 main sections. The first section is about demographic data. It contains three items, which include three attributes: College, year of study, age, and grade point average (GPA). The self-esteem was evaluated by using a validated Rosenberg Self-Esteem 7-questions Scale used only (Rosenberg, 1965). Demographic data and GPA were added to this instrument (questionnaire). The second section consists of the first factor of self-esteem. It contains seven close-ended questions. The four points on the Likert scale of the self-esteem indicate: 1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree. The third section consists of 8 general questions about the social-demographic impact of self-esteem. The final section consists of the nine factors which affect the GPA, The four points on the Likert scale of the self-esteem indicate: 1 = strongly does not affect, 2 = does not affect, 3 = Affect and 4 = strongly affect.

2.1. Participants

The Data was collected by self-administered, both paper-based and online questionnaires, to improve the response of the students. The questionnaire was distributed among health Science College's undergraduate students manually total of 83 questionnaire and we received 69 responses from the students and by using online questionnaire link which was sent by email to total of 468 students and we received 438 students in the period from the 1st of December 2017 to the 1st of March 2018. A comprehensive sampling tech-

nique was used among health Science Colleges students at PNU, where the online questionnaire link was sent by email to all students. The participation was voluntary, and confidentiality was assured. A pilot study was done to test the survey's questions and the time required to complete all items. The paper-based questionnaire was filled by the 37 students. The students commented that the questions were clear and understandable. However, in some parts, few students did not understand some terms. To avoid this misunderstanding, we added the Oxford dictionary definitions (oxford-dictionaries) of these words within the questionnaire.

2.2. Data analysis

Data were analyzed using Statistical Package for Social Science Program (SPSS) version 21.0. We calculated the frequencies and percentages for all nominal variables, mean, and standard deviation for numerical (measurable) variables. Pearson's chi-square test was used to evaluate and quantify the correlation. The statistical significance level was set as P-value < 0.05 during the entire analysis.

2.3. Ethical considerations

The participants were informed about the study and agreed to get involved in the project. The study was approved by the ethical research committees (IRB) of the Princess Nourah bint Abdulrahman University (PNU), Riyadh, Saudi Arabia.

3. Results

A total of 551 questionnaires were distributed to the students, and 507 of them responded. Out of 507 responded, 7 are excluded due to a lack of information. Out of the total of 500 valid participants, 50 (10%) were first-year, 78 (15.6%) were the second year, 118 (23.6%) were the third year, 201 (40.2%) fourth year, and 53 (10.6%) higher level. Similarly 47 (9.4%) were Foundation year students, 109 (21.8%) Medical students, 44 (8.8%) Dental students, 97 (19.4%) Pharmacy students, 101 (20.2%) Nursing students and 102 (20.4%) Applied science (Table 1).

Tables 2 and 3 summarize the student's perception about self-esteem with demographic information that included seven items. The students' overall responses demonstrated that most of the health science students agreed in a positive way of self-esteem (1.68 ± 0.31). Most students 452 (90.4%) with different colleges and different years agreed on the whole "I am satisfied with myself," the only college of medicine students slightly worried. Furthermore, the pharmacy college (78.4%) students reported about "At times, I think I am not good at all", that responses statistically significant ($p = 0.0001$). Similarly, pharmacy students also reported (70.1%) about "I certainly feel useless at times," and 90.7% pharmacy students reported "all in all. I am inclined to feel

Table 1
Socio-demographic profile of study subjects.

Variable	N(%)	Variable	N(%)
College		Year	
Foundation	47(9.4)	Year 1	50(10)
Medicine	109(21.8)	Year 2	78(15.6)
Dental	44(8.8)	Year 3	118(23.6)
Pharmacy	97(19.4)	Year 4	201(40.2)
Nursing	101(20.2)	Higher levels	53(10.6)
Applied Science	102(20.4)		
Age		Lives with	
16-19	81(16.2)	Parents	460(92)
20-23	404(80.8)	Relatives	6(1.2)
24-27	15(3)	Student hostel	34(6.8)

Table 2
Perception of health science students of different college about self-esteems.

Items	Mean ± SD	Category*	Participants	College						P-Value
				Foundation	Science	Dental	Medicine	Nursing	Pharmacy	
On the whole, I am satisfied with myself.	1.90 ± 0.29	Agree	452(90.4)	44(93.6)	93 (91.2)	43 (97.7)	92(84.4)	91 (90.1)	89(91.8)	0.15
At times, I think I am no good at all.	1.40 ± 0.49	Disagree	48(9.6)	3(6.4)	9(8.8)	1(2.3)	17(15.6)	10(9.9)	8(8.2)	0.0001
		Agree	200(40.0)	15(31.9)	26 (25.5)	9(20.5)	44(40.4)	30 (29.7)	76(78.4)	
I feel that I have a number of good qualities.	1.97 ± 0.17	Disagree	300(60.0)	32(68.1)	76 (74.5)	35 (79.5)	65(59.6)	71 (70.3)	21(21.6)	0.75
		Agree	485(97.0)	46(97.9)	100 (98.0)	43 (97.7)	105 (96.3)	99 (98.0)	92(94.8)	
I am able to do things as well as most other people.	1.97 ± 0.15	Disagree	15(3.0)	1(2.1)	2(2.0)	1(2.3)	4(3.7)	2(2.0)	5(5.2)	0.39
		Agree	487(97.4)	47(100)	100 (98.0)	44 (100)	106 (97.2)	98 (97.0)	92(94.8)	
I certainly feel useless at times.	1.36 ± 0.48	Disagree	13(2.6)	0(0)	2(2.0)	0(0)	3(2.8)	3(3.0)	5(5.2)	0.0001
		Agree	184(36.8)	14(29.8)	27 (26.5)	8(18.2)	40(36.7)	27 (26.7)	68(70.1)	
All in all, I am inclined to feel that I am a failure.	1.28 ± 0.45	Disagree	316(63.2)	33(70.2)	75 (73.5)	36 (81.8)	69(63.3)	74 (73.3)	29(29.9)	0.0001
		Agree	141(28.2)	7(14.9)	11 (10.8)	2(4.5)	19(17.4)	14 (13.9)	88(90.7)	
I take a positive attitude towards myself	1.91 ± 0.27	Disagree	359(71.8)	40(85.1)	91 (89.2)	42 (95.5)	90(82.6)	87 (86.1)	9(9.3)	0.48
		Agree	459(91.8)	42(89.4)	93 (91.2)	41 (93.2)	96(88.1)	96 (95.0)	91(93.8)	
		Disagree	41(8.2)	5(10.6)	9(8.8)	3(6.8)	13(11.9)	5(5.0)	6(6.2)	

Overall mean score- 1.68 ± 0.31. *The 4 point likert scale response were combined into 2 different categorical variables; agree (strong agree plus agree), disagree (strongly disagree plus disagree).

Table 3
Perception of health science students of different years about self-esteems.

Items	Mean ± SD	Category*	Participants	Years					P-value
				1st year	2nd year	3rd year	4th year	Higher levels	
On the whole, I am satisfied with myself.	1.90 ± 0.29	Agree	452(90.4)	46(92.0)	73(93.6)	103(87.3)	179(89.1)	51(96.2)	0.3
		Disagree	48(9.6)	4(8.0)	5(6.4)	15(12.7)	22(10.9)	2(3.8)	
At times, I think I am no good at all.	1.40 ± 0.49	Agree	200(40.0)	17(34)	32(41.0)	45(38.1)	87(43.3)	19(35.8)	0.69
		Disagree	300(60.0)	33(66.0)	46(59.0)	73(61.9)	114(56.7)	34(64.2)	
I feel that I have a number of good qualities.	1.97 ± 0.17	Disagree	485(97.0)	48(96.0)	75(96.2)	117(99.2)	192(95.5)	53(100.0)	0.25
		Agree	15(3.0)	2(4.0)	3(3.8)	1(0.8)	9(4.5)	0(0.0)	
I am able to do things as well as most other people.	1.97 ± 0.15	Disagree	487(97.4)	48(96.0)	74(94.9)	118(100)	195(97.0)	52(98.1)	0.22
		Agree	13(2.6)	2(4.0)	4(5.1)	0(0.0)	6(3.0)	1(1.9)	
I certainly feel useless at times.	1.36 ± 0.48	Disagree	184(36.8)	15(30.0)	30(38.5)	33(28.0)	83(41.3)	23(43.4)	0.1
		Agree	316(63.2)	35(70.0)	48(61.5)	85(72.0)	118(58.7)	30(56.6)	
All in all, I am inclined to feel that I am a failure.	1.28 ± 0.45	Disagree	359(71.8)	42(84.0)	65(83.3)	93(78.8)	123(61.2)	36(67.9)	0.0001
		Agree	459(91.8)	44(88.0)	72(92.3)	112(94.9)	183(91.0)	48(90.6)	
I take a positive attitude towards myself	1.91 ± 0.27	Disagree	41(8.2)	6(12.0)	6(7.7)	6(5.1)	18(9.0)	5(9.4)	0.59
		Agree	41(8.2)	6(12.0)	6(7.7)	6(5.1)	18(9.0)	5(9.4)	

*The 4 point likert scale response were combined into 2 different categorical variables; agree (strong agree plus agree), disagree (strongly disagree plus disagree).

that I am a failure", and a significant difference was found between the other colleges ($p = 0.0001$) Pharmacy students' responses should be investigated why most of the students were negative.

Table 4, summarizes the student's perception with general discipline, living status was not playing a big role of students' self-esteem. Almost an equal response to every question only those students who are living in university hostel (82.4%) they were the more positive and confident own self-esteem as compared to students who were living with families and relatives about "I certainly feel useless at time". Those students doing regularly and irregularly exercise have more positive attitude towards them self and also significant difference was found between regularly exercise, irregularly exercise and not doing exercise ($p = 0.004$). Furthermore, students who took the decision to choose their by themselves without the influence of the surrounding people are less likely to think of negative self-esteem, mostly family pressure students negative about self-esteem (66.7%; $p = 0.05$). Most of the students who have that thought negative self-esteems have any diseases, depres-

sion, anxiety, others, and the difference between the diseases and not have any diseases was statically significant ($p = 0.001$, $p = 0.06$ (marginally) and $p = 0.001$).

Table 5 summarizes the relationship between personal and psychological impact with GPA. The results show that English was playing a significant role, 96% of students reported that English affects high achievement in an academic career (OR = 2.4, CI 0.80–7.19; $P = 0.11$). Similarly, almost all students agreed (99.4%) that time management affects their academic GPA. The majority 85.6% of student's thought that academic faculty support important, that affects the academic growth (OR = 1.06, CI 0.62–1.81; $P = 0.82$). Students who have problems with physical health (OR = 0.21, CI 0.037–1.28; $P = 0.09$) or Depression, stress, anxiety, etc. increased the chance of the affected the overall academic performance. More than half 64.6% of the students reported that who have a financial problem those students' academic career affected (OR = 2.22, CI 1.45–3.39; $P = 0.0002$) and mostly high GPA students' thoughts like this.

Table 4
Perceptions about self-esteems towards the general discipline.

	Items	On the whole, I am satisfied with myself.		At times, I think I am no good at all.		I feel that I have a number of good qualities.		I am able to do things as well as most other people.		I certainly feel useless at times.		All in all, I am inclined to feel that I am a failure.		I take a positive attitude towards myself	
		Agree	Disagree	Agree	Disagree	Agree	Disagree	Agree	Disagree	Agree	Disagree	Agree	Disagree	Agree	Disagree
Whom do you live with	Mother/Father	415 (90.2)	45(9.8)	187 (40.7)	273 (59.3)	447 (97.2)	13(2.8)	448 (97.4)	12(2.6)	176 (38.3)	284 (61.7)	135 (29.3)	325 (70.7)	422 (91.7)	38(8.3)
	Relative	6(100)	0(0.0)	2(33.3)	4(66.7)	5(83.3)	1(16.7)	6(100)	0(0.0)	2(33.3)	4(66.7)	1(16.7)	5(83.3)	5(83.3)	1(16.7)
	University dorm	31(91.2)	3(8.8)	11(32.4)	23(67.6)	33(97.1)	1(2.9)	33(97.1)	1(2.9)	6(17.6)	28(82.4)	5(14.7)	29(85.3)	32(94.1)	2(5.9)
	P-Value	0.71		0.6		0.14		0.91		0.05		0.15		0.66	
How often do you exercise	Regularly	53(96.4)	2(3.6)	22(40)	33(60)	54(98.2)	1(1.8)	55(100)	0(0.0)	21(38.2)	34(61.8)	19(34.5)	36(65.5)	53(96.4)	2(3.6)
	Irregularly	272 (91.0)	27(9.0)	109 (36.5)	190 (63.5)	289 (96.7)	10(3.3)	291 (97.3)	8(2.7)	94(31.4)	205 (68.6)	72(24.1)	227 (75.9)	281(94)	18(6.0)
	Do not exercise	127 (87.0)	19(13.0)	69(47.3)	77(52.7)	142 (97.3)	4(2.7)	141 (96.6)	5(3.4)	69(47.3)	77(52.7)	50(34.2)	96(65.8)	125 (85.6)	21(14.4)
	P-value	0.11		0.09		0.81		0.39		0.005		0.04		0.004	
Your major was chosen by	Your well	330 (91.7)	30(8.3)	136 (37.8)	224 (62.2)	348 (96.7)	12(3.3)	351 (97.5)	9(2.5)	126 (35.0)	234 (65.0)	94(26.1)	266 (73.9)	330 (91.7)	30(8.3)
	Family pressure	11(73.3)	4(26.7)	10(66.7)	5(33.3)	14(93.3)	1(6.7)	15(100)	0(0)	9(60.0)	6(40.0)	7(46.7)	8(53.3)	13(86.7)	2(13.3)
	University choice	111 (88.8)	14(11.2)	54(43.2)	71(56.8)	123 (98.4)	2(1.6)	121 (96.8)	4(3.2)	49(39.2)	76(60.8)	40(32.0)	85(68.0)	116 (92.8)	9(7.2)
	P-Value	0.04		0.05		0.43		0.74		0.11		0.12		0.7	
How is your fluency in English	Excellent	153 (89.5)	18(10.5)	61(35.7)	110 (64.3)	165 (96.5)	6(3.5)	168 (98.2)	3(1.8)	66(38.6)	105 (61.4)	48(28.1)	123 (71.9)	155 (90.6)	16(9.4)
	Good	293 (91.6)	27(8.4)	135 (42.2)	185 (57.8)	311 (97.2)	9(2.8)	310 (96.9)	10(3.1)	115 (35.9)	205 (64.1)	92(28.8)	228 (71.3)	297 (92.8)	23(7.2)
	Poor	6(66.7)	3(33.3)	4(44.4)	5(55.6)	9(100)	0(0.0)	9(100)	0(0.0)	3(33.3)	6(66.7)	1(11.1)	8(88.9)	7(77.8)	2(22.2)
	P-Value	0.03		0.35		0.79		0.82		0.02		0.51		0.21	
Any diseases	Chronic disease	12(92.3)	1(7.7)	6(46.2)	7(53.8)	13(100)	0(0.0)	13(100)	0(0.0)	6(46.2)	7(53.8)	4(30.8)	9(69.2)	12(92.3)	1(7.7)
	Depression, Anxiety etc.	24(66.7)	12(33.3)	15(41.7)	21(58.3)	34(94.4)	2(5.6)	34(94.4)	2(5.6)	15(41.7)	21(58.3)	12(33.3)	24(66.7)	25(69.4)	11(30.6)
	Others	27(90.0)	3(10.0)	14(46.7)	16(53.3)	30(100)	0(0.0)	30(100)	0(0.0)	16(53.3)	14(46.7)	11(36.7)	19(63.3)	29(96.7)	1(3.3)
	Not have any disease	389 (92.4)	32(7.6)	165 (39.2)	256 (60.8)	408 (96.9)	13(3.1)	410 (97.4)	11(2.6)	147 (34.9)	274 (65.1)	114 (27.1)	307 (72.9)	393 (93.3)	28(6.7)
	P-Value	0.001		0.82		0.54		0.49		0.17		0.6		0.001	
Family member work in a medical field	Yes	215 (91.9)	19(8.1)	103 (44.0)	131 (56.0)	226 (96.6)	8(3.4)	225 (96.2)	9(3.8)	89(38.0)	145 (62.0)	73(31.2)	161 (68.8)	219 (93.6)	15(6.4)
	No	237 (89.1)	29(10.9)	97(36.5)	169 (63.5)	259 (97.4)	7(2.6)	262 (98.5)	4(1.5)	95(35.7)	171 (64.3)	68(25.6)	198 (74.4)	240 (90.2)	26(9.8)
	P-Value	0.18		0.05		0.39		0.08		0.32		0.09		0.11	
Get enough encouragement from family	Yes	395 (92.7)	31(7.3)	165 (38.7)	261 (61.3)	413 (96.9)	13(3.1)	415 (97.4)	11(2.6)	150 (35.2)	276 (64.8)	117 (27.5)	309 (72.5)	399 (93.7)	27(6.3)
	No	57(77.0)	17(23.0)	35(47.3)	39(52.7)	72(97.3)	2(2.7)	72(97.3)	2(2.7)	34(45.9)	40(54.1)	24(32.4)	50(67.6)	60(81.1)	14(18.9)
	P-Value	0.0001		0.1		0.61		0.59		0.05		0.22		0.001	
Transportation problem	Yes	147 (86.5)	23(13.5)	71(41.8)	99(58.2)	165 (97.1)	5(2.9)	167 (98.2)	3(1.8)	69(40.6)	101 (59.4)	56(32.9)	114 (67.1)	153(90)	17(10.0)
	No	305 (92.4)	25(7.6)	129 (39.1)	201 (60.9)	320 (97.0)	10(3.0)	320 (97.0)	10(3.0)	115 (34.8)	215 (65.2)	85(25.8)	245 (74.2)	306 (92.7)	24(7.3)
	P-Value	0.02		0.31		0.59		0.3		0.12		0.05		0.18	

Table 5
Correlation with self-esteems general discipline with GPA.

Items	Category*	Participants	GPA			Odds ratio (95% CI)	P-Value
			1 to 3.0	3.1 to 4.0	4.1 to 5.0		
Mastering the English language	Affect	480(96.0)	19(100)	155(97.5)	306(95.0)	2.4 (0.80–7.19)	0.11
	Not Affect	20(4.0)	0(0)	4(2.5)	16(5.0)	1 (ref.)	
Time management	Affect	497(99.4)	19(100)	157(98.7)	321(99.7)	0.23 (0.02–2.6)	0.24
	Not Affect	3(0.6)	0(0.0)	2(1.3)	1(0.3)	1 (ref.)	
Availability of study material and resources	Affect	487(97.4)	19(100)	155(97.5)	313(97.2)	1.11 (0.33–3.6)	0.85
	Not Affect	13(2.6)	0(0.0)	4(2.5)	9(2.8)	1 (ref.)	
Family support	Affect	466(93.2)	19(100)	150(94.3)	297(92.2)	1.40 (0.63–3.08)	0.39
	Not Affect	34(6.8)	0(0.0)	9(5.7)	25(7.8)	1 (ref.)	
Academic faculties support	Affect	428(85.6)	19(100)	136(85.5)	273(84.8)	1.06 (0.62–1.81)	0.82
	Not Affect	72(14.4)	0(0.0)	23(14.5)	49(15.2)	1 (ref.)	
Student's health status	Affect	486(97.2)	17(89.5)	155(97.5)	314(97.5)	0.21 (0.037–1.28)	0.09
	Not Affect	13(2.6)	2(10.5)	4(2.5)	7(2.2)	0.18 (0.03–0.98)	
Student's mental status	Affect	491(98.2)	19(100)	157(98.7)	315(97.8)	1.74 (0.35–8.49)	0.49
	Not Affect	1(0.2)	0(0.0)	2(1.3)	7(2.1)	1 (ref.)	
Transportations	Affect	428(85.6)	15(78.9)	139(87.4)	274(85.1)	0.53 (0.16–1.78)	0.31
	Not Affect	72(14.4)	4(21.1)	20(12.6)	48(14.9)	1.21 (0.69–2.13)	
Financial status	Affect	323(64.6)	16(84.2)	120(75.5)	187(58.1)	2.22 (1.45–3.39)	0.0002
	Not Affect	177(35.4)	3(15.8)	39(24.5)	135(41.9)	3.85 (1.10–13.47)	

The 4 point likert scale response were combined into 2 different categorical variables; affect (strong affect plus affect), not affect (strongly does not affect plus not affect).

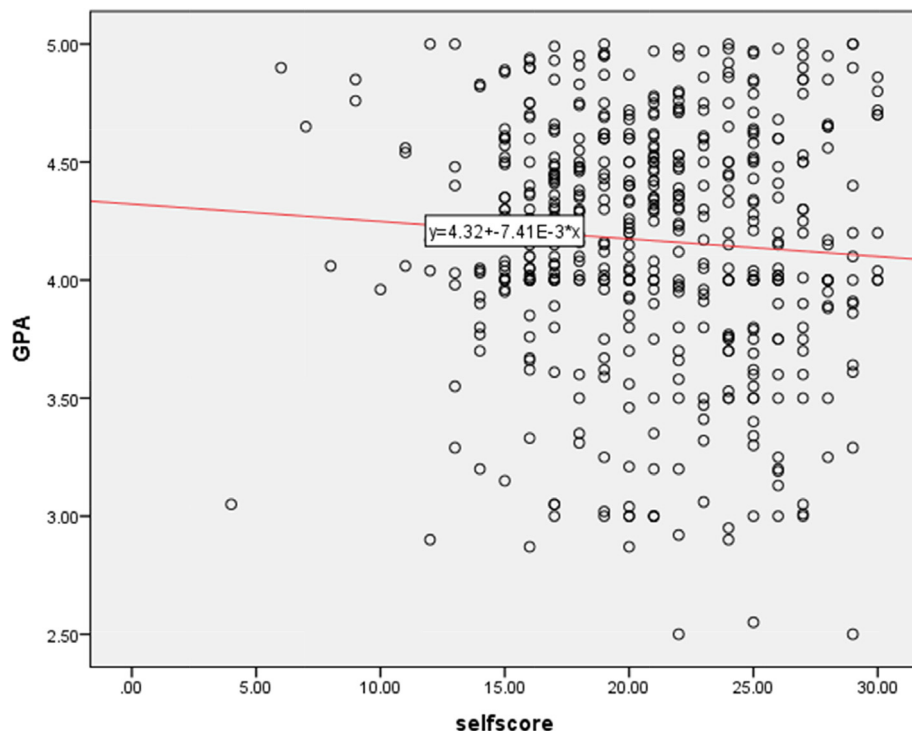


Fig. 1. Correlation between GPA & self esteem.

Fig. 1 The average self-esteem score was 20.83, and the average GPA was 4.16. There was a weak positive Pearson correlation between self-esteem and GPA of the students of health science colleges, which was statistically insignificant ($r=0.031$, $p=0.533$). Higher GPA students were good with personal and psychological impact and self-esteem.

4. Discussion

The relationship between self-esteem and academic achievement is one that is regarded by many educators as a well-established fact. This research examined the relationship between self-esteem and academic achievement in PNU health science colleges' students. We found that there is a weak positive relationship

between measured self-esteem and GPA. This finding agreed with a previously published study (Habibollah et al., 2008; Pullmann and Allikk, 2008). The study showed that the association between these two variables was low maybe causing of, high achiever or academically successful students have a more positive thinking of themselves and the students with low achievement in an academic career to build abilities compensate their academic lack by uplifting their self-esteem score and developed the better cognitive skills (Pullmann and Allikk, 2008). The current finding showed that all health professionals positive with self-esteem; only pharmacy students slightly worried about self-esteem they think negative. This is nearly tight to the findings of (Vuong et al., 2010). The pharmacy profession stressed the importance of classroom and laboratory educated pharmacists, but de-emphasized the role of

apprenticeships or any type of practice, applied educational experiences (Buerki, 1999; Worthen, 2009; Votta and Benau, 2013). Not a major significant difference in between the years of study and self-esteem was observed in the current study, an only significant difference ($p = 0.0001$) was found in fourth and higher education students more worried about failure due to stress of academic sources and extremal pressure of career that impact on academic achievement and academic self-esteem. The study results also support the findings of (Schmidt and Padilla, 2003; Bankston and Zhou, 2002). Self-esteem is relevant for several personal and social life outcomes. The current study showed that if students have any diseases, those students' levels of self-esteem were low; and they more negative about them self. A similar finding, reported by (Orth et al., 2008), a low level of confidence may fill in as a risk factor for depression in pre-adulthood and youthful adulthood. In a research, (Steiger et al., 2014), analyzing the long-term impacts of self-esteem improvement, found that people who had a low confidence during pre-adulthood displayed more depressive illness indications two decades later. Furthermore, a different line of research showed that for early young people, enhancing their self-esteem is essential in keeping away from depression (Jun et al., 2013). We have also analyzed student's self-esteem and encouragement from family, those students who have good support from parents; they have the good self-esteem score, and they have positive attitude towards them self. The same findings were reported by (Cimino et al., 2013). This study also revealed that low self-esteem, stress can be influenced by the family member works in the medical field possible due to parents and other family members medical field can relate academically to their children and help them to cope with stress and other problem. On the other hand, the Student's transportation also affects the students' performance. However, transportation problems appear to play a significant role in self-esteem and negative thoughts. These findings are also suggested by another study, as the risk of success in an academic career for students have problems with traveling and transportation (Bankston and Zhou, 2002). Students who have good time management skills have good with his/her academic career. Moreover, when students manage time management skills, they can develop the process and tools that increase efficiency, productivity, and have an impact on academic success. The current study consistent with (Serap, 2003), that college students who have not manage the time properly they have a relatively low-self-esteem score. The current study revealed that family income, financial problems were statistically significant factors that have affected academic achievement. Likewise In two studies had reported similar findings (Crocker and Luhtanen, 2003; and Arulampalam et al., 2004). The relation between self-esteem and GPA revealed a weak positive correlation. Other studies carried out by other local college students (Abdulghani et al., 2014 and Anna et al., 2005) correlation between academic performance and self-esteem insignificant. The current results were matched with the previously published findings, where high achieving students in the throwout academic career also have good self-esteem scores (El-Anzi, 2005). In contrast, we report a significant correlation between these two factors; most probably because we used a good sample size compared to other studies. In general, this study showed that self-esteem greatly influences academic performance. We also found a statistically significant relationship between students' GPA and who themselves chose the major subject for studying in the university.

5. Conclusion & recommendation

The findings from the current study contribute to the resources to better oversee projects to upgrade health sciences students' self-esteem, some short term courses (i.e. English, personality develop-

ment and motivation) are requested to boost the academic career and confidence by lifting self-esteem; it indirectly helps to better academic performance. Students also need special counseling for how to deal with stress, anxiety and depression. Further research is needed to explore this relationship, to see why the correlation was not so strong and what the factors which affect the two variables are. We recommend to include male students, non-health colleges, and more universities. The random sampling technique may also be used to get more accurate results.

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Further reading

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