



Journal Homepage: - www.journalijar.com

INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)

Article DOI: 10.21474/IJAR01/14804

DOI URL: <http://dx.doi.org/10.21474/IJAR01/14804>



RESEARCH ARTICLE

ACADEMIC TASK COMMITMENT AND ACADEMIC ACHIEVEMENT THE INTER CHARACTERISTICS OF ACADEMIC OUTCOMES

G. Surendar

“There’s a difference between interest and commitment. When you’re interested in doing something, you do it only when circumstances permit. When you’re committed to something, you accept no excuses, only results.” – Art Turock.

Manuscript Info

Manuscript History

Received: 27 March 2022

Final Accepted: 30 April 2022

Published: May 2022

Key words:-

Academic Task Commitment (ATC),
Academic Achievement

Abstract

This research paper is an attempt to understand commitment and achievement which are very important in predicting individual and group success in any endeavor. Research has shown that commitment invariably has a major impact on behavioral outcomes connected to task performance. Task performance leads to achievement which has a very crucial impact on personality factors like self-esteem, self-concept, emotional intelligence and other connected constructs. Environmental and social factors are also the contributing factors in commitment-achievement interplay. This paper studies academic task commitment vis-a-vis academic performance/achievement of high school students of select schools of Bangalore-India, belonging to three different boards namely Central Board of Secondary Education, Indian Council of Secondary Education and Karnataka State Board, each having unique syllabus and board of examination. Gender and socio economic factors have been considered in the study. The results reveal the rejection of the null hypothesis which states that there was no significant relationship between Academic Task commitment and Academic Achievement among school children. The study also found that there was no significant difference in Academic Task Commitment among boys and girls due to gender. Further, the study found that there was no significant difference in Academic Achievement among boys and girls due to gender. Finally, the null hypothesis which states that socio economic status difference has no significance in Academic Task Commitment among school children is accepted. Data analysis throws significant light and possible interplay between constructs that can be factored for designing very significant interventions with more detailed study on implications.

Copy Right, IJAR, 2022,. All rights reserved.

Introduction:-

Background & Review of literature

Commitment is a cornerstone of human social life. Commitment facilitates cooperation by making individuals willing to be part of joint action. Though commitment is very important it is not fully understood how people assess the level of their own and commitments of others or what factors motivates them to honour commitments.

Corresponding Author:- G. Surendar

Address:- “There’s a difference between interest and commitment. When you’re interested in doing something, you do it only when circumstances permit. When you’re committed to something, you accept no excuses, only results.” – Art Turock.

Academic task commitment is an important parameter that gives a measure of learners who hold a promise. Academic related task commitment is generally considered to be bi-directional between the teachers and students. For the success of educational institutions, teacher's commitment has, in particular, been recognised as an effectual route. As the educational system is the most influential spot that leads to the progress of society, it requires committed teachers who are not mere tools, but their strategic partners.

Herbert Herb Clark (2006) classifies taxonomies commitment based on the recipient. There are two types of commitments based on the recipient criteria.

1. Commitment to oneself (self-commitments)
2. Commitment to another agent (interpersonal commitments).

Interpersonal commitments can be further classified into

1. Unilateral commitments (in which case one agent makes a commitment to a second agent but the second agent is not committed to anything)
2. Mutual commitments (in which case the other person is also committed to something). Mutual commitments can be complementary where something is done in exchange.
3. Committed to a shared goal in a social unit or organization.

From an evolutionary perspective, we can distinguish between two hypotheses about the evolutionary function of our default pro-social tendency. First, one may be motivated to perform actions for others in the present in order to increase one's likely future benefits – either through eliciting reciprocal pro-social behaviour from them in the future (i.e., reciprocal altruism ;Trivers, 1971) or through a boost to one's reputation among potential interaction partners (i.e., indirect reciprocity; Nowak & Sigmund, 1998). We may call this the strategic prosociality hypothesis.

Second, Roberts' (2005) interdependence hypothesis explains why one might be genuinely interested in the well-being of other group members. The interdependence hypothesis holds that human's tendency to cooperate arose evolutionarily in a period in which our ancestors lived in small groups of individuals whose interests were largely interdependent and for whom it was therefore not typically beneficial to act selfishly to the detriment of other group members.

In the psychological sense when one makes a commitment to perform a particular action, and one's interests or desires subsequently change, one should remain motivated to fulfil the commitment. Commitment will be performing the function of stabilizing behaviours/expectations and making more accurate predictions possible. The concept of commitment in the strict sense is binary: either an assurance has been given and acknowledged under conditions of common knowledge, or it hasn't. People have a tendency to feel pressured into fulfilling other's expectations; and secondly, that they accordingly try to avoid learning of other's expectations in order to avoid being pressured into carrying out actions they do not want to carry out.

Commitment consists of an outcome (O), two agents (ME and YOU), and at least one crucial contribution which YOU need to make in order to bring about the outcome. O may be a goal towards which ME is acting, in which case ME denotes ME's contribution to bringing about O. But O may also simply be an outcome which ME desires to be brought about, without ME having to do anything. For example, ME may desire that the grass be cut by virtue of YOU operating the lawnmower while ME does nothing.

Task commitment

In the original, Renzulli (1978) spoke of the three factors. Following is the full quote about task commitment and how it is different than motivation. "A second cluster of traits that are consistently found in creative/productive persons constitutes a refined or focused form of motivation known as task commitment. Whereas motivation is usually defined in terms of a general energizing process that triggers responses in organisms, task commitment represents energy brought to bear on a particular problem (task) or specific performance area."

Diagram1:- Renzuilli Model.

Keeping in perspective, aspects like, Teacher's Judgments of elementary Student's Ability, Creativity and Task Commitment on the lines of "The three-ring model of giftedness by Renzuilli "Detlef Urhahne (2011) assesses the ability and creativity of the students by standardized testing procedures, and measures task commitment by a self-descriptive questionnaire. Research results show that teachers while judging the students competencies on rating scales, were accurate judges of student abilities, but had difficulty predicting student's creativity and task commitment. Teacher's effectiveness and efficiency in selecting the most qualified students was low. Teachers detected only half of the students with the highest competencies and nominated many more students to be gifted than actually were in the sample. In conclusion, teachers are only accurate judges of student performance but cannot correctly assess student's creativity and task commitment.

The definition of academic task, focuses attention on each of the following:

1. The products students are required to produce;
2. The resources, including content instruction, that are available to them;
3. Accountability or the reward structure in the class;
4. The cognitive demands of the tasks.

Analysis of tasks in the classroom requires attention to interrelationships among tasks as well as to the actions and perceptions of students and teachers.

Task commitment has three components and their sub components. (Kim et al 2013) The three components of task commitment are

1. High goal setting
2. Self confidence
3. Focused attention

The sub components of high goal setting are

1. Task exploration
2. Self-goal set
3. Self-goal clarification
4. Self-goal attainment

The sub components of self-confidence are

1. Self-confidence by successful mastery of experience
2. Self-confidence by goal achievements
3. Self-confidence by strategy and performance

Sub components offocused attention are

1. Attention towards task identification
2. Attention towards the goal of the task
3. Attention on strategy and performance

Task commitment component levels differ among individuals the reason why task commitment presents itself differently among different individuals. These components and their sub components develop in different patterns along the process of task solving. Therefore these components must be considered in light of each task solving process when investigating task commitment.

Academic Achievement

It describes academic outcomes that indicate the extent to which a student has achieved his/her learning goals. Academic achievement may refer to completing educational benchmarks such as a degree. Academic achievement is often measured through examinations or continuous assessments. Academic achievement is the extent to which a student or institution has achieved either short or long term educational goals. Achievement may be measured through student's grade point average, whereas for institutions, achievement may be measured through graduation rates.

Academic achievement was once thought to be the most important outcome of formal educational experiences and while there is little doubt as to the vital role such achievements play in student life and later (Kell, Lubinski, & Benbow, 2013), researchers and policy makers are ever increasingly turning to social and emotional factors, as well as the relationships among them, as indicators of student well-being and psychological development (Chernyshenko, Kankaraš, & Drasgow, 2018; Frydenberg, Martin, & Collie, 2017; Moore, Mok, Chan, & Lai, 2006).

Sandler, Martin E. (2002) in his "Elaborated Model of Adult Student Persistence" studied the following four focal variables Academic integration [student's feelings about being part of the institution's academic life] Perceived stress Academic Achievement and Goal commitment. The findings were said to suggest that the academic and social systems of the adult undergraduate experience must be more attuned to adult student's percept's of Academic Achievement and perceived stress and that higher education institutions must offer curricula and services that are challenging, supportive and relevant to those students.

Barooj Bashir & Abdul Gani (2020) in their research have highlighted the state of commitment of institution teachers under various dimensions in India. Their study reveals that the teachers and the institutions are engaged in give and take relationship. When teachers perceive high organisational engagement, they respond back with a greater commitment, perceiving them as an integral part of the institution. This results in their higher level of motivation and dedication, which in turn have a matching effect on the students interest in learning and their academic performance.

Building Grit: The Longitudinal Pathways between Mindset, Commitment, Grit, and Academic Outcomes was published online on 20 February 2019, by 1) Xin Tang 2) Ming-Te Wang 3) JiesiGuo . In their study, they examined whether growth mindset and goal commitment impacted the grit (defined as consistency of interest and perseverance of effort) and whether grit acted as a mediator between growth mindset, goal commitment, and achievement outcomes. The findings suggested that grit is associated with increased engagement and academic achievement; and practitioners who wish to improve grit of adolescents may encourage goal commitment more than growth mindset.

SofikHandoyo (2018) studied to understand the relationship between students' motivation, academic performance, and career commitment on accounting profession among undergraduate accounting students. Three independent variables were investigated in this study namely study motivation, Academic Achievement and commitment carrier in the accounting profession. Intrinsic interest, extrinsic interest, normative beliefs and conflict anticipation were treated as sub-variables of the study motivation. The results indicated that majority of accounting undergraduate student choosing accounting study program due to intrinsic interest motivation and extrinsic interest motivation and there is no indication motivation influenced by normative beliefs motivation and conflict anticipation motivation. Intrinsic interest has a positive and significant correlation with Academic Achievement ($r=2.17$, $p<0.01$) and Academic Achievement has a positive correlation ($r = 0.124$) with commitment carrier in the accounting profession.

Procrastination, academic engagement and the use of multiple social network sites (e.g. Face book, Twitter, Instagram, etc) are the core elements of Closson and Bond's (2019) study with Canadian university students. In a very timely investigation, they reported that the use of certain social network sites contributed to procrastination and mal-adaptation to university life while other sites, the less complex ones, had less negative outcomes.

Academic Task Commitment

Academic task commitment in this study, focuses on tasks that the student is expected to fulfil both curricularly & co-curricularly to qualify and to be eligible to obtain the certification needed to complete high school education (based on the 10+2 model) before qualifying to pursue the +2 pre-university course. India's new National Education Policy (NEP 2020), visualises a 5+3+3+4 system leading to a four year university degree in place of the present 10+2+3 based three year degree. After a detailed literature review with specific reference to Indian context, this study has a working definition of academic task commitment.

The authors have done a detailed study and have defined it as the ability with the below mentioned factors

1. Endurance
2. Strong Ego, Fascination & Perseverance,
3. Self Confidence
4. Interest & Enthusiasm
5. Self Determination, Hard work and Dedicated Practice

Each of the components has been defined as follows.

1. Endurance: Refers to the ability to be on high psychological energy levels which facilitates completion of the academic tasks. Its various components include; Memory, Thinking and Reasoning, Problem solving, Language Competence, Planning ability, Ability to Evaluate and Reflect.
2. Strong Ego Fascination & Perseverance: Is the ability to intrinsically feel driven uninterruptedly towards studies and education irrespective of the difficulty levels of the learning tasks. Its various components are Interest, Academic and Intellectual Curiosity, Excitement and Self Drive towards academic activities.
3. Self Confidence: Is a belief in one's own ability to carry out academic tasks. Its different components are Self-esteem, Courage and Imaginability.
4. Interest and Enthusiasm: Is the ability of the learner to feel, show and demonstrate high energy levels to be engaged in academic tasks. Its components are, Interest towards academic tasks, Thinking constantly about academic activities, Demonstration of interest towards academic tasks, and Pursuing higher levels of academic activities constantly.
5. Self Determination, Hard work and Dedicated Practice: Is the ability to plan and implement one's own study habits, with long hours of engagement in learning situations. Its components are Realistic Planning of studies, Effective time management, Focused Attention to the planned activities, Self-discipline, and Accomplishment of planned activities.

Objectives:-

1. To find out the significant relationship between Academic Task commitment and Academic Achievement among select high school children in Bangalore-India.
2. To study the significant difference in Academic Task Commitment among boys and girls due to gender
3. To study the significant difference in Academic Achievement among boys and girls due to gender
4. To study the significant difference in Academic Task Commitment among school children due to socio economic status.
5. To study the significant difference in Academic Achievement among school children due to socio economic status.

Hypotheses:

1. **H1:** There is no significant relationship between Academic Task commitment and Academic Achievement among school children.
2. **H2:** There is no significant gender difference in Academic Task commitment among boys and girls.
3. **H3:** There is no significant gender difference in Academic Achievement among boys and girls.
4. **H4:** There is no significant socio economic status difference in Academic Task Commitment among school children.
5. **H5:** There is no significant socio economic status difference in Academic Achievement among school children.

Design & approach of the Study

In this study, a correlational non-experimental research design was employed using quantitative approach because the study was intended to investigate the relationship between gender, socio economic status ,academic task commitment and academic achievement. According to Fraenkel and Wallen[41], correlation research describes an existing relationship between variables. The study took the quantitative approach because it was based on variables measured with numbers and analyzed with statistical procedures. This design method helped us to realistically explore the phenomena in more natural manner. High school students from select co-educational schools were given usable research questionnaires. To assess the validity of items in the questionnaire in measuring variable constructs, Pearson correlation coefficient was used and to measure the reliability, an Academic Task Commitment tool was used. This correlational research allowed us to understand the interrelationship between Academic Task commitment and Academic Achievement.

Sample

The sample of the study comprised 126 schools students in the age group 12-16 years, of which there were 65 boys and 61 girls studying in Bangalore urban (India) based school selected using non probability purposive sampling technique.

Tool used:

- Variable
 - Academic Task Commitment
- Tool
 - Academic Task Commitment
- Authors
 - C.G. Venkatesha Murthy & Kiran N.C (2016)
- Type
 - Check-list
- Reliability
 - Internal consistency .87
 - Test-retest .96

Establishing Validity (Content validity % of experts calculated items) total Percentage

The checklist having 127 items were subjected to the experts and for the first rating 'Fully Agree' the percentage calculated was 55%, 'Agree' 40%, 'Just Ok' 4%, 'Disagree' 2% , subsequently and 'Fully Disagree' 0% at the end of the process 6 items were removed and 121 items were retained in the checklist.

At the final stage of the validation process language expert was called in for her opinion on items . She thoroughly examined the items and found 7 items to be vague with repeated ideas and removed them from the checklist. Finally 114 items were retained in the checklist.

Results:-

H1: There is no significant relationship between Academic Task commitment and Academic Achievement among school children.

Table I:- Correlation between Academic Task commitment and Academic performance.

Variables	N	M	SD	r	p
Academic Task commitment	126	54.52	16.25	.35**	.001
Academic performance		69.98	26.99		

Note: $p < 0.01$ ** is significant at the 0.01 level (2-tailed).

The correlation was calculated for the two variables, i.e., Academic task commitment and Academic Achievement on 126 school children. The Pearson correlation results showed that there was a low significant positive correlation between Academic task commitment and Academic Achievement ($r = .35$, $p < 0.01$), indicating that higher levels of Academic Achievement were related to higher levels of academic task commitment. Therefore, rejecting the null

hypothesis which states that “There is no significant relationship between Academic Task commitment and Academic Achievement among school children”

H2: There is no significant difference in Academic Task commitment among boys and girls due to gender.

Table II:- Gender related Independent Samples t Test of Academic Task commitments.

ATC	N	M	SD	SE	t	df	P
Boys	65	48.72	27.38	3.39	2.55**	124	.012
Girls	61	60.70	25.35	3.24			

Note: $p < 0.01^{**}$ is significant at the 0.01 level (2-tailed).

An independent sample t-test was conducted to compare the differences in Academic task commitment between boys and girls. The results revealed that there was a significant difference in the scores of Academic task commitment among girls ($M = 60.70$, $SD = 25.35$) and boys ($M = 48.72$, $SD = 27.38$) indicating that girls have higher Academic task commitment levels compared to boys counterpart. Therefore, rejecting the null hypothesis which states that “There is no significant gender difference between Academic Task commitment among boys and girls”

H3: There is no significant difference in Academic Achievement among boys and girls due to gender.

Table III:- Gender related Independent Sample t Test of Academic performances.

Academic Performance	N	M	SD	SE	t	Df	P
Boys	65	63.64	15.32	1.90	4.93**	124	.001
Girls	61	76.74	14.49	1.87			

Note: $p < 0.01^{**}$ is significant at the 0.01 level (2-tailed).

An independent sample t-test was conducted to compare the differences in Academic Achievement between boys and girls. The results revealed that there was a significant difference in the scores of Academic Achievement among boys ($M = 63.64$, $SD = 15.32$) and girls ($M = 76.74$, $SD = 14.49$) indicating that girls have higher Academic Achievement levels compared to boys counterpart. Thus, rejecting the null hypothesis which states that “There is no significant gender difference in Academic Achievement between boys and girls”

H4: There is no significant difference in Academic Task Commitment among school children due to socio economic status.

Table IV:- Socio economic status related Independent Sample t Test of Academic Task commitments.

Academic task commitment	N	M	SD	SE	T	Df	P
Middle income	98	53.70	27.07	2.73	.637	124	.527
Upper middle income	28	57.39	26.99	5.10			

An independent sample t-test was conducted to compare the differences in Academic task commitment between middle income and upper middle income groups. The results revealed that there was no significant difference in the scores of Academic task commitment among middle income groups ($M = 53.70$, $SD = 27.07$) and upper income group ($M = 57.39$, $SD = 26.99$) indicating that there was no significant difference among both the groups in academic task commitment. Therefore, accepting the null hypothesis which states that “There is no significant socio economic status difference between Academic Task Commitment among school children”

H5: There is no significant socio economic status difference between Academic performances among school children.

Table V:- Socio economic status related Independent Sample t Test of Academic performances.

Academic Performance	N	M	SD	SE	t	Df	P
Middle income	98	67.83	15.72	1.588	2.82**	124	.007
Upper middle income	28	77.52	16.09	3.042			

Note: $p < 0.01$ ** is significant at the 0.01 level (2-tailed).

An independent sample t-test was conducted to compare the differences in Academic Achievement among middle income and upper middle income groups. The results revealed that there was a significant difference in the scores of Academic Achievement among

Upper middle income groups ($M = 77.52$, $SD = 16.09$) and middle income groups ($M = 67.83$, $SD = 15.72$) indicating that there was a significant difference among upper middle income group in academic performance. Thus, rejecting the null hypothesis which states that "There is no significant difference in Academic achievements among school children due to socio economic status".

Discussion:-

Commitment and performance are interlinked in any field of endeavour and are extremely crucial in endeavours where competition is high. Academic Achievement is very important in school finishing stage, paving way for career building in higher professional pursuits. Academic Achievement is much related to academic task commitment. Table 1 indicates that higher level of task commitment results in higher performance clearly indicating that the factors of task commitment enable good performance. Table 2 clearly indicates that compared to boys, girls are more serious and therefore their academic commitment is higher than boys. Consequently, table 3 shows that girls have higher academic achievement than boys. Due to higher academic task commitment as shown in table 2, the academic achievement of girls is higher than boys. Studies conducted by Collins & Amabile, (1999, p. 299) found that only few students have high level's of motivation, or task commitment.

Many school children have strong interests in creative IT use, demonstrate high immersion and little interest in possible rewards. This motivation "to engage in an activity primarily for its own sake" leading to commitment is close to the notion of flow. One feels absorbed with the problem, loses sense of the outer world and experiences a state of being happy. At the same time, flow is not just fun, it accompanies hard and productive work (Csikszentmihalyi et al., 1993). Authors Bloom, (1985); Csikszentmihalyi et al., 1993; Gross, 1993; and Janos & Robinson, 1985), found that children who are underachievers are not motivated and they develop low self-esteem about their intellectual capacities.

The factors like Endurance, Strong Ego, Fascination & Perseverance, Self Confidence, Interest & Enthusiasm, Self Determination, Hard work and Dedicated Practice empower higher achievement in an individual. Table 5 shows that children from upper middle class were high on academic achievement than children from middle income group. In the context of vital role being played by Internet and Communication Technology (ICT) in today's teaching and learning, being able to afford good internet connection and a decent Laptop has become a challenge and lack of affordability can impact academic performance. Teaching pedagogy and instructional mode also has lot of ICT enabled processes and poor affordability and resource crunch factors may also affect the performance in a large section of the society.

Findings

Study reveals that higher level of academic task commitment leads to higher academic achievement. Compared to boys, girls are more serious and therefore their academic task commitment is higher than that of boys. As a consequence, academic achievement of girls is higher than that of boys. The factors like Endurance, Self Confidence, Interest & Enthusiasm, etc. empower higher achievement in an individual. In an era where learning and teaching is strongly driven by technology and gadgets, students from upper middle class having financial affordability were high on academic achievement than children from lower middle class

Limitation of the Study:

This study is limited to a few students from three select schools having different affiliations and syllabi and respective board of examination. Study relied on data obtained via questionnaire and used correlational analysis in

certain aspects. This marked the causal relations between variables little grey. Factors like parent's educational attainments, family culture, beliefs and social variables, have not been considered in this study. Further the facilities and infrastructure of the three schools, their culture, academic excellence, quality of teachers and teaching, location, management, etc that influence commitment and performance in academics have not been considered. Hence the findings cannot be generalised.

Suggestions for Further Studies:-

Academic task commitment and academic achievements are very important milestones in any individual's pursuit of career. Emotional and cognitive factors affecting and shaping commitment in a student, need to be studied and understood. What transforms commitment into behavioural matrices enabling achievement also merits a detailed factor wise study. Factors like parent's educational attainments, family culture, beliefs and social variables, IT facilities and infrastructure of schools, their culture, academic excellence, quality of teachers and teaching, location, management, etc have to be considered and this will enable educational Psychologists to design interventions and strategies, in order to have good qualities for enhancement of academic performance. In the context of affordability playing a vital role in today's ICT driven teaching and learning, how government and schools can formulate policies and enable the students belonging to the economic lower middle class and lower class have the ICT enabled learning opportunities equivalent to those who can afford, is an important area of further study.

Declaration of Conflicting Interests

The authors hereby declare that conflicts of interest with respect to this research, authorship, and/or publication of this article, do not exist.

References:-

1. Anggraini, Vanny & S, Neviyarni. (2020). The Task Commitment on Student. *Journal of Counseling, Education and Society*. 1. 13. 10.29210/08jces45200.
2. Bloom, B. S. (1985). *Developing talent in young people*. New York, Ballantine Books.
3. Bashir, B. and Gani, A. (2020) 'Correlates of Organisational Commitment Among University Teachers in India: An Empirical Investigation', *Asia-Pacific Journal of Management Research and Innovation*, 16(1), pp. 7–20. doi: 10.1177/2319510X19872632.
4. Collins, M.A. & Amabile, T.M. 1999. Motivation and creativity. In Sternberg, R.J. (Ed.), *Handbook of Creativity* (pp. 297-312), Cambridge, MA: Cambridge University Press.
5. Chairunnisa, C. and Kosasih, A., 2019. The Influence of Academic Culture and Task Commitment Toward Lecturers' Innovativeness. *The Journal of Social Sciences Research*, 5(12), pp.1850-1854.
6. Closson, L.M. and Bond, T.A., 2019. Social network site use and university adjustment. *Educational Psychology*, 39(8), pp.1027-1046.
7. Clark, H.H., 2006. Social actions, social commitments. *Roots of human sociality: Culture, Cognition and interaction*, pp.126-150.
8. Csikszentmihalyi, M., Rathunde, K. and Whalen, S., 1997. *Talented teenagers: The roots of success and failure*. Cambridge University Press.
9. Chernyshenko, O.S., Kankaraš, M. and Drasgow, F., 2018. Social and emotional skills for student success and well-being: Conceptual framework for the OECD study on social and emotional skills.
10. Gross, M.U., 2002. *Exceptionally gifted children*. Routledge.
11. Handoyo, Sofik., 2018. Study Motivation, Academic Performance and Commitment Career in Accounting Profession. *Journal of Education and Learning (EduLearn)*. 12. 366. 10.11591/edulearn.v12i3.8078.
12. Ismanova, D., 2019. Students' loyalty in higher education: The mediating effect of satisfaction, trust, commitment on student loyalty to Alma Mater. *Management Science Letters*, 9(8), pp.1161-1168.
13. Janos, P. M., & Robinson, N. M. 1985. Psychosocial development in intellectually gifted children. In F. D. Horowitz & M. O'Brien (Eds.), *The gifted and talented: Developmental perspectives* (pp. 149–195). American Psychological Association. <https://doi.org/10.1037/10054-006>
14. Jang, J., Chung, Y., Choi, Y. and Kim, S.W., 2013. Exploring the characteristics of science gifted students' task commitment. *Journal of the Korean association for science education*, 33(1), pp.1-16.
15. Kiran, N.C. and Murthy, C.V., 2017. Academic Task Commitment among the Students of Jawahar Navodaya Vidyalayas (JNVs) and Kendriya Vidyalayas (KVs).
16. Kell, H.J., Lubinski, D. and Benbow, C.P., 2013. Who rises to the top? Early indicators. *Psychological Science*, 24(5), pp.648-659.

17. Martin, A.J., Collie, R.J. and Frydenberg, E., 2017. Social and emotional learning: Lessons learned and opportunities going forward. In *Social and emotional learning in Australia and the Asia-Pacific* (pp. 459-471). Springer, Singapore.
18. McCormick, James. (1988). The academic task. *Lancet*, 2, 326. 10.1016/S0140-6736(88)92370-7.
19. Moore, P.J., Mo Ching Mok, M., Chan, L.K. and Yin Lai, P., 2006. The development of an indicator system for the affective and social schooling outcomes for primary and secondary students in Hong Kong. *Educational Psychology*, 26(2), pp.273-301.
20. Nowak, M.A. and Sigmund, K., 1998. Evolution of indirect reciprocity by image scoring. *Nature*, 393(6685), pp.573-577.
21. Panditrao, M.M. and Panditrao, M.M., 2020. National Education Policy 2020: What is in it for a student, a parent, a teacher, or us, as a Higher Education Institution/University?. *Adesh University Journal of Medical Sciences & Research*, 2(2), pp.70-79.
22. Renzulli, J.S., 1978. What makes giftedness? Reexamining a definition. *Phi delta kappan*, 60(3)\p.180.
23. Roberts, G., 2005. Cooperation through interdependence. *Animal Behaviour*, 70(4), pp.901-908.
24. Sandler, M.E., 2002. A Structural Examination of Academic Integration, Perceived Stress, Academic Performance, and Goal Commitment from an Elaborated Model of Adult Student Persistence.
25. Trivers, R.L., 1971. The evolution of reciprocal altruism. *The Quarterly review of biology*, 46(1), pp.35-57.
26. Tang, X., Wang, M. T., Guo, J., & Salmela-Aro, K. ,2019. Building Grit: The Longitudinal Pathways between Mindset, Commitment, Grit, and Academic Outcomes. *Journal of youth and adolescence*, 48(5), 850–863. <https://doi.org/10.1007/s10964-019-00998-0>
27. Urhahne, D., 2011. Teachers' judgments of elementary students' ability, creativity and task commitment. *Talent Development & Excellence*, 3(2), pp.229-237.
28. Wallen, N.E. and Fraenkel, J.R., 2013. *Educational research: A guide to the process*. Routledge.