

A Self-Determination Theory on Effect of Teacher Autonomy Support on Students' Motivation in Public School of Pakistan

Roshi khalid*

Moafia Nader†

Afifa Khanam‡

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Abstract

Self Determination Theory conjectures that teacher autonomy support propels motivation in education and educational achievements; however, the question of socially different conversations within SDT questions significance of TAS in schools and classrooms located in Asia. In a quasi-experimental study, 101 Grade-5 students, of a public school in Pakistan, were taken as the population for the present study, who underwent the pretest and posttests. The tests consisted of intervention for seven sessions by an expert language teacher. The data was cumulated to find the results from pretest, posttest1, and posttest2 by using intrinsic motivation inventory, a self-regulation questionnaire, and a learning climate questionnaire to find out the level of interest in the students during this study. The results proved that the SDT is not a socially bound worth and is comparatively appropriate for Pakistani educational systems as well.

Key Words: Self- Determination Theory, Teacher Autonomy Support, Quasi-Experimental Study, Intrinsic Motivation, Socially Bound, Academic Outcomes

Introduction

“Motivation is defined as a process whereby goal-directed activity is instigated and sustained” (Pintrich & Schuck, 1996). It is a push-pull force that helps one to reach his destination. Motivation holds an important place in bringing a positive change in students' behavior as well as in bringing outstanding academic results however knowing the strategies of motivation for teaching in the classroom and observing students' presentation has remained a challenging task for educational theorists (Urduan & Turner, 2005). This is because many teachers fail in understanding techniques to motivate the students in class and are unable to catch students' interest in the given task. To understand the concept to develop an interest in studies the teachers must make several efforts and use different teaching strategies to keep students involved actively throughout the lesson. (Alexander, 2005). There are many studies conducted on finding out different ways and techniques to motivate the students and produce better academic results so that the number of failures reduces (McCombs & Whisler, 1997; Skinner & Belmont, 1993). Many theories like of Pavlov's (1927, 1928) classical theory, Skinner's (1953) conditioning theory, and Festinger's (1957) cognitive conflict theory is hard to find out the concept of motivation and the distinctiveness of motivation which can benefit the schools and students and among these theories, “Self-determination Theory” is one of the important theory which has defined the concept of “Self” the first which would lead to every trait and benefit that are linked with motivation especially in the field of education.

Self-Determination Theory (SDT) is an assumption which studies an individual's inspiration and deals with capability, self-sufficiency, and relatedness as a fundamental psychosomatic requirement, that is very important for every human being. The theory states that if human basic needs are fulfilled he can easily progress and grow

*Lecturer, Research and Evaluation Department (IOE), Lahore College for Women University, Lahore, Punjab, Pakistan.

Email: roshi.khalid@yahoo.com

†Assistant professor, Department of Professional Studies (IOE), Lahore College for Women University, Lahore, Punjab, Pakistan.

‡Assistant professor, Department of Professional Studies (IOE), Lahore College for Women University, Lahore, Punjab, Pakistan.

in any field of his life (Savani, Markus & Conner, 2008). There have been more than 30 years of empirical research conducted within this theory and have many important results which indicate that motivation is only possible when the basic psychological needs are catered. And further, it indicates that once these needs are catered, outstanding results are seen in the educational field and as well as in his personal growth and development (William, 2002) and education (Reeve, 2006).

The basic aim of this study was to come across the positive effects of learning with independence on the attention and inspiration level of the students when they were taught by different teaching techniques by a language teacher in a public school of Pakistan (Deci, & Ryan, 2008). The secondary purpose was to explore the social congruity of teachers' independent and effective teaching style in the Pakistani public school's culture. Inside the study of independent teaching structure, several studies have been conducted to inspect the effects of Teacher Autonomy Support on students' learning, motivation, and school functioning (Reeve & Jang 2006; Patrick, Skinner, & Connell, 1993). The present study was conducted to find out the impact of Teacher's independent and modern, and effective way of teaching to find learners' "interest" in public school.

Many investigations have been conducted in the past couple of years to access the success of learning skills in the classroom teachings functioning (Reeve & Jang 2006; Patrick, Skinner, & Connell, 1993) and many of the teachers and educators are well aware of the student-centered classroom technique which is a true learning environment in which students actively participate throughout the session (Estes, 2004). Many educational studies and researches have proved that student-centered classroom has always been an ideal situation to teach where students feel themselves important bodies in the classrooms where their opinions, suggestions, and answers are valued (Assor et al., 2002; Reeve 2006; Reeve & Jang 2006; Flink et al., 1990). Whereas those institutions that do not adopt student-centered classroom teaching techniques are still facing problems in gaining students' attention and interest in education hence affecting the academic results, too. One of the core reasons for not being capable of instilling motivation level in students was the lack of information on modern teaching pedagogies that were strongly recommended by many learning reforms (Littlewood, 1999).

Many studies have proved that traditional teaching methodology has obstructed the upcoming researchers to study or conduct research in public schools (Atagi, 2002). Moreover, the teachers of the 21st century should realize the importance of a student-centered classroom and should learn to adopt modern teaching technologies which will not just help the teachers in delivering their lessons but will also help in creating an interest in the students (Reeve, 2006). It is strongly recommended that the time requires that the teachers should work on student-teacher relatedness (Bao & Lam, 2008) and come out of hierarchical model so that students can feel free to participate in the discussion and feel free and safe to voice their opinion (Wlodkowski, & Jaynes, 1990).

Overall, in a Pakistani traditional educational society with strong socialist values, it is a big challenge to implement the reforms that encourage student autonomy in the classroom specifically in public schools where traditional teaching is followed so religiously that change is very hard to accept. Therefore, there is a need to develop an in-depth understanding of modern pedagogy and its importance to implement in Asian educational set up (Littlewood, 1999).

Teacher autonomy support (TAS) has earned worldwide popularity among educators and teachers for its benefits in improving students' school functioning with favorable academic results (Reeve, 2006). Throughout the world many educators and educational institutions, including the Pakistani Ministry of Education, have many times promoted the implementation of Teachers' independent way of teaching inside the class in educational institutions (Little, 2000). On the other hand, criticisms from cultural relativists and followers of traditional teaching have raised questions about the universal relevance of the autonomy construct, especially in the Asian classroom context (Hang, 2008). A review of the literature on producing motivation and interest in students of Pakistani public schools found very less or no information available on the effects of TAS on Pakistani students. Also, TAS, which over some time has developed into a structural teaching methodology, has rarely been tested in natural settings for its effects. Hence, the present steady endeavors to find the outcome of TAS on Pakistani learners' inspiration and attention in studies in a natural classroom setting using quasi-experimental non-equivalent group design.

Effects of Teacher Autonomy Support

The primary goal was to inspect the role of teacher's independent and effective teaching style on student learning (Patrick, Skinner, & Connel, 1993) as well as to examine the amount of interest the students gain after teacher's autonomy support (Assor, Kaplan & Roth, 2002). Ideally, in an autonomy-supportive classroom, teachers facilitate learning and teaching by warm-up sessions, asking questions, involving students in discussions, supporting students' feedback, and acknowledging their perspective (Reeve & Cai, 1999). The present study truly examined the effects of TAS on students' interest.

Interest

Interest is defined as a psychosomatic state that has emotional constituents of optimistic feelings and a cognitive constituent of attentiveness. Interest is also described as a psychological expression that is fully loaded with feelings of some portion of positive inclination and a mental fragment of core interest (Bergin, 1999). In this study, the subscale of intrinsic motivation to measure interest involves seven items to be reported on seven points Likert scale having 1= not at all true up to 7= very true (Ryan & Connell, 1989). To calculate a psychosomatic condition of the brain, typify by optimistic feeling for the task given, the answering range includes questions as "I enjoyed doing this activity very much". For the present study item, 3 and item 4 were rephrased into a positive statement, so that the students do not come across negative question phase (Vallerand, Pelletier, & Blais, 1993).

Research Design

A quasi-experimental design was chosen to study the effect of TAS on an experimental group (Cambell, & Stanley, 1979) whereas the controlled group was taught in the traditional manner (Gay, & Airasian, 2003). Based on the principles of self-determination theory and the recommendations from the literature on TAS, a comprehensive treatment session was developed for implementation in the experimental group. The treatment consisted of modern teaching pedagogy that emphasized on learners' autonomy in a classroom environment and the classroom environment was made student-centered. Teachers made use of non-controlling language and used flexible ways to assess students' learning (Fry, 2002). During the teaching session, the teacher would frequently invite student opinions and acknowledged their perspectives. Students were allowed to exchange learning aids, share their learning, and finish activities at their preferred pace.

Statement of Problem

The study addresses the following concerns:

- a) Literature about teachers' independent way of teaching in public schools to enhance inspiration was not sufficient to conduct the research. In other words, the great deficiency was found in composing available activities of Teacher Autonomy Support to be used in motivating students concerning the educational policies.
- b) Then the importance of "need" to inspect how the teachers teach in public schools where it is assumed that traditional teaching takes place.
- c) Lastly, to investigate the impact of teaching with different teaching pedagogies in the classrooms.

This study is conducted to overcome all these limitations.

Research Objectives

Self Determination Theory believes that when teachers are trained and allowed to teach using different productive modern teaching strategies, positive results will be obtained and will leave a positive impact on the student. Keeping this in line, the aim of this study is:

1. to examine the correlation between variables of interest and apparent autonomy support at pretest, postest1, and postest2.
2. to inspect the impact of teachers', help, and support on gaining students 'attention.

Research Questions

- 1: Is there any significant effect of TAS on student's interest?
- 2: Is there any important impact observed on students' attention and interest when the teacher stopped teaching with modern teaching strategy from the experimental group?

Research Hypotheses

- H1: There is a momentous positive correlation between attention (interest) and apparent autonomy support at posttest1.
- Ho: There is no major impact on teachers' teaching style on students' attention and interest in learning in the experimental group.

Material and Methods

The researcher developed interactive lesson plans/ modules for Grade V for English vocabulary building and gave the planners to the teacher with complete briefing and explaining how to execute the planner in the classroom (Black & Deci, 2000). Every topic was distributed in further subtopics as a compact module for independent learning. These modules incorporate different activities like group discussions, quizzes, SMART board activities, videos, mind maps and nature walk (Boggiano, Flink, Shields, Seelbach, & Bearrett, 1993). The trained English language teacher introduced each designed module and the planner in experimental class. She shared her objective too with her students and in every experimental class, the activities were described before implementation (Bonwell & Eison, 1991). An observer rated the learning of the students at different intervals and recorded the findings. Students were alienated into two groups, experimental and control groups. The control group underwent no treatment and was taught with chalk and talk method with written exercises, whereas the experimental group underwent treatment in seven sessions, each session lasting for about 60 minutes.

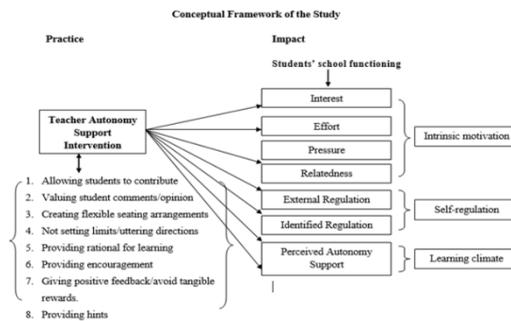


Figure 1: Conceptual framework of the study

The dialectic framework shows two agents and their contents in adjacent boxes. The upper and lower arrows present an interchange of effects on each other.

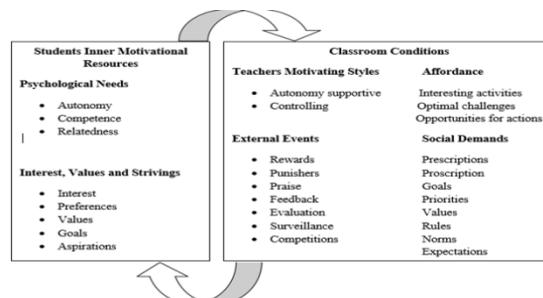


Figure 2: The Dialectic structure contained by Self-Determination Theory (Reeve, Deci & Ryan, 2004)

The above figure is explained as a cycle, in which the upper arrow presents that students engage themselves actively in classroom conditions as an expression of their innate motivational resources and turn, as shown through the lower arrow, classroom conditions either supports or hinders their autonomous motivation (Reeve, 2006). Subsequently, the dialectic framework suggests rationally the classroom environment as a “huge factor” in making, developing, proceeding, and sustaining student’s inner motivational resources (Reeve, Deci, & Ryan, 2004). Hence, the classroom setting and environment have to be pleasant, admirable, and comfortable which plays vital to bring a change in students leaning (Ryan, Stiller & Lynch, 1994).

To look at the effect of “interest”, the participants reported their response on self-report questionnaires on speculatively decided variable i.e. “interest” at pre-intervention, on post-intervention, and withdrawal of intervention (Bergin, 1999). The results from *MANOVA* analysis showed a significant difference after intervention on students’ interest within the experimental group. The other group that was not exposed to the treatment showed no difference in this variable (Sansone & Thomas, 2005).

The questionnaire was filled by students at pretest, posttest1, and posttest2 in both controlled and experimental groups. They were given the confidence that their response will not be shared or exposed to anyone. Neither would they face any kind of uncertainty.

The first analysis was a between-group comparison. The *MANOVA* analysis was performed to dissect the effect of teacher autonomy support (Tabachnick & Fidell, 2007). There was none noteworthy dissimilarity at interest level among the groups at pretest whereas when the Mean difference of posttest1 of experimental group and control group were compared. The result showed an important mean dissimilarity between the two groups.

Table 1. Descriptive data of Experimental and Control Group for Item Means on Variable (Interest) in Pretest, Posttest1, and Posttest2

	Experimental Group					Control Group				
	# of items	Item mean	D	Skew ness	Kurto sis	Item mean	D	Skew Ness	Kurtosis	
Interest (Pretest)	7	2.2	1.0	1.3	1.19	2.1	.4	1.13	.63	
Interest (Posttest1)	7	5.6	1.2	1.09	.73	2.3	.3	1.13	.17	
Interest (Posttest2)	7	5.1	.99	.37	.15	2.3	.3	1.32	.36	

The result of Table No.1, of the variable Interest, is found to be consistent with the finding in the past results confirming the positive impact of teachers’ teaching style on students’ interest (Reeve. Deci & Ryan, 2004). The principle examination of this outcome depends on *MONOVA. Statistics* programming SPSS was utilized to check the exactness of information received and the accuracy of the data collected. All the values on the 7-point Likert scale were within range. Expressive descriptive statistics proposed plausible means and standard deviation.

In the second analysis, the effect was evaluated within the experimental group by comparing gained score for pre-test (before TAS intervention) and posttest1 (after intervention). It was revealed that students in the experimental group showed vital differences on the dependent variable, after undergoing the treatment of teacher autonomy support, whereas no significant difference between the strategies of the means of pre-test and posttest1 of the control group was found.

Table 2. Summing up of Mean Differences of Pretest and Postest1 of Experimental Group

Dependent Variable	Mean	SD	Mean Difference(posttest1-pretest)
Pre-Interest	2.1	1.0	3.4
Post1 Interest	5.5	1.1	

In table 2.the The mean of all responses at pretest is 2.1 and at posttest1 is 5.5. It reveals an increase in positivity in the mean of variable Interest before the intervention and after the intervention. Hence, a positive correlation between PAS and Interest exists. In the present study, ideal autonomy-supportive environmental

was created to arouse students' interest like not setting deadlines, acknowledging students' hard work, valuing their opinion, making a student-centered classroom (reeve)

Table 3. Summing up of Mean Difference of Posttest1 and Posttest2 of Experimental Group

Dependent Variable	Mean	SD	Mean Difference(posttest1-posttest2)
Post1 Interest	5.5	.99	-.40
Post2 Interest	5.1	1.0	

In table 3, the means of all responses of interest at posttest1 is 5.5 and at posttest2 is 5.1. This shows that once interest is developed, there is no significant decrease in it even after the withdrawal of the intervention.

MANOVA: Before Intervention, During Intervention and After Intervention

Descriptive Data of Experimental and Control Group (Pretest, Posttest 1 & Posttest 2)

The first order of analysis began with checking the assumption that both the groups, experimental and control address a homogenous population. Table 4.1 shows descriptive statistics and normal distribution of data with the value of skewness and kurtosis.

Item mean for the above scales are obtained by dividing the composite mean with the number of items in the scale. In the pretest, the value of skewness, for the experimental group is 1.35 and kurtosis is 1.19. In the control group, the value of skewness is 1.13 and kurtosis is 0.63.

In posttest 1, the Value of skewness, for the experimental group is 1.09, and the value of kurtosis is 0.73. The value of skewness, in the control group, and value for kurtosis 1.13.

In posttest 2, the value of skewness is 0.37, and the value for Kurtosis is 0.15 for the experimental group. In the control group, the value of skewness is 1.32, and the value for Kurtosis is 0.36 which is considered acceptable evidence for normality (Tabachnick & Fidell, 2007).

The outcome indicates shows that there was an important positive correlation of interest with apparent autonomy support at pretest, posttest1, and posttest 2.

Interest after Intervention

Interest is said to play an important role in students' motivation and learning, and it helps individuals to select and retain information (Bergin, 1999). In the present study, participants in both experimental and control groups reported a lack of interest in the pre-test because the classroom environment was less flexible and more controlling. After intervention participants of the experimental group who were exposed to TAS reported a higher level of interest in the posttest1 on the given task and class activity (Deci, Koestner & Ryan, 1999).

After the withdrawal of intervention it is revealed that if within a period an individual develops an interest in a certain given task or topic, it is expected to carry on as a function of the earlier understanding of one's interest. It is probable to say that the state of interest continued even after the withdrawal of TAS, this being the result of the individual interest being developed based on prior experience associated with a specific subject (Deci & Ryan, 1985).

Overall, the study yields favorable implications for the practical application of the TAS teaching strategies in natural classroom settings (Deci, La Guardia, Moller, Scheiner & Ryan, 2006). Also, students would show more interest, expand the better effort, feel less pressured while learning. The objective of the present research was to bring a significant change in classroom teaching methodologies and convince teachers to expand or modify their teaching methodology, which has been achieved successfully (Renninger & Hidi, 2002).

Discussion and Conclusion

In the current study, the participants of both the groups, the controlled and experimental group, reported lack of interest at the beginning of the study which was eminent at pretest1 as the classroom atmosphere was nonflexible and was kind of more controlling. After the intervention, the participants of the experimental group who were open to the elements to the TAS showed remarkable raise in their interest level in studies

which was evident in posttest 1, whereas the understudies of controlled group remained the same as per the experimental study conducted by ([Ryan & Connell, 1989](#)).

After the withdrawal of the treatment, it was revealed that if an individual gains interest and energy for a particular activity or subject from his inside, it is most likely going to carry on as a segment of the related information on one's life for more time. More likely than not, the state of interest continued even after the withdrawal of TAS, which proves that the best way of teaching helps the students to retain the interest and motivation level permanently as found by ([Ryan & Grolnick, 1986](#)) or for a longer period.

As a rule, the researcher yields positive repercussions for useful utilization of the TAS indicating strategies in like student-centered classroom settings. Similarly, the participants would show increasingly premium, broaden better effort, and feel less constrained while learning as previously suggested by ([Deci, Speigel, Ryan, Koestner & Kauffman, 1982](#)). The objective of the ebb and flow hence indicate the favorable teaching techniques and positive academic results may convince the teachers to develop or modify their teaching methodologies as reported by ([Roth, Assor, Kannat-Maymon, & Kaplan, 2007](#)).

The findings of this study have multiple indications to consider that the monotonous teaching or old methodology which is also called “traditional teaching” especially for teaching English as a second language to the students will never bring change in their learning unless a serious and hard effort done claimed by ([Deci, Ryan & Williams, 1996](#)). The understudies will not only be left learning anything; they will not even show interest in learning the language which can result in lacking the skills in acquiring the second language. The positive results of the current study show favorable results that when the teaching methodology changes and the teachers teach according to the interest of the participants as per the results of ([Deci, Schwartz, Sheinman, & Ryan, 1981](#)). The result is different from the traditional classroom. Apart from showing significant results after the intervention of various teaching methods in a language class, the students also developed an interest in accepting the challenge of learning a new language supporting the researchers conducted by (Sarrazin, Tessier, Pelletier, Trouilloud & Chanal, 2006). The “interest” was so eminent that even after the withdrawal of the experiment, the curiosity of gaining and achieving remained high. The study brings food for thought for producing interactive lesson modules to address different deficit areas of the students in various subjects that are taught in public schools. In the future, more such modules can be produced with the help of the school administration and studies department to increase the concentration of the learners in different subjects. This study also highlights the immense need for designing teaching pedagogical content in syllabus breakup and lesson planning for productive lesson delivery in the future as advocated by ([Adeyemi, 2008](#)). The study also suggests that further research can help in improving the teaching culture in the public schools of Pakistan suggested by ([Ahmed, Shafie & Janier, 2007](#)). It is also suggested that more and more teachers to be given in-service training for a different educational module which includes effective teacher and effective teaching pedagogies can be of great help for the teachers- students and would be a great step towards bringing the change in the educational culture in public schools as suggested by (Cohen & Manion & Morrison, 2003).

The entire study favors the self-determination theory in public schools of Pakistan which fulfills the true meaning of education and educating the students supporting the study of ([Deci, & Vansteenkiste, 2004](#)). The education by force does not give out favorable outcomes whereas education having the impact of developing “interest” in learners does wonder in the educational system and brings positive change in the life of the understudies. The objective of the study to bring a positive change in classroom teaching and convincing teachers to expand or modify their methodologies is satisfying and further detailed research by upcoming researchers can help them find more favorable results as compared to ([Adeyemi, 2008](#)). Thus, producing such or improved teaching content for the larger population, students of primary, elementary and secondary education, teachers’ continuous professional development can help in achieving better results and goals in providing “education for all” under the concept of self-determination theory espoused by ([Ryan, & Deci, 2002](#)) in every category of schools in Pakistan.

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