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The Role of Soft Skills in Shaping Academic Performance among Learners: An Exploratory Study

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Abstract:

In the 21st century, globalization has transformed our world into a global village. In rapidly changing world, individuals need to adapt themselves in diverse work situation. This is possible through the gaining of wide array of knowledge, skills, values. In this connection, UNESCO recognizes the prominence of soft skills (transversal skills) in education and their role in fostering lifelong learning, employability and maintain social relationship. By considering these points in mind an attempt is made to assess the association among soft skills and academic achievement of higher secondary students in

West Bengal. A total 414 students of higher secondary level in some schools of selected districts of West Bengal were included through multi-stage random sampling in the study. Self-made soft skills inventory developed by the investigator based on the dimensions proposed by UNESCO (2019) was constituted the tool of the present study. Final board exam results of class-XI taken as an academic achievement of students. Here descriptive correlation design was used to obtain the objective of the study. The findings of the investigation unveil that academic achievement and soft skills are moderately associated ($r = 0.62, p < 0.01$) with each other and that would help in holistic development of learners.

Keywords: Soft Skills, 21st Century Skills, Personality Traits, Academic Achievement.

1. Introduction:

As today's world is changing rapidly which makes it more complex and competitive. The globe has become a global village in the twenty-first century due to globalization. So, in this situation, obtaining only higher grades or marks in academics is not sufficient. The learners will have to prepare themselves to touch the level of concept attainment and prepare themselves according to the 21st-century society. In such a situation, people need some different type of skills, knowledge, values with conventional knowledge to cope with the changes. These distinct types of skills, knowledge, values are called as soft skills as well as transversal skills or life skills.

The concept of "soft skill" encompasses a wide-ranging and interdisciplinary construct that has been characterised in diverse manners, including but not limited to 21st-century skills, non-



cognitive skills, character skills, and life skills (Park et al., 2017)¹. According to Parker et al. (2004)² and Robles (2012)³, “soft skills refer to adaptable personal attributes that manage our emotional, behavioural, and cognitive conditions, facilitating successful communication with others and the attainment of individual objectives”. It complements hard skills. At present days, it is playing a prominent role in the holistic development of pupils and may perhaps help to govern their future employability and performance in any walk of their life they wish to go (Washer, 2007⁵). Similarly in academics, it also helps in the holistic development of individual’s personality, motivates to work collaboratively with fellow students, solve a problem by oneself and stick to problem solving, not only that but also encourage creative thinking and critical thinking among them. Such skill makes them confident in interpersonal as well intrapersonal communication. It helps youth to ease to enter and betterment in professional life as well as to succeed in scholastic achievement through directly or indirectly helps the individuals in the time of performing of such activities or sub-activities which directly linked with scholastic achievement (Asuru & Ogidi, 2013⁸; Obilor, 2019⁹). So, in the above discussion, it can be concluded that, the importance of soft skills at present days has been realized and accepted as a crucial factor of success in any field. In this regard, investigator tries to explore the relationship between soft skills and academic achievement through the study.

2. Literature Review:

It has already been proven to have a significant impact of soft skills on labour market, both theoretically (Heckman, 2011¹⁷; Schulz, 2008¹⁸; Thomas, 2019¹⁹) and practically (Yadav and

¹ Park, D., Tsukayama, E., Goodwin, G. P., Patrick, S., & Duckworth, A. L. (2017). A tripartite taxonomy of character: Evidence for intrapersonal, interpersonal, and intellectual competencies in children. *Contemporary Educational Psychology*, 48, 16–27. <https://doi.org/10.1016/j.cedpsych.2016.08.001>

² Parker, J., Creque, R., Barnhart, D., Harris, J., Majeski, S., Wood, L., Bond, B., & Hogan, M. (2004). Academic achievement in high school: Does emotional intelligence matter? *Personality and Individual Differences*, 37(7), 1321–1330. <https://doi.org/10.1016/j.paid.2004.01.002>

³ Robles, M. M. (2012). Executive perceptions of the top 10 soft skills needed in today’s workplace. *Business Communication Quarterly*, 75(4), 453–465. <https://doi.org/10.1177/1080569912460400>

⁵ Washer, P. (2007). Revisiting key skills: A practical framework for higher education. *Journal of Quality in Higher Education*, 13(1), 57-67.

⁸ Asuru, V. A., & Ogidi, R. C. (2013). Challenges associated with assessment of soft skills for quality education in Rivers South-West senatorial district of Rivers State, Nigeria. *Journal of Educational assessment in Africa*, 8, 213-228.

⁹ Obilor, E. I. (2019). Soft Skills and Students' Academic Achievement. *The International Journal of Community and Social Development*, 7, 27-37.

¹⁷ Heckman, J. J. (2011). The economics of inequality: The value of early childhood education. *American Educator*, 35, 31–35.

¹⁸ Schulz, B. (2008). The importance of soft skills: Education beyond academic knowledge. *Journal of Language and Communication*, 2, 146–154.

¹⁹ Thomas, B. (2019). The 5 most important soft skills of the future: employee performance. *Educational leadership*, 67 (1) 16-21.



Mohammad, 2019²⁰; Chalupa and Chadt, 2021²¹). Additionally, numerous studies have revealed that soft skills contribute significantly to academic achievement (Parker et al., 2004²²; Garcia-Almeida & Cabrera-Nuez, 2020²³). In this regard, various international as well as national organisations (European Commission, 2016²⁴; UNICEF, 2019²⁵; NEP-2020²⁶) stressed upon to development of soft skills in students and agree to positively included in curriculum of every stages of school as well as higher education. Further some of the studies conducted by Chan et al. (2012)²⁷; Muenks et al. (2017)²⁸; Feraco et al. (2021)²⁹ indicates that each of the skill might not relate directly to academic achievement. Their effect would be arbitrated by other factors. So, far understanding the importance of all of these matters as well as to explore the relationship, the investigator was motivated to conduct the study.

3. Rationale of the Study:

The rapid growth of the world due to globalization has made soft skills crucial for adapting to the changing landscape. UNICEF (2019)³⁰ highlights the prominence of soft skills in enhancing adaptability and resilience in a rapidly changing world. They facilitate navigation, employment, career advancement, and professional success. The National Education Policy of 2020 (NEP-2020)³¹ of India, stresses that the goal of education will not only be cognitive growth but also character building and generating holistic and well-rounded individuals with 21st-century key

²⁰ Yadav, S., & Mohammad, I. (2019). Effectiveness of concept mapping on conventional teaching method in terms of knowledge regarding arterial blood gas (Abg) analysis among b.sc. nursing iv year students. *Medico-Legal Updat.*, 19(2). <https://doi.org/10.5958/0974-1283.2019.00165.8>

²¹ Chalupa, S., & Chadt, K. (2021). The perception of soft skills and their training at hotel front—Office in connection to CoVid-19 pandemics. *TEM Journal*, 517-521. <https://doi.org/10.18421/TEM102-05>

²² Ibid; (Footnote-2)

²³ Garcia-Almeida, D. J., & Cabrera-Nuez, M. T. (2020). The influence of knowledge recipients' proactivity on knowledge construction in cooperative learning experiences. *Active Learning in Higher Education*, 21(1), 79–92. <https://doi.org/10.1177/1469787418754569>

²⁴ European Commission (2016). *A New Skills Agenda for Europe*.

²⁵ <https://www.unicef.org/india/media/2571/file/Comprehensive-lifeskills-framework.pdf> at 20.02.2023 10:01

²⁶ https://niepid.nic.in/nep_2020.pdf at 19.01.2022 13:30

²⁷ Chan, K. W., Wong, K. Y. A., & Lo, E. S. C. (2012). Relational analysis of intrinsic motivation, achievement goals, learning strategies and academic achievement for Hong Kong secondary students. *The Asia-Pacific Education Researcher*, 21, 230–243.

²⁸ Muenks, K., Wigfield, A., Yang, J. S., & O'Neal, C. R. (2017). How true is grit? Assessing its relations to high school and college students' personality characteristics, self-regulation, engagement, and achievement. *Journal of Educational Psychology*, 109, 599–620. <https://doi.org/10.1037/edu0000153>

²⁹ Feraco, T., Resnati, D., Fregonese, D., Spoto, A., & Meneghetti, C. (2021). Soft skills and extracurricular activities sustain motivation and self-regulated learning at school. *The Journal of Experimental Education*, 1–20. <https://doi.org/10.1080/00220973.2021.1873090>

³⁰ <https://www.unicef.org/india/media/2571/file/Comprehensive-lifeskills-framework.pdf> at 20.02.2023 10:01

³¹ https://niepid.nic.in/nep_2020.pdf at 19.01.2022 13:30



abilities, i.e., soft skills, which support the holistic development of learners. In today's knowledge-based society, soft skills are essential for academic and professional achievements. They enable individuals to contribute to the advancement and prosperity of their society, nation, and the world. The ability to confront the obstacles of a digitally evolving, globally engaged, collaboratively advancing, creatively developing, change-oriented 21st-century society and acquire competent human resources is facilitated by soft skills. So, all of these things keeping in the mind present investigator motivated to conduct the study.

4. Research Question:

Based on the above discussion, the investigator framed the research question-

Is there any relationship exists between soft skills and academic achievement of students studying in class XII?

5. Objectives of the Study:

Based on the research question, the investigator framed the following objectives to deal with the problem-

- (i) To know the status of overall Soft-skills among higher secondary school students studying in class-XII.
- (ii) To find out the Academic Achievement among higher secondary school students studying in class-XII.
- (iii) To estimate the nature of the relationship between overall soft skills & academic achievement of students studying in class- XII.
- (iv) To estimate the predictive capability of soft skills on academic achievement of students studying in class- XII.

6. Hypotheses:

As per the stated above objectives, following null hypotheses were formulated and tested at 0.01 level of significance.

H₀₁: There is no significant relationship between soft skills & academic achievement of students studying in class- XII.

H₀₂: There is no significant predictive capability of soft skills on academic achievement of students studying in class- XII.

7. Definition of Key Terms:

The major key term used in the study are given below.

- (i) **Soft skills:** In the present study, soft skills refer to scores obtained by the higher secondary i.e. class- XII school students of West Bengal in the soft skills inventory developed by the



investigator which is based on the dimensions of Comprehensive Life/Soft Skills Framework (2019)³² of UNICEF.

- (ii) **Academic Achievement:** In the current investigation, Academic Achievement indicates to the marks obtained by the Higher secondary school students of West Bengal in their class-XI WBCHSE board exam.
- (iii) **Higher Secondary Students:** In the current study, 'Higher Secondary Students' denotes to the students of Class-XII in Bengali Medium co-education school, situated West Bengal and affiliated to the WBCHSE.

8. Methodology:

Keeping the objectives of the study in mind, descriptive correlation design was used in the present study.

8.1 Sample and Sampling Technique:

A multi-stage random sampling method was used to select the sample in the study. Finally, a number of 414 students of class-XII from 18 Bengali medium higher secondary schools (Govt. & Govt. Aided) of West Bengal chosen as a sample for the present study.

8.2 Tools Used:

(1) Soft Skills Inventory:

In order to assess the soft skills of higher secondary students, a self-made soft skills inventory was employed in the study. Reliability of the scale was established by internal consistency method. Reliability values are- SA(0.617), C(0.643), R(0.516), E(0.736), P(0.506), CT(0.742), CRT(0.500), PS(0.658), DM(0.759), N(0.707), Overall (0.846). And the validity of the inventory was determined by the subject experts in education as well as the psychology of different universities, i.e., content validity and face validity. The inventory contained a total of 33 closed-ended items, and options were given based on a 5-point Likert-type rating.

(2) Academic Achievement:

In the present study, the investigator considered and taken class-xi board exam results as an academic achievement score of students of class-xii.

9. Data Analysis:

In the present study, at first investigator converted all the raw score of both variables into T-score for the ease of handling of the data and in second phase, the investigator was calculating mean, SD, and correlation coefficient for the purpose of data analysis through use of SPSS v.22.

³² Ibid; (Footnotes-30)



10. Results and Findings:

All the null hypotheses have been tested at 0.001 level of significance.

Table-1: Description of data distribution of SS and AA

Variables	N	Mean	Mdn	Mo	SD	Sk	Ku
Soft Skills (SS)	414	53.31	54.75	57.02	8.68	-0.971	1.087
Academic Achievement (AA)	414	53.62	55.05	45.22	9.41	-0.223	-0.732

It is found from Table-1 that both the data distributions of the variables (e.g., Soft Skills and Academic Achievement) were not normally distributed. So, here it was justified to use non-parametric statistical analysis.

Objective 1: To know the status of overall Soft skills among higher secondary school students studying in class-XII.

Table-2: Status of overall soft skills

Score Range	Categories	Number of samples	Percentage
>62 or 62	Above Average	55	13.285 %
46 – 61	Average	291	70.289 %
<45 or 45	Below Average	68	16.425 %

It is obtained from Table-1 that total number of samples is 414. Mean and SD of distribution of soft skills is 53.31 and 8.68 respectively. In table-2, based on mean and sd present investigator classify or labelling the whole data distribution into three categories (i.e.- Above average, Average, Below average) and presented the status of the sample regarding soft skills.

Objective 2: To find out the Academic Achievement among higher secondary school students studying in class-XII.

Table-3: Status of academic achievement

Score Range	Categories	Number of samples	Percentage
>63 or 63	Above Average	79	19.082 %
45 – 62	Average	261	63.043 %
<44 or 44	Below Average	74	17.874 %

It is obtained from Table-1 that total number of samples is 414. Mean and SD of distribution of academic achievement is 53.62 and 9.41 respectively. In table-3, based on mean and sd present investigator classify or labelling the whole data distribution into three categories (i.e.- Above



average, Average, Below average) and presented the status of the sample regarding academic achievement.

Objective 3: To estimate the nature of the relationship between overall soft skills & academic achievement of students studying in class- XII.

H₀₁: There is no significant relationship between soft skills & academic achievement of students studying in class- XII.

Table-4: Correlation among various dimensions of soft skills with academic achievement

	Variables	Academic Achievement
Spearman' s rho	Self-Awareness (SA)	0.194** (0.000)
	Communication (C)	0.231** (0.000)
	Resilience (R)	0.153** (0.001)
	Empathy (E)	0.266** (0.000)
	Participation (P)	0.214** (0.000)
	Critical Thinking (CT)	0.320** (0.000)
	Creative Thinking (CRT)	0.233** (0.000)
	Problem-Solving (PS)	0.242** (0.000)
	Decision Making (DM)	0.206** (0.000)
	Negotiation (N)	0.213** (0.000)
	Overall Soft Skills	0.620** (0.000)

** Correlation is significant at the 0.01 level ($p = <0.001$) (2-tailed).

Table-4 indicates that coefficient of correlation value among the dimensions of soft skills and academic achievement are- SA v AA, $r=0.194$; C v AA, $r=0.231$; R v AA, $r=0.153$; E v AA, $r=0.266$; P v AA, $r=0.214$; CT v AA, $r=0.320$; CRT v AA, $r=0.233$; PS v AA, $r=0.242$; DM v AA, $r=0.206$; N v AA, $r=0.213$ and overall Soft Skills v Academic Achievement, $r=0.620$ significant at 0.001 level of significance. This designates that result is statistically significant and consequently null hypothesis i.e., **H₀₁** fail to accept. It can be concluded that separately all the dimensions of soft skills with academic achievement are positive but poorly correlated, but in overall soft skills significant and positively correlated with academic achievement. So, in the next phase the investigator tries to find out the predictive capability of overall soft skills with academic achievement.

Objective 4: To estimate the predictive capability of soft skills on academic achievement of students studying in class- XII.

H₀₂: There is no significant predictive capability of soft skills on academic achievement of students studying in class- XII.



Table-5: Regression model summary between SS with AA

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	14086.613	1	14086.613	257.981	.000 ^b
	Residual	22496.537	412	54.603		
	Total	36583.150	413			
** Significant at the 0.01 level ($p < 0.01$) (2-tailed).						
a. Dependent Variable: AA b. Predictors: (Constant), SS						

Table No-6: Coefficient of Regression Model

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	17.762	2.262		7.853	.000
	TSS	.673	.042	.621	16.062	.000
** Significant at the 0.01 level ($p < 0.01$) (2-tailed). a. Dependent Variable: AA						

It is found from the Table-5 that the dependent variable (academic achievement) was regressed on predicting variable of soft skills. The independent variable significantly predict academic achievement ($F(1, 412) = 257.981, p < 0.001$), which indicates that soft skills under study have a significant impact on academic accomplishment statistically and consequently null hypothesis i.e., H_0 fail to accept. Moreover, the $R^2 = 0.385$ depicts that the model explains 38.50 % of the variance in academic achievement. Additionally, coefficient was further assessed to ascertain the effect of soft skills on the criterion variable (academic achievement). The results revealed that soft skills have a substantial and positive impact on academic achievement ($B = 0.673, t = 16.062, p < 0.001$).

11. Discussion:

From the above data analysis, it was observed that there is a significant positive relationship exist between conjointly soft skills and academic achievement. This indicates that compact of soft skills with academic achievement varies each other with positive direction and an improvement is made in soft skills of the higher secondary school students leads to a conforming improvement in academic achievement. This result also resembles with the studies conducted by Shajimon and Joseph (2018)³⁴. But with respect to dimensions, all the dimensions positively correlated with academic achievement, but magnitude of the relationship is poor. It may due to indirect relation

³⁴ Shajimon, P. P., Joseph, Suma. (2018). A relationship study between soft skills and academic achievement of higher secondary students. 6 (2), ISSN: 2320-2882



of each soft skill with overall academic achievement instead of directly related with sub-functions or ancillary activity of academic achievement, and each of the skill has unable to impact on get overall achievement in academics instead of specific area of scholastic achievement. It also agreed with some earlier studies conducted by Chan et al. (2012)³⁵; Muenks et al. (2017)³⁶; Feraco et al. (2021)³⁷ who found that each of the skill may perhaps not associate in every respect to academic achievement. Their effect would be intervened by other factors, such as SRL, scholastic motivation, and emotions on academic success. Conjoint with the above discussion, it was found that overall dependent variable was successfully regressed on predicting variable. And in sole, soft skills shared nearly 40% of variance in academic achievement. The findings reflect the assumption of various national or international commissions and agencies.

12. Conclusions:

To sum up, it can be inferring that soft skills are important transition skills that helps the individuals to cope up with the challenging and changing situation of 21st century from the perspective of both academics as well as in productive future life of individuals. Although these skills are actually related to personality traits, so in most of the cases individuals needs to take own efforts to polishing the skills in him, which helps in maintain inter-personal relationships with peers, teachers a well as colleagues, working with integrity, and maintaining intrapersonal relationships with own self. And it also verified in the study as well as earlier investigation. So, it needs to be kept in mind in the time of teaching-learning and policy framing. And teacher, policy maker as well as parents are needs to be more responsible for performing their duties. Last but not least, in future, the same kind of studies may be embarked on students of secondary levels of school education as well as on college going students because of after completing school or college or universities, they have to go to the job market for fulfilling his basic needs as well as maintain sustainable life. So, it needs to be research regarding, if they are aware about these things or not. Further studies need to experimentation of giving soft skills related training as a form of treatment and what should be the effect on scholastic achievement of students.

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³⁵ Ibid; (Footnote-27)

³⁶ Ibid; (Footnote-28)

³⁷ Ibid; (Footnote-29)



- Chan, K. W., Wong, K. Y. A., & Lo, E. S. C. (2012). Relational analysis of intrinsic motivation, achievement goals, learning strategies and academic achievement for Hong Kong secondary students. *The Asia-Pacific Education Researcher*, 21, 230–243.
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