



Effect of Teacher's Feedback on Self-Concept of Students at Secondary Level

Namood -E- Sahar

PhD Scholar; National Institute of Psychology, Quaid-i-Azam University Islamabad.
Email: namood.sahar@nip.edu.pk

Hamid Ali Nadeem

Lecturer; Educational Planning Policy Studies and Leadership Department, Allama Iqbal Open University Islamabad

Citation

Sahar, N., & Nadeem, H.A. (2024). Effect of teacher's feedback on self-concept of students at secondary level. *Open Access Education and Leadership Review*, 1(1): 11-20

WEBSITE: www.mdPIP.com
PUBLISHER: MDPIP

ABSTRACT:

Self-concept is set of personal schemas (Gerrig & Zimbardo, 2002) that become more relevant during adolescence or teenage period (Fournier, 2018). Also, it is related to psychological well-being among adolescents (Marshall, 2001; McCullough, Huebner, & Laughlin, 2000). Although many factors contribute in building and shaping the self-concept in adolescents; but the present research intended to examine the role of Teacher's feedback on the Self-concept among students. The study was conducted on sample ($N=300$) of students ($M=15.6$, $SD=1.4$); comprising of boys ($n=150$) and girls ($n=150$) from the public schools in urban areas of Islamabad, Pakistan. The study instruments; Teacher's Feedback Scale (Burnett, 2003) and Adolescent's Self-concept Short Scale (Veiga & Leite, 2016), were translated and adapted by the researcher with permission of original authors. Findings suggest that providing positive feedback about the ability of students predict a positive self-concept explaining 23% variance ($\Delta R=.228$), whereas negative feedback is the non-significant negative predictor of the self-concept. The gender differences on both scales were also explored. Results can be employed to devise a teaching plan with a focus on positive feedback by teachers and avoiding negative one to help improve the self-concept among the students.

Key words: Teacher's Feedback, Student's Self-Concept, Positive Feedback, Gender Difference.

This is an open access article distributed under the terms of [Creative Commons Attribution License \(CC BY\)](https://creativecommons.org/licenses/by/4.0/).



Reproduction, distributions and use in other forums is permitted provided copyright owner(s) and original author(s) are credited and original publication is cited.

Introduction

As a human, we all have a basic and unique self of our own that distinguish us from the others around. This self is exhibited by our feeling, thinking, and actions. It is based on these three determinants through which the people around us formulate a persona of us; that is, who as a person we are? So, this conception then leads to categorization of the persons. Here the point of consideration is, do only other forms an image about who are we or do we all also ponder on the basic question of who am I? The answer is yes, we all think about how as a person we are, and this is termed as self-concept. It refers to how a person thinks about his or her own self and is based on an internal model that employs self-assessments for defining schemas that a person holds for his or herself (Gerrig & Zimbardo, 2002; Hattie, 2014).

Self-concept is actually an essential part of a person's being which distinguish him or her from other individuals. Baumeister (1999), stated the self-concept as belief of individual about his or her own self and also the set of attributes that are credited to one self, including the person's attributes and who and what the self is. Self-concept is comprised of the self-schemas one holds, and which interact with the one's esteem, knowledge, and self to form the whole identity. It underlies one's past, present, and future selves. Where, future selves include our possible selves that represent an individual's idea of what they could and might become in times to come and also what they would like to or afraid of becoming. These possible selves could act as incentive for certain behaviors (Markus & Nurius, 1986; Myers, 2009). In the phase of childhood, self-concept is concrete and tied to extrinsic (external) elements, various items or skills. But as the child grows characteristic traits develop, and self-concept shifted to intrinsic (internal) elements. The self-concept become clearer and more relevant to the individual as the adolescence period starts (Fournier, 2018). Also, the adolescents assess their abilities on a continuum based upon the self-concept they possess (Gupta & Thapliyal, 2015). About the self-concept most of the theorists agreed on some points about this construct. That are; self-concept is a broad overview of how one cognitively as well as affectively judge one own self, self-concept underlies different aspect i.e. social, emotional, religious, spiritual, physical and is thus multi-dimensional. Also, the self-concept can be leaned, not innate or inherent, and influenced by both the biological and environmental factors (Cherry, 2018; Gecas, 1982). Turner's self-categorization theory also explain the acquisition of self-concept. It states that self-concept comprised of two levels; the one is personal identity (i.e., perception of one's own self) and the second is social identity (i.e., perception of how one categorizes one's self in their social groups). The individual's self-concept is based on one's self-perception and how they are perceived by others. This self-concept imparts an influence on the individuality (i.e., self-perception, personal beliefs, self-persona) and the person's social influence (Turner & Reynolds, 2011).

Associated with interest of this research is another term, derived from self-concept; that is "academic self-concept". It is termed as the individual's belief about the academic abilities that he or she has (Trautwein, Ludkte, Marsh, & Nagy, 2009) and directly affects the learning process (Vidals, 2005) through the significant influence it had on the effective cognitive functioning (Santana, Feliciano, & Jimenez, 2009). Literature indicated that students who possess low level of self-concept also possess low confidence level in relation with their academic aptitude (Amezcuca & Fernandez, 2000; Broc, 2000). Also, the construction of a positive type of self-concept has a paramount significance for the psychological wellbeing of an individual (Flouri & Buchanan, 2003) as well as the academic wellbeing (Marsh & Craven, 2006). Thus, the enhancement of one's self-concept is viewed as a central objective of education (Marsh & Craven, 2006). The gender differences for academic self-concept was also assessed by researchers which demonstrate that girls rate themselves higher on academic self-concept as compared to boys (Herrera, Al-Lal, & Mohamed, 2020; Menon & Perry, 2016; Valdes-Cuervo, Sanchez-Escobedo, & Valadez-Sierra, 2015). The second variable that is the focus of our research is feedback by the teachers. Feedback is defined as the information about the reactions or performance of a person on a task which is then used a source for improvement. It also refers to a process of receiving an input based on or in simple words as a consequence of output (Kearsley, 2003). Similarly, Umpleby (2007) explained feedback as the knowledge about the result of a process intended to impart an impact on the process itself; such that, it can be positive negative or even neutral in nature. A positive feedback increases the likelihood of repetition of the same behavior output in the future. The negative feedback however decreases the likelihood that the same behavior will repeat in the future. And the neutral feedback is the one which neither increases nor decreases the future behavior; e.g., when an individual simply repeat what another has mentioned. The gender differences for feedback of teacher was also assessed by Nicaise, Cogertino, Bois, and Amorose (2006). Findings suggest that

teacher's feedback related to competencies of girl were stronger than boys. Carvalho, Santos, Conboy, and Martins (2014) found that girls perceive teacher's feedback as more effective than the boys.

Researches demonstrate that self-concept helps an individual in shaping his or her personality and behaviors. So, the exploration of self-concept possesses a significant importance for the understanding of the construct in a better way and also to find out the ways for its enhancement. Also, the phase of adolescent maintains a crucial position for the development of self-concept. At this stage the individual start paying attention to one self and begin developing the foundations of one's self-concept. Also, at this stage of life a person possesses great self-consciousness and is thus able to understand the perspective of someone else in a more effective manner (Manning, 2007; Sebastian, Burnett, & Blakemore, 2008).

The literature also indicated that the construct of self-concept has a significant positive relation with the evaluation an individual obtains from the significant other. The two important factors that affect self-concepts are success and the approval from the people who are significant in person's life (Brookover, Thomas, & Paterson, 1964; Manning, 2007). In the life of the student the teachers have a position of being a significant other. So, this research project conceptualized that the teacher's feedback has a significant effect on the student's self-concept. Also, the recent research by Klapp (2018) indicate that the self-concept plays a role of mediating variable between student's ability and academic achievement. It was also demonstrated that academic or student's self-concept possess a consistent reciprocal effect on achievement as well as achievement in education (Marsh & O'Mara, 2008). A study by Ybrandt (2008) suggested that self-concept has a significant effect on social functioning as well as on internalizing and externalizing behavioral problems among adolescents. Findings demonstrated that a negative self-concept might result in externalizing behavior problems predicting aggression and delinquency. The importance of self-concept was also explored by Pakistani researchers. Zahra, Asif, and Yousaf (2010) explored the relationship existing between self-concept and academic achievement among Bachelor's degree students. It was concluded that academic self-concept is related to academic achievement (Zahra, Asif, & Yousaf, 2010). Similarly, another study demonstrated that both self-concept and academic achievement complement each other also among students at higher education levels (Deeba & Shah, 2016). So, this research study is of paramount importance in exploring the relationship between two variables in our cultural context and then employing the findings for the betterment of the academic as well as non-academic life of our youth. It is premised that the greatest exploration and sense of self develop during the period of adolescence. At this time, the identifications of earlier childhood will be re-shaped or discarded to resolve confusion and fragmentation about the self (McAdams, 2010), and individuals move towards the creation of a stable and positive self-concept to support the transition to adulthood. The self-concept among the students is also found in Pakistani literature to be associated with academic achievement (Deeba & Shah, 2016; Zahra et al., 2010). The aforementioned research also indicates that feedback from significant others greatly influences the self-concept (Manning, 2007) and teachers hold a significant position in a student's life. Therefore, this research project aimed to investigate the role played by the teacher's feedback on the self-concept of school-going adolescents that is secondary students. The gender differences in the variables were also determined. The findings of the study could help improve the academic self-concept among students through a positive and constructive type of feedback by teachers.

Hypotheses

1. Teacher's feedback is significantly associated with student's self-concept.
2. Positive, ability, and effort-related feedback by teachers is positively related to student's self-concept.
3. Negative feedback by teachers is negatively related to student's self-concept.
4. Teacher's feedback predicts student's self-concept.

Methods

Sample

The population of the current research was secondary-level male and female students of public schools in the vicinity of Islamabad. Using the simple random sampling technique, the sample of 150 male and 150 female students ($N = 300$) was approached with ages ranging from 13 to 18 years old ($M = 15.46$, $SD = 1.23$). The main demographic characteristics of the sample are mentioned as follows:

Table 1
Demographic Characteristics of the Sample (N=300)

Variables		Number	Percent
Gender	Male	150	50%
	Female	150	50%
Education	9 th Class	129	43%
	10 th Class	171	57%

Table 1 demonstrates that the sample of the study comprised an equal proportion of male and female students such that 57% of the students belong to the 10th class and 43% belong to the 9th class.

Instruments

Teacher's Feedback Scale. It was developed by Burnett in 2003 based on the Significant Others Statements Inventory (Burnett, 1997). The scale was modified to include general feedback items that underlie the positive, negative, ability, and effort feedback statements by the teacher. The reliability coefficients for the sub-scales were determined; that was, for general positive feedback ($\alpha = .85$), general negative feedback ($\alpha = .77$), general ability feedback ($\alpha = 0.79$), and general effort feedback ($\alpha = .78$) items. This indicated that the scale possesses good reliability.

Adolescents' Self-Concept Short Scale. It is the version of the Piers-Harris Children's Self-Concept Scale (Piers & Hertzberg, 2002) constructed by Veiga and Leite in 2016. It is a 30-scale comprising of responses from completely disagree to agree, scored 1-6. The scale in total highlighted six factors; including, Behavior (Be), Anxiety (An), Intellectual status (Is), Popularity (Po), Physical Appearance (Pa), and Happiness (Ha), that underlie five items each. The value for internal consistency ($\alpha = .87$) is high showing that the scale possesses good reliability (Veiga & Leite, 2016).

Procedure

The study used a survey method to collect the data from the respondents. To accomplish the objectives of this research project, the research instruments were translated into the Urdu language to make it easily comprehensible for the sample of study. The permission for the translation and the administration of the research instruments was acquired from the original authors. The translated versions were then administered to the sample by approaching different schools and acquiring permission for the scale administration. The students were provided with guidelines about the research project and how to fill in the scales. After obtaining students' consent the scale was administered and they were thanked at the end of administration the students were thanked and provided with the incentives. The data obtained was analyzed using the SPSS-25. The main analyses that were conducted include psychometric estimates, correlations, *t-tests*, and multiple regression analysis. The results obtained were then interpreted to either accept or reject the hypotheses.

Results and Findings

The analysis of the data began with descriptive statistics, which comprised mean, standard deviation, and reliability analyses. Followed by the descriptive statistics was the inferential type of statistics, which comprised correlation, multiple regression, and *t*-test analyses. The results of all analyses are presented as follows in the form of tables and are also discussed.

Table 2

Psychometric Properties and Inter Correlation of all Variables (N=300)

Scales	<i>M(SD)</i>	<i>α</i>	1	2	3	4	5	6	7	8	9	10
Positive feedback	8.03(1.94)	.62	-.04	.58**	.34**	.36**	.37**	.18	.20	.43**	.37**	.47**
Negative feedback	18.18(3.03)	.60	-	.13	.19	.04	-.04	.02	-.05	-.09	-.16	-.06
Ability feedback	6.98(2.21)	.78	-	-	.60**	.29**	.36**	.29**	.22	.41**	.37**	.50**
Effort feedback	6.62(2.29)	.78	-	-	-	.23	.23	.20	.18	.40**	.31**	.36**
Anxiety	16.96(4.08)	.59	-	-	-	-	.26**	.50**	.56**	.43**	.36**	.75**
Physical appearance	19.25(2.82)	.34	-	-	-	-	-	.27**	.48**	.57**	.49**	.70**
Behavior	18.14(3.29)	.39	-	-	-	-	-	.44**	.45**	.25	.70**	
Popularity	18.73(3.52)	.49	-	-	-	-	-	-	.41**	.45**	.79**	
Happiness	19.83(3.43)	.71	-	-	-	-	-	-	-	.34**	.77**	
Intellectual status	18.26(3.24)	.55	-	-	-	-	-	-	-	-	.65**	
Social concept	110.91(14.63)	.84	-	-	-	-	-	-	-	-	-	-

***p* < .01

Table 2 shows descriptive for both the variables of the current study i.e., teacher's feedback and self-concept along with the respective subscales. The values of the reliability coefficient indicate that both the scales and their subscales possess good reliability. These findings provide evidence for good internal consistency and are thus appropriate for the use. Correlation estimates indicate that teacher's feedback and student's self-concept are related to one another. This provides support for hypothesis 1: Teacher's feedback is significantly associated with student's self-concept. Findings also suggest that self-concept has a positive correlation with positive feedback, ability feedback, and effort feedback, which supports hypothesis 2: Positive, ability, and effort-related feedback by teachers is positively related to student's self-concept. It also shows that negative feedback forms a negative, however non-significant, relation with self-concept supporting hypothesis 3: Negative feedback by teachers is negatively related to students' self-concept.

Table 3

Multiple Regression Analysis for Effect of Demographic and Study Variables on Student's Self-concept (N=300)

Variables	Model 1 β	Student's Self-concept	
		B	95% CI
Constant			
Gender	-.21**	-.15	[-9.18, -2.02]
Age	-.26**	-.23	[-3.55, -1.13]
No. of siblings	-.01	.01	[-1.22, 1.16]
Birth Order	-.06	-.08	[-3.28, 1.44]
Positive feedback		.27*	[.37, 3.64]
Negative feedback		-.07	[-1.28, .58]
Ability feedback		.28*	[.09, 3.51]
Effort feedback		.10*	[-.81, 1.99]
<i>R</i> ²	.10	.23	
<i>F</i>	5.47**	7.33	
ΔR^2		.13	
ΔF		8.41**	

p* < .05. *p* < .01.

Table 3 demonstrated that the demographic variables alone account for 10% of the variance in the student's self-concept. Model 2 indicates the effect caused by study variables; positive, negative, ability, and effort feedback such that the effect caused by demographic variables is controlled. The results show that the study variables together account for 13% of the total variance in student's self-concept with ability feedback being the significant predictor ($p < .05$). The negative sign of the coefficient for negative feedback demonstrates that it is a negative predictor of student's self-concept; that is, increase in negative type of feedback from teacher decreases the level of student's self-concept. This supports hypothesis 4: Teacher's feedback predicts the student's self-concept.

Table 4

Contrast of Male with Female for Teacher's Feedback and Student's Self-concept. (N=300)

Variables	Male (n=150)		Female (n=150)		t	p	Cohen's d
	M	SD	M	SD			
Positive feedback	12.37	1.83	11.58	2.01	2.22	.029	0.41
Negative feedback	18.19	2.45	16.79	3.15	2.64	.010	0.50
Ability feedback	9.48	2.17	8.37	2.18	2.72	.008	0.51
Effort feedback	9.35	2.39	9.18	2.29	.38	.702	0.07
Self-concept	113.23	14.93	108.93	14.69	1.44	.154	0.29
Anxiety	18.15	3.64	15.65	3.85	3.55	.001	0.67
Physical Appearance	19.30	2.82	19.22	2.81	.14	.889	0.03
Behavior	18.64	3.35	17.76	3.17	1.44	.152	0.27
Popularity	18.61	3.62	19.12	3.53	-.76	.446	0.14
Happiness	19.86	3.48	19.61	3.64	.36	.716	0.07
Intellectual Status	18.10	3.40	18.84	2.66	-1.26	.209	0.24

Note. Boldface Indicates Significant Differences Among Male and Female

Table 4 shows that gender difference exists for study variables; that is, teacher's feedback and student's self-concept. The t -scores on overall self-concept were non-significant but slightly higher among male students which contradicts hypothesis 5: Student's self-concept is higher among female students. The t -scores are significant and positive (i.e., males are high scorers) on the subscales of positive, negative, and ability feedback. This finding opposes hypothesis 6: Female students receive more positive feedback from teachers. Also, the t -score is significant for anxiety and is a subscale of a student's self-concept; such that, scores are higher for male students. For the subscales of popularity and intellectual status, t -scores are negative but non-significant which indicates that female students are slightly high scorers on these two subscales.

Discussion

The purpose of the study was to study the relationship between teacher's feedback and self-concept among the students. The research instruments used in this study are the Teacher's Feedback Scale (Burnett, 2003) and the Adolescent Self-concept Scale (Veiga & Leite, 2016). The scales were translated into the Urdu language to retain its purpose in our culture. The reliability of the translated research instruments was also assessed, and it was found that both scales; the Teacher's Feedback Scale and the Adolescent's Self-concept Scale, possess good reliability coefficients (see Table 2). This indicates that the research instruments are reliable and thus have good internal consistency (Chiang, Jhangiani, & Price, 2015). A correlation analysis was also carried out on the data. The values of the correlation (see Table 3) indicate that self-concept has a significant positive correlation with positive feedback, ability feedback, and effort feedback, whereas it possesses a non-significant negative correlation with negative feedback. This illustrates that positive type of feedback from the teachers helps to heighten the self-concept of the students. The literature also provides evidence in this regard that feedback by teachers has a significant influence on the self-concept of students (Burnett, 1999; McAdams, 2010; Meeus *et al.*, 2002). The nonsignificant relationship of negative feedback with self-concept among students could be attributed to the culture prevailing in Pakistan in which negative feedback or criticism from elder significant others is appreciated and considered essential for the development of children. The children recognized their elder significant others as being wise and possessing greater experience and

thus the criticism is accepted (Qidwai *et al.*, 2011). Negative feedback by the teachers thus might not have a significant effect on the self-concept of students.

The multiple regression analysis was also conducted which indicated that among the predictors of self-concept being studied, ability feedback is the significant positive predictor. This means that a higher score on the items of ability feedback predicts a high score for the person on self-concept (see Table 4). This is also supported by the meta-analysis study by Hattie (1992) concluded that teachers act as self-concept enhancement agents. Research in the past indicated that attribution feedback statements by teachers help to enhance the academic self-concept among students (Brophy, 1981; Craven, 1989; Craven, Marsh, & Debus, 1991; Craven, 1996; Schunk, 1983; 1985). Also, Burnett (1997; 1999) highlighted the importance of positive statements over negative statements by the teachers on the self-esteem of the students that will affect the self-concept. Another study by Burnett (2003) found that negative feedback statements by teachers are internalized negatively by the students. The *t*-test was also executed on the data (see Table 4) and it demonstrated that the difference is significant for positive feedback, negative feedback, ability feedback, and anxiety (i.e., a subscale of self-concept); such that the male students are high scorers. and anxiety. The results, however, contradict the literature which demonstrates that girls receive more positive feedback from the teachers. The reason might be that the boys are more critically handled in our culture in terms of education as they are considered careless and unmotivated (Bogdanovitch, 2019; Munns *et al.*, 2012) thus receiving greater teacher feedback (i.e., both positive and negative feedback). Also, the *t*-scores for popularity and intellectual status are negative but non-significant which indicates that female students are slightly high scorers on these two subscales. Literature also suggests that female students are considered as popular and more competent (Nicaise *et al.*, 2006). Also, females are recognized as intellectually of higher status than males (Cortright *et al.*, 2015).

Conclusion

It can be thus concluded that teacher's feedback does have a strong relationship with student's self-concept that ability feedback being the most significant predictor. Also, gender differences were demonstrated to exist in the scores on the two variables; that is, teacher's feedback and student's self-concept.

Limitations and Suggestions

1. The research project studied the variables among students of secondary level only that constitutes of adolescents only. The variable age groups are suggested for study in the future.
2. The research was confined to urban schools only samples from rural areas could also be used and a comparison could have been made.
3. The impact of demographic variables could be further explored by using higher analyses like ANOVA and mediation.

Implications

The findings of the study might help us in an extensive research study on the topic in the future. Also, the Urdu translations of the Teacher's Feedback Scale and Adolescent Self-concept Scale that were carried out in this research could be used by future researchers.

Acknowledgments: The researcher acknowledges the cooperation of the respondents in filling and returning the questionnaires.

Declaration of Interest: The author declares that there is no clash of interests.

References

- Amezcuca, J., & Fernandez, E. (2002). The influence of concept in academic performance. *Iber Psychology*, 5(1).
- Baumeister, R. F. (Ed.) (1999). *The self in social psychology*. Philadelphia, PA: Psychology Press.
- Bogdanovitch, S. (2019). Re: Are boys less motivated to read than girls [Digital Media Project for Children]. Retrieved from <https://digitalmediaprojectforchildren.wordpress.com/2019/04/19/are-boys-less-motivated-to-read-than-girls/>

- Broc, M. (2000). Self-concept, self-esteem and academic performance in 4th grade students of the ESO. Educational pedagogical implications in guidance and tutoring. *Educational Research Review*, 18(1): 119-146.
- Brookover, W. B., Thomas, S., & Paterson, A. (1964). Self-concept of ability and school achievement. *Sociology of Education*, 271-278.
- Brophy, J. (1981). Teacher praise: A functional analysis. *Review of Educational Research*, 51, 5-32.
- Burnett, P. C. (1999). Children's Self-Talk and Academic Self-Concepts: The impact of teachers' statements. *Educational Psychology in Practice*, 15(3): 195-200.
- Burnett, P. C. (2003). The impact of teacher feedback on student self-talk and self-concept in reading and mathematics. *The Journal of Classroom Interaction*, 11-16.
- Burnett, P.C. (1997). The relationship between significant others' positive and negative statements and self-talk, self-concepts, and self-esteem. Paper published by *Australian Association for Research in Education on the Internet*. Retrieved from. <http://www.swin.edu.au/aare/welcome.html>.
- Carvalho, C., Santos, J., Conboy, J., & Martins, D. (2014). Teachers' feedback: Exploring differences in students' perceptions. *Procedia-Social and Behavioral Sciences*, 159: 169-173.
- Cherry, K. (2018). Re: What is self-concept and how does it form? [Very Well Mind]. Retrieved from <https://www.verywellmind.com/what-is-self-concept-2795865>
- Chiang, I. C. A., Jhangiani, R. S., & Price, P. C. (2015). Reliability and validity of measurement. In *Research Methods in Psychology* (2nd ed, pp. 87-92). Retrieved from. <https://opentextbc.ca/researchmethods/chapter/reliability-and-validity-of-measurement/>
- Cortright, R. N., Lujan, H. L., Cox, J. H., Cortright, M. A., Langworthy, B. M., Petta, L. M., ... & DiCarlo, S. E. (2015). Intellectual development is positively related to intrinsic motivation and course grades for female but not male students. *Advances in Physiology Education*, 39(3): 181-186.
- Craven, R. G. (1996). *Enhancing academic self-concept: A large-scale longitudinal study in an educational setting* (unpublished doctoral dissertation). University of Sydney, Australia.
- Craven, R. G., Marsh, H. W., & Debus, R. L. (1991). Effects of Internally Focused Feedback and Attributional Feedback on enhancement of Academic Self-concept. *Journal of Educational Psychology*, 83(1): 17-27.
- Craven, R.G. (1989). *An examination of self-concept: The interrelationship of teachers', parents and children's perceptions of Self-concept, and their influence in enhancing Self-concept* (Unpublished Bachelors thesis), University of Sydney, Australia.
- Deeba, F., & Shah, A. F. (2016). A Study of Relationship of Self-Concept and Achievement of Students at Higher Education level. *Pakistan Journal of Social Sciences (PJSS)*, 36(1).
- Flouri, E., & Buchanan, A. (2003). The role of father involvement and mother involvement in adolescents' psychological well-being. *British Journal of Social Work*, 33: 399-406.
- Fournier, G. (2018). Re: Self-Concept [*Psychology Central*]. Retrieved from. <https://psychcentral.com/encyclopedia/self-concept/>
- Gecas, V. (1982). The self-concept. *Annual Review of Sociology*, 8: 1-33.
- Gerrig, R. J., & Zimbardo, P. G. (2002). *American Psychological Association: Glossary of psychological terms*. London: Pearson Education
- Gupta, D., & Thapliyal, G. (2015). A study of prosocial behavior and self-concept of adolescents. *Journal on Educational Psychology*, 9(1): 38-45.
- Hattie, J. (1992). *Enhancing self-Concept*. In *Self-concept*. New Jersey: Hillsdale.
- Hattie, J. (2014). *Self-concept*. UK: Psychology Press.
- Herrera, L., Al-Lal, M., & Mohamed, L. (2020). Academic achievement, self-concept, personality and emotional intelligence in primary education: Analysis by gender and cultural group. *Frontiers in Psychology*, 10: 3075.
- Kearsley, G. (2003). Explorations in learning and instruction: The theory into practice database. *Feedback / Reinforcement*. Retrieved from. <http://tip.psychology.org/feed back.html>
- Klapp, A. (2018). Does academic and social self-concept and motivation explain the effect of grading on students' achievement? *European Journal of Psychology of Education*, 33(2): 355-376.
- Manning, M. A. (2007). Self-concept and self-esteem in adolescents. *Principle Leadership Magazine*, 11-15.
- Markus, H., Nurius, P. (1986). Possible selves. *American Psychologist*, 41(9): 954-969.

- Marsh, H. W., & Craven, R. G. (2006). Reciprocal effects of self-concept and performance from a multidimensional perspective: Beyond seductive pleasure and uni-dimensional perspectives. *Perspectives on Psychological Science*, 1: 133-163.
- Marsh, H. W., & O'Mara, A. (2008). Reciprocal effects between academic self-concept, self-esteem, achievement, and attainment over seven adolescent years: Unidimensional and multidimensional perspectives of self-concept. *Personality and Social Psychology Bulletin*, 34(4): 542-552.
- Marshall, S. K. (2001). Do I matter? Construct validation of adolescents' perceived mattering to parents and friends. *Journal of Adolescence*, 24(4): 473-490.
- McAdams, D. P. (2010). Self and identity across the life span. In *Handbook of Lifespan Development* (pp. 158-207). New Jersey: Wiley Publishers.
- McCullough, G., Huebner, E. S., & Laughlin, J. E. (2000). Life events, self-concept, and adolescents' positive subjective well-being. *Psychology in the Schools*, 37(3): 281-290.
- Meeus, W. I. M., Oosterwegel, A., & Vollebergh, W. (2002). Parental and peer attachment and identity development in adolescence. *Journal of Adolescence*, 25(1): 93-106.
- Menon, M., Perry, L.C. (2016). Peer reputations and gender differences in academic self-concept. *Psychological Studies*, 61: 21-31.
- Munns, G., Arthur, L., Downes, T., Gregson, R., Power, A., Sawyer, W., & Steele, F. (2012). *Motivation and Engagement of Boys: Evidence-Based Teaching Practices. Appendices*. Australia: Australian Government Department of Education, Science and Training.
- Myers, David G. (2009). *Social psychology* (10th Ed.). New York: McGraw-Hill Higher Education.
- Nicaise, V., Cogérino, G., Bois, J., & Amorose, A. J. (2006). Students' perceptions of teacher feedback and physical competence in physical education classes: Gender effects. *Journal of Teaching in Physical Education*, 25(1): 36-57.
- Piers, E. V., Herzberg, D. S., & Harris, D. B. (2002). *Piers-Harris Children's Self-concept Scale:(PHCSCS)*. California: Western Psychological Services.
- Qidwai, W., Rauf, M. U. A., Sakina, S., Hamid, A., Ishaque, S., & Ashfaq, T. (2011). Frequency and associated factors for care giving among elderly patients visiting a teaching hospital in Karachi, Pakistan. *PLOS One*, 6(11): e25873.
- Santana, L., Feliciano, L., & Jimenez, A. (2009). The influence of the concept of academic performance on university students. *Spanish Journal of Orientation and Psychopedagogy*, 20(1): 16-28.
- Schunk, D. H. (1983). Ability versus effort attributional feedback on children's perceived efficacy and achievement. *Journal of Educational Psychology*, 75: 848-856.
- Schunk, D. H. (1985). Self-efficacy and classroom learning. *Psychology in the Schools*, 22: 208-223.
- Sebastian, C., Burnett, S., & Blakemore, S. J. (2008). Development of the self-concept during adolescence. *Trends in Cognitive Science*, 12: 441-446.
- Trautwein, U., Lüdtke, O., Marsh, H. W., & Nagy, G. (2009). Within-school social comparison: How students perceive the standing of their class predicts academic self-concept. *Journal of Educational Psychology*, 101(4): 853.
- Turner, J. C., & Reynolds, K. J. (2011). Self-categorization theory. *Handbook of Theories in Social Psychology*, 2(1): 399-417.
- Umpleby, S. (2007). Physical relationships among matter, energy and information. *Systems Research and Behavioral Science*, 24(3): 369-372.
- Valdes-Cuervo, A. A., Sanchez-Escobedo, P. A., & Valadez-Sierra, M. D. (2015). Gender differences in self-concept, locus of control, and goal orientation in Mexican high-achieving students. *Gifted and Talented International*, 30(1-2): 19-24.
- Veiga, F., & Leite, A. (2016). Adolescents' self-concept short scale: A version of PHCSCS. *Procedia-Social and Behavioral Sciences*, 217, 631-637.
- Vidals, A. (2005). *Self-concept, locus of control, and academic performance in second semester students of the faculty of psychology* (unpublished Master thesis). National Autonomous University of Mexico, Mexico.
- Ybrandt, H. (2008). The relation between self-concept and social functioning in adolescence. *Journal of Adolescence*, 31(1): 1-16.
- Zahra, A. T., Arif, M. H., & Yousuf, M. I. (2010). Relationship of academic, physical and social self-concepts of students with their academic achievement. *Contemporary Issues in Education Research*, 3(3): 73-78.

Submit your manuscript to MDPI Open Access journal and benefit from:

- Convenient online submission
- Rigorous peer review
- Open access: articles freely available online
- High visibility within the field
- Retaining the copyright to your article

Submit your next manuscript at [mdpi.com](https://www.mdpi.com)