

Influence of Academic Achievement of Higher Secondary School Student

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Abstract

Achievement motivation is one of the criterions in a contemporary society as it plays central role in learning and career success. This mixed methods, explanatory sequential study explores the achievement motivation of 600 higher secondary students (ages 16 -17) residing in Thrissur district in Kerala using the Deo-Mohan achievement motivation questionnaire. The second phase of the study which is of qualitative in nature, consist of two focus group discussion of teachers and interview of parents. Chi- square test, t- test and levene's test were used to analyse quantitative data and thematic analysis for qualitative data. Quantitative data analysis indicated that the achievement motivation of adolescents is below-average level. Many themes emerged from the qualitative analysis such as deficit of a long-term goal in life, budding romantic relations, access to IT, demand for more freedom, peer pressure, alcohol and drug abuse, stressful family environment, stream preference, difficulty in coping new syllabus, were the reasons for the low motivation in adolescents. A significant difference was found between the achievement motivation of girls and boys and between students from the urban and rural areas. No significant difference was noticed between the students from government and aided schools.

Keywords: *Achievement Motivation, Adolescent, Explanatory Sequential Design.*

1. INTRODUCTION

Motivation has a crucial role in academic achievement which in turn is related to society's development (Amrai, Azizi, Elahi, & Parhon, 2011). Academic achievement has major effects on jobs or career prediction and therefore recognizing the motivation of adolescents is crucial which ensures whether the students appreciate their potential in school (Domene, Socholotiu, & Woitowicz, 2011). Problems such as anxiety, hot temperedness, academic under-achievements, and rigid school laws are seen in higher secondary students of Kerala (Mumthas & Muhsina, 2014). Motivation plays a significant role in the school context; a higher level of motivation leads to higher achievement level (Bakadorova & Raufelder, 2017; Gupta, 2012). Motivation is generally defined as the internal situation that stimulates, directs and maintains behavior (Kulwinder Singh, 2011). Academic performance and motivation have an indispensable relationship (Amrai et al., 2011). The term achievement, in the school context, refers to the degree or the level of success attained in some specific school tasks especially scholastic performance (Singh, 2011). Many studies show that the level of achievement-motivation influences academic achievement. There has been a growing interest in recent years in the analysis of achievement motivation as a basic character trait leading to personal achievements as well as excellence (Gupta, 2012; Mansfield & Wosnitza, 2010; Bandhana and Sharma, 2012; Stinmayr, Ricarda, Weidinger, Schwinger, & Spinath, 2017; Singh, 2011). Achievement motivation is an important pre-requisite in modern society because of its central role in learning and career success (Barret & Morgan, 2018). It is considered as a measure to judge student's total potentialities and capabilities. Achievement motivation energises and directs behaviour towards achievement and is thus considered to be a significant determinant of academic achievement. The level of achievement motivation defines the reasons behind people's behaviour and determines why they behave in a particular way. It is a striving force to increase or to keep as high as possible, one's capabilities in all activities in which a standard of excellence is maintained (Klaeen, Eifler, & Riemann, 2017). The vigorous and pioneering work in the field of achievement motivation has shown the importance of the motivation for achievement in adolescence (McClelland, 1955). Adolescence is a critical period for teenagers in establishing their goals, especially career choices (K. Singh, Bassi, Junnarkar, & Negri, 2015; Rogers & Creed, 2011; Santrock, 2007).

Adolescents have certain enlightening important assignments such as the development of an identity, conversion of family relationships, building tie-up with peers, maturing sexuality, scholastic achievement and career planning (Janardhana & Manjula, 2017; Santrock, 2014). Research shows that adolescents at the age of 16–17 years, about 25% have had a major depressive episode at some time in their lives (Essau, Conrard, & Petermann, 2000) and had increased mental illness and psychosocial maladjustment (Kamlesh Singh et al., 2015). Studies have suggested that the decline in motivation occurs in the late years of elementary school and this decline is most pronounced during educational transitions (Emmanuel, Adom, Josephine, & Solomon, 2014). Over the past 20 years, adolescents motivation in learning contexts has emerged as an important issue of educational research (Covington, 2000; Wigfield, Eccles, Schiefele, Roeser, & Davis-Kean, 2007; Martin, 2007; Deci & Ryan, 2008; Lee et al., 2012; Chetri, 2014; DeCaro, DeCaro, & Rittle-Johnson, 2015; Damle & Christian, 2016; Han & Lu, 2018; Barret & Morgan, 2018). Working with and helping adolescents have always been a priority across time and culture as they hold the promise of our future (Prajapati, Sharma, & Sharma, 2016). Researchers have shown that there is a tremendous decline in achievement motivation for adolescents during the transition from early adolescence to late adolescence (Mansfield & Wosnitza, 2010; Pittman & Richmond, 2007). In view of the disparity between results of class X and plus two in the last three years in Kerala syllabus, we understand the importance of paying attention to higher secondary school students (Government of Kerala, n.d.). Higher secondary education plays a very important role in all Keralites as all decisions are taken for the future after this education (Prasida, 2014). In Kerala, there has been little research investigating the achievement motivation of teenagers. This study attempts to probe two questions, what is the level of achievement motivation in higher secondary school students? What is the level of achievement motivation in adolescents from the perspective of parents and teachers?

2. METHODS

Type of research

This study aims to fill the above-mentioned gap by investigating the level of achievement motivation of adolescents (16-17-year-old) in Kerala by an explanatory sequential method. This is a two-phase mixed method design which includes a collection of both qualitative and quantitative data in response to research objectives. The researcher collected quantitative data in the first phase, analysed the results, and to support the quantitative analysis planned the second, qualitative phase (Schoonenboom & Johnson, 2017; Creswell & Clark, 2011). The rationale for this approach is that the results of quantitative data provide a general picture of the research problem and findings from qualitative data extend or explain the general picture by exploring participants views in more depth (Ivankova, Creswell, & Stick, 2006).

Phase 1: Quantitative Analysis

3. OBJECTIVE:

To examine the existing level of achievement motivation of adolescents age 16 and 17 years

Participants and procedure

After reviewing the different sampling techniques, stratified random sampling was found to be the most appropriate sampling for this study. The researcher applied the technique of Stratified random sampling to select the sample from the population. The population being studied was divided into eight strata based on, location i.e. rural/urban, gender i.e. boys/girls, type of governance i.e. aided / government. 20 schools were selected using stratified random sampling through lottery method by dividing the schools into mutually exclusive groups/strata such as type of school management and locality of schools. The rationale behind this selection is fixing a quota for making an equal representation of four strata i.e. urban government, urban aided, rural government and rural aided (5+5+5+5). The 1:1 ratio of allocation for males and females is maintained. A statistical power analysis was performed for sample size estimation; the sample size of 600 was more than adequate for the main objective of this study.

Ethical considerations

The ethics approval was received from the university research ethics committee (UREC). The principals of the higher secondary schools were contacted in advance and permission was sought from them to conduct the study. Informed consent from parents and assent from the students was obtained.

Research Tool

Independent variable: gender, management of the school, locality.

Depended Variable: Achievement motivation Achievement motivation was assessed using Deo Mohan

Achievement scale developed by Prof. Pratibha Deo (Pune) and Dr Asha Mohan (Chandigarh). The scale consists of 50 items. It is not time-bound. This questionnaire is a self-rating type with five points to rate, viz., Always, Frequently, Sometimes, Rarely and Never. It has no time limit.

4. DATA ANALYSIS TECHNIQUE

For statistical calculations SPSS software version 22.0 was used. The level of significance was fixed as 0.05.

Tests such as Independent sample t-test and Chi-square test were used to test the hypothesis.

Chi-square test was performed with the following assumptions.

Ho: Achievement motivation is independent among male and female adolescents

H1: Achievement motivation is dependent among male and female adolescents

Ho: Achievement motivation is independent among Govt. and Aided students

H1: Achievement motivation is dependent among Govt. and Aided students

Ho: Achievement motivation is independent on locality

H1: Achievement motivation is dependent on locality

Chi-Square Tests		
Variables	Pearson Chi-Square Value	Asymp. Sig. (2-sided)
Gender	10.885	.004
Type of management	2.997	.223
Locality	13.606	.001

The above table shows Karl Pearson Chi-Square values related to gender, type of Management and locality. It may be inferred that the type of management does not affect the level of motivation of the students (pvalue .223). The p-value of gender and level of achievement motivation is $0.004 < 0.05$, and the p-value of locality and level of achievement motivation is $0.001 < 0.05$. The significant values of gender and level of achievement motivation, locality and level of achievement motivation are less than the level of significance. Then the null hypothesis is rejected. It means that there is a significant difference in the level of achievement motivation among gender and location.

Existing Level of Achievement Motivation of Higher Secondary School Students

Raw score	Z score range	level of achievement motivation	No. of respondents	%
Below 109	-2.01 and below	Lowest motivated	117	19.5
109-123	-1.26 to -2.00	Low motivation	177	29.5
124-138	-0.51 to -1.25	Below average motivation	148	24.67
139-159	-0.50 to .50	Average motivation	130	21.67
160-173	.51 to 1.25	Above average motivation	26	4.33
174-189	1.26 to 2.00	High motivation	2	.33
189-200	+2.01 and above	Highly motivated	0	0

From the perusal of the above table of the data, 19.5 % of respondents have the lowest motivation 29.5% respondents have low motivation and 24.67 % come under below average motivation. Only two respondents are highly motivated. A large segment of higher secondary students i.e. 74% of students is having low achievement motivation. As per this scale, level of achievement motivation among adolescents is below average motivation.

Qualitative Analysis (Phase 2)

To probe further into the quantitative analysis result, two focus group discussions were conducted with teachers. The first focus group discussion was conducted in an urban aided school in August 2017 and another was in a rural government school in sept 2017. Both the discussions were attended by eight teachers from the same school. The age range was between the age of 40 and 46, with a minimum of 16 years of service in higher secondary schools. Teachers were selected by convenience sampling. The time and date of the discussion were predetermined. Written consent from the participants were obtained before beginning the discussion. An unstructured interview with eight parents was also conducted. Parents of low achievers were selected by lottery method. The interview was attended by a father or mother who was interested in their children's learning. The participants were given a choice to choose a place for the interview, where she or he felt at ease sharing the details of their experience openly.

5. MAJOR THEMES IDENTIFIED THROUGH QUALITATIVE ANALYSIS

1. The deficit of a long term goal in life

A primary reason for low achievement motivation that has been observed in the analysis of the qualitative data of the focus group discussion and interview was deficit of a long term goal in the student's life. Some of the causes may be attributed to money motivated life, reluctance to hard work and virtual world. Most of the parents and the majority of the teachers complained that students especially boys lack a long term goal in life. The required money for their personal wishes was earned through small jobs like catering services and a part-time job. Adolescents keep on pressuring their parents to give them money. One parent recalled „one day I told my son, ‘I would not give you money’, then he said, ‘if you are not giving money I will commit suicide’. I do not have enough courage to say no’ (mother-home maker / 43years/R6, interview). Another parent reported „He goes for small jobs like electrical works, computer applications, catering service to earn his pocket money (mother-daily wage/47years/R1/Interview)’. The parents opined that, their children do not like to work hard. They do not have the habit of studying regularly. The only time they do learn something academically is during exam time and that too hardly an hour. One parent remarked „his friends do not study regularly and tease him for being studious. So he stopped regular studies’ (father- electrician /53years /R7/Interview). A teacher added in a focus group discussion „They spent 6 hours and more a day on the internet, but they are short of time to be in front of their textbooks’ (Male teacher/54years/ FGD/R1/Sept 2017).

2. Budding romantic relationships

A teacher responded that „one boy may have one affair in the class, one in the tuition class, one in the neighbourhood and one in other social circles. As a result, they are not able to concentrate properly in the class“(Female teacher/ 47 years/ FGD/R5/Sept 2017). One mother complained in an interview „subject of his conversation is always about girls. His hobby is to enjoy the beauty of all the girls who pass by“(R2/54years/ mother –home maker/ Interview). Most of the teachers agreed to the point, romantic love relationships negatively affect academics however parents are not be much aware of this.

3. Access to information technology

It was evident that information technology has a positive and negative influence on adolescents' life. One teacher shared in FGD „With different sources available to students in urban areas, they are capable of preparing long speeches exceeding required time limits which once upon a time was an impossible task.“(Female teacher/ 42 years/ FGD/R2/ Aug 2017). But in an interview, another mother shared „he has friendships with over 500 girls in 50 countries. Through Google translator, he can manage to chat in all different languages (mother-home maker/ 43years/R6). In FGD one of the teachers commented that „They spend 6 hours and more a day on the internet“(male teacher /52years/ FGD/R8/Sept 2017).It may be inferred from the data that there are three main reasons for the low achievement motivation among the adolescents related to information technology. First, they compel their parents for expensive mobile phones with latest features, which the parents themselves are ignorant about. This leads to the

second cause, i.e., the parents cannot ask anything about it. And lastly, the students just keep on surfing the internet navigating from one site to the next interesting site and so on, during which they are not cautious about time.

4. Stressful family environment

It is to be noted that both parents come home late because of their work so they do not have time to talk to their children. Single parent either divorce or living abroad also causes problems. When children's learning becomes an issue of the dignity of the home, it can lead to many problems. The teacher said in the focus group discussion „There was a boy who was scoring good marks in all his class exams. With pressure from home, he used to appear all exams even if he was down with fever. This was insisted upon by his mother. Once he was down with fever and didn't want to appear for his Physics exam, and his mother forced him to write the exam. When the results were out, he had cleared all the papers except Physics. He was mentally down and couldn't face his mother. With mental torture, he took 20 pills in a row and killed himself.”(female teacher/ 46 years/ FGD/R2/ Aug 2017). Comparison to the neighbourhood students also becomes a problem. Adolescents are often reluctant to share their feelings because they think their parents could not understand them.

5. Demand for more freedom

In an interview, the mother of a boy said, “Most days he comes home too late. He is gripped with the influence of bad habits of drinking and smoking. My son thinks that these are signs of manliness which he has grown, not knowing that he is destroying his health and future career” (mother-home maker / 44 years/ /R3/ Interview). Another parent disclosed, “My son does not entertain any question about himself under the garb of his freedom and privacy” (mother- daily wage/47years/R1/Interview). Very often when adolescents demand more freedom it is just for experimenting with new things.

6. Peer pressure,

alcohol and drug abuse Majority of the parents complain that their male children spent most of the time with friends. „He would go to their house every morning, even though some are far away. He has a peculiar hair cut which was suggested by his friends” (mother-daily wage/47years/R1/Interview). A mother added „He does whatever his friend's suggest” (mother-home maker/ 44 years/ /R3/ Interview). The majority of teens with substance abuse problems began using drugs or alcohol as a result of peer pressure. In the FGD a teacher said that „students go to their friend's house and spend time with them which has become a trend today. In these gatherings, there is an increasing tendency for students to drink alcohol and smoke cigarettes” (maleteacher /52years/ FGD/R8/Sept 2017).

7. Stream preference

Parents always pressure their children to choose a career according to their interest. According to them, being sixteen years of age is not a prompt age to take life and career decisions of their own. So adolescents have to accept their parent's preference. It was also mentioned by one of the teachers that, „Parents are thinking that science has more job opportunities than other subjects.” (Female/ 48years/ FGD/R1/ Aug2017).

8. Difficulty in coping with new syllabus

A teacher said that „as the students from Kerala education policy, who have been promoted till tenth without having a strong foundation in the lower classes find difficulty to cope up with the new syllabus, gradually loses their motivation “. (Female/ 48 years/ FGD/R4/ Aug 2017). „Those who came from CBSE and ICSE syllabus seemed to have a bit easier to learn”(maleteacher /52years/ FGD/R8/Sept 2017).

6. DISCUSSION

This study investigated the level of achievement motivation of adolescents at the age of 16 and 17. It specifically examined whether students in aided and government schools, urban and rural areas, girl and boy differ in the achievement motivation. The achievement motivation was found below average level for higher Secondary Students. Comparison of mean scores of achievement motivation for subsamples based on gender, locale and type of management, there exists a significant difference in score of achievement motivation among male and female, urban and rural. There is no significant difference in the achievement motivation between government and aided school

students. There is ample existing literature which supports the findings of this study. A study conducted among higher secondary biology students in Kerala found that majority of the students are average in their level of achievement motivation (Prasida, 2014). It was average for biology students, and when we consider the whole group of higher secondary students in this analysis, it seems to be below average. This study aligns well with Dhanya and Anitha (2013), in their study on the Achievement motivation of high school students, the girls have more desire to achieve than boys. Female college students have better meta-cognition than male college students. (Bhalla, 2015). But Vishwavidyalaya (2011) reports, boys have higher motivation for achievement than girls. The study goes well with the findings of S. Santhiram (2011) the urban students from the tenth class have higher levels of achievement motivation than the rural students. The finding of K. Vijayakumari & Rekha shows that there is no significant difference between the achievement motivation of types of school for secondary students (K. & M.P., 2014). A primary reason for low achievement motivation that has been observed in the analysis of the qualitative data of the focus group discussion and interview was “deficit of a long term goal in life”. It supports the study of Mansfield & Wosnitza 2010, where junior students (12 & 13 ages) scored higher than senior students (16&17) on all achievement goals and relationship goals. According to Stinmayr, Ricarda, Weidinger et al., (2017) achievement motivation is not a single construct but rather subsumes several different constructs likeability, selfconcepts, task values, goals, and motives for achievement. Motivation is classified into two types, intrinsic and extrinsic (Alt, 2015). It has been seen in certain schools in Kerala, by the time they reach higher secondary classes, they tend to have the seniority attitude of the school section whereby they behave like the grown-ups and are carefree. At this stage, adolescents are likely to seek new experiences and start to skip classes, cheat, use drugs or alcohol, share inappropriate material online, or become involved in other risky behaviours. A teacher shared her fears about the students, „There are many celebrations in school, we are afraid whether students are drinking and when students leave school we ask parents to accompany them’ (male/54years/ FGD/R1/Sept 2017). „Due to the popularity of social media, children are trying to find a boyfriend and girlfriend even from other countries’ (male/52years/ FGD/R8/Sept 2017). The love affair keeps adolescents away from reality (Janardhana & Manjula, 2017). Immature love relationships shift them away from home and community. Family environment has an important role in adolescent’s growth (Alfaro, Umana-taylor, & Bamaca, 2006). Most of the parents are employed and they are self-sufficient. Family cohesion became an old fashion. Sometimes adolescents happen to become the victims of their parent’s competition (Jaggers et al., 2015). A study done in Kerala with the sample of higher secondary students shows that children with high protective cover, traditional values, reward, nurturance and permissiveness have better empathy, critical thinking, self-awareness, coping with stress, interpersonal relations and effective communication as well as overall psychosocial competence. (Rapeal, Damodaran, & Paul, 2014). Home, which constitutes the immediate environment of an adolescent, is a system whose quality and manner is built up mainly with parental practices and parental beliefs (R. Singh, Pant, & Laitonjarn, 2014).

7. CONCLUSION

Achievement motivation of adolescents of age 16& 17 is below average level. Many previous studies have shown that the level of achievement-motivation influence academic achievement (Amrai et al., 2011; Gupta, 2012; Mansfield & Wosnitza, 2010). Those who are part of a low achievement category should be provided with adequate learning facilities and encouraged by teachers and parents so that they can succeed in their studies (Devi, 2010). Educational authorities should therefore consider this fact as a very important matter. The parents and society must make the younger generation motivated and inspired at the same time. Training in life skills will improve the self-perception and perception of others and will increase their self-confidence, assertiveness, sense of responsibility and inter-personal relationships (Saeed Rajabi, Moazedian, & Sabetiman, 2013). So the researcher strongly recommends to inculcate life skill education to the higher secondary students.

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