09-3574-AESSR-700

Academy of
Education and Social Sciences Review
Vol. 4 No. 1 (February, 2024), 82-93
ISSN (p): 2790-8348 | ISSN (e): 2789-6781
DOI: https://doi.org/10.48112/aessr.v4i1.700

Check for updates

Original Article

Academic Motivation of Elementary School Students: Unearthing the Role of Teachers

Muhammad Murad
Department of Early Childhood Education and Elementary Teacher Education
Allama Iqbal Open University - Pakistan
me.murad29@gmail.com

Mubeshera Tufail
Department of Early Childhood Education and Elementary Teacher Education
Allama Iqbal Open University - Pakistan
mubesheratufail@yahoo.com

How to Cite:

Murad, M., & Tufail, M. (2024). Academic motivation of elementary school students: unearthing the role of teachers. *Academy of Education and Social Sciences Review, 4(1), 82–93.*

https://doi.org/10.48112/aessr.v4i1.700

Abstract

The purpose of this study was to investigate the relationship between teachers' behaviour and students' academic motivation. This research study employed a quantitative research design. The correlation research method was used to conduct the study. All the students studying in elementary classes of district Swabi (Khyber Pakhtunkhwa, Pakistan) were the population for this study. Multi-stage sampling technique was used for the selection of 656 students from the population of 10930 students. Self-regulation Questionnaire (SRQ-A) and Perceived Autonomy Support (PAS) were used to collect data about students' academic motivation and students' perception of their teacher's behaviour, respectively. The study found that teachers' autonomy-supportive behaviour had a moderate, positive, and significant relationship with students' autonomous, intrinsic and identified academic motivation and a very weak correlation with students' controlled academic motivation. It is recommended that the teachers adopt autonomy-supportive behaviour (i.e. students-centred approach) but they may avoid a controlled teaching style (i.e. teacher-centred approach) as it is considered one of the main reasons behind the dropping out of children from schools in KPK.

Keywords: Autonomous academic motivation, Controlled academic regulation, Elementary school students, Perceived autonomy support, Self-determination theory

INTRODUCTION

Motivation is considered as one of the most important and fundamental recipes in the academic success of students. Motivation energizes the students to work hard and put more effort into goal achievement. It is the core of all aspects of biological, cognitive, and social regulation. According to Self-Determination Theory (SDT), motivation is not a singular construct i.e., not all types of motivations are the same, as we can see that people can be moved to act and behave by very different types of factors and reasons with highly varied consequences. Some people feel natural interest in an activity. They feel satisfaction in doing something. This type of motivation is called intrinsic motivation or self-motivation. SDT consider intrinsic motivation as the best type of motivation. As it is one of the most autonomous types of motivation on the self-determination continuum.

Different types of motivation can have very different effects on the performance of students, their engagement, and persistency. In contrast, to least autonomous extrinsic motivation (i.e. external and introjected regulation), intrinsic as well as highly autonomous forms of extrinsic motivation (i.e. integrated and identified regulations) are positively correlated to psychological well-being, learning outcomes and effective performance of the students (Ryan & Deci, 2000b; Deci & Ryan, 2013). The study of Maldonado, et al., (2019) added that students' autonomous academic motivation is associated with students' interest and concentration on academic activities. It is negatively correlated with students' amotivation. Feng, et al., (2019) has found that autonomy-supportive teacher played an important role in promoting elementary school students' autonomous academic motivation. According to Maldonado, et al., (2019), autonomous motivation of students can be facilitated by the autonomy-supportive behaviour of the teachers. Autonomous motivation is also positively associated with students' homework.

In Pakistan, teachers often lack to adopt autonomy supportive behaviour towards their students. They emphasize the memorization (i.e. rote learning) of the students in order to get success in the examinations. The study of Tanveer, et al., (2012) reported that teachers use techniques like formal lesson planning, promoting students' active participation, lesson elaboration, using positive emotions, and student counselling to promote successfully their academic motivation and counter their motivational issues. Khurshid, et al., (2011) found that teachers use audio-visual aids, group work and competition among students to enhance their interest and academic motivation. The findings also showed that teachers were unable to create intrinsic academic motivation in students. According to Sulaiman, et al., (2020), corporal punishment by the teachers compels most of the students (i.e. grade one to ten) to quit their educational institutions in Khyber Pakhtunkhwa. Teachers behave coercively, emphasize on the memorization, and use various strategies and techniques to promote students' academic motivation. But they ignore self-determination theory (SDT), one of the most important theories of human motivation

that can be successfully used not only for students' motivation but for their well-being as well.

Keeping in view the significance of autonomy-supportive behaviour of teachers and its role for student motivation at school level, this research study was carried out to investigate the relationship between teachers' behaviour and students' academic motivation under the umbrella of SDT. The purpose of this study was to assess the relationship of the teachers' behaviour of autonomy-support (students cantered approach) with students' academic motivation (i.e. autonomous vs. controlled). In other words, this research study was an attempt to know the behavioural role of elementary school teachers in students' academic motivation.

LITERATURE REVIEW

The word motivation is derived from the word "motive". The word motive means needs, desires, wants, or drives of an individual. The motive or drive works as a stimulator to act towards the achievement of a goal. For example, the desire for money, success, or recognition stimulates the people to act for achieving the required goal. Motivation is the process of stimulating a person to act by providing an incentive or motive. Motivation is considered as an internal energy or a person's desire to do something in order to achieve something. Motivation can also be defined as the process that initiates, guides, and maintains goal-oriented behaviour. The presence or absence of motivation is considered a major determinant of success or failure. Motivated students have stronger intent and determination to challenge themselves with higher goals and work more persistently as compared to less motivated students (Deci & Ryan, 2013).

Self-Determination Theory

Self-Determination Theory (SDT) is considered as one of the most popular theories of human motivation. This theory is the result of a large number of research studies on the intrinsic motivation. The research studies related to SDT, expanded to almost every field and domain of human life including health, education, sports, workplace etc. (Deci, et al., 2017). Self-Determination theory is the combination of six theories that described human behaviour across various domains of life. These domains are education, work, relationship, religion, health, and sports (Legault, 2017). SDT placed the five different types of motivation in a straight line. They were started from highly controlled and end up on highly autonomous. Autonomous motivation is considered good for the psychological well-being of humans (Ryan & Deci, 2000b; Deci & Ryan, 2013).

Level of Autonomy in Different Types of Motivation

On self-determination continuum, there are five different types of motivation based on the reason that regulates these motivations. The autonomy of these motivations is increasing from left to right on the self-determination continuum (Deci & Ryan, 2013).

- Autonomy of External Regulation: External regulation has been placed next to a motivation on the self-determination continuum. It indicates that it is the least autonomous type of motivational regulation. When the motivation of a person is controlled from the outside of one's own self is termed as external regulation (Ryan & Deci, 2017).
- Autonomy of Introjected Regulation: Introjected regulations are those actions or behaviours that are regulated by internal pressure. The reason behind introjected behaviour is to avoid the feeling of guilt, shame and anxiety or to maintain the feelings of self-esteem. As compared to external regulation, introjected regulation is a relatively more autonomous type of motivation (Deci & Ryan, 2013; Ryan & Deci, 2000b).
- Autonomy of Identified Regulation: Identified regulation in comparison to external and introjected regulation, is a relatively more autonomous type of extrinsic motivation. When the behaviour of the person is regulated by personal importance or the value of the task is termed as identified regulation (Ryan & Deci, 2000b).
- Autonomy of Intrinsic Motivation: Far on the right end of the self-determination continuum, we can find intrinsic motivation. According to self-determination theory (SDT), intrinsic motivation is the inherent interest, enjoyment and satisfaction that one feels in performing an activity. It provides a

great deal of freedom in personal choices (Ryan & Deci, 2000a).

Teachers' Motivational Strategies in the Context of Pakistan

A study by Kakar and Pathan (2017) conducted in Quetta Balochistan (Pakistan) at secondary schools level in the context of EFL, found that teachers use various motivational strategies to motivate students to learn the English language. When asked about motivational strategies they used, teachers highlighted different strategies such as to promote their students' autonomy, interacting with proper behaviour, encouraging students' self-confidence, maintaining a pleasant classroom environment, and present tasks properly, increasing students' goal-orientation behaviour, stimulating the learning task, and familiarize the learners with second language related culture etc. Teachers used formal lesson planning, student counselling, promote active participation, lesson elaboration, de-emphasizing of grades and using positive emotion. A teacher can use all these techniques successfully to motivate their students (Tanveer, et al., 2012). Secondary school students used audio-visual aids, promote students' competition, encourage students, to work in groups, celebrate the best work in class, use innovative activities and computer technology, establish good relationships with students, provide positive feedback and award students for their best performance (Khurshid, et al., 2011). Teachers often behaved coercively to compel their students to memorize or learn their lesson by heart. It was done only to ensure students' success in exams. In the Pakistani context, all these studies were used only to explore, investigate or identify what kind of behaviour or strategies or techniques teachers used to motivate their students. The present study aimed to fill this gap by investigating the role of elementary school teachers (autonomy-supportive vs. control behaviour) in students' academic motivation in district Swabi, KPK.

Hypotheses of the Study

The hypotheses for this study are given below:

- Ho1 There was no statistically significant relationship between perceived autonomy support (PAS) and autonomous motivation of elementary school students.
- Ho2 There was no statistically significant relationship between teachers' behaviour of autonomy support and the students' controlled academic motivation at elementary school level.
- Ho3 There was no statistically significant relationship between teachers' behaviour of autonomy support and the level of students' intrinsic academic motivation.
- Ho4 There was statistically no significant relationship between teachers' behaviours and students' identified regulation.
- Ho5 There was statistically no significant relationship between students' perception of teachers' behaviours and their introjected academic regulation.
- Ho6 There was statistically no significant relationship between students' perception of teachers' behaviours and their external regulation.
- Ho7 There was statistically no significant association between students' autonomous academic motivation and their controlled academic motivation.
- Ho8 There was statistically no significant between students' identified regulation and their parents' education.
- Ho9 There was statistically no significant between students' controlled academic motivation and their age.

METHODOLOGY

This research study was quantitative in nature. In this research study, correlation research method was used. In this study, the two main variables were perceived autonomy support and students' academic motivation, keeping in view the significance and role of both variables in the teaching-learning process (as explained in the introduction part). Perceived Autonomy Support (PAS) questionnaire and Self-regulation Questionnaire (SRQ-A) were used as research instruments for collecting the data. For data analysis, Statistical Package for Social Sciences (SPSS) was used. All male students (n = 10930) of grade-8

who studied in government schools of district Swabi (KPK) during the 2021 academic year were the population of the study. The sample of this research study consisted of 656 students of grade 8 of district Swabi (KPK). For the selection of sample, two-stage sampling technique was used. In the first stage, stratified sampling technique was used as district Swabi comprised of four tehsils. In the second stage, cluster random sampling technique was used to select 19 schools/classes from every tehsil according to the proportion of students in all four tehsils of district Swabi (Table 1).

Table 1
Tehsil wise population of district Swabi

Tehsils	Population (N)	Sample Size (n)
1.Topi	2101	126
2.Swabi	2943	177
3.Chota Lahore	2002	120
4.Razzar	3884	233
Total	10930	656

Data Collection Instruments

In this research study, two instruments have been used. Perceived Autonomy Support (PAS) questionnaire was developed by Solberg and Halvari (2009) and Self-regulation Questionnaire (SRQ-A) was developed and validated by Ryan and Connell (1989). The questionnaires were translated from English into Urdu language for the ease, clarity and better understanding of the students of grade 8. Forward-backward translation technique was used for the translation of research tools. This method is considered one of the most reliable methods to achieve both semantic and conceptual equivalency between the original source of a language and the target language (Wang, et al., 2006). After the completion of translation, pre-testing and cognitive interview was also used to insure semantic equivalency and validity of the questionnaire.

Validity and Reliability of Research Instruments

The sample of 96 students of grade-8, who were the representative of the same culture were selected for piolet testing. Cronbach's alpha coefficient for the SRQ-A was .844 (α = .844) and for the Perceived Autonomy Support (PAS) questionnaire, it was .843 (α = .843). The values of Cronbach's alpha coefficient indicated that the items of both questionnaires have relatively high internal consistency. For construct validity, "Simplex Structures" of all four subscales of SRQ-A need to be strongly and positively correlated with those that are theoretically adjacent, than with those that are more distant. The pattern of the latent correlations of the factors of SRQ-A was found very much consistent when compared with the SDT continuum and original English version of (SRQ-A) (Ryan & Connell, 1989) as shown in table 2.

Table 2
Simplex structure of the Urdu version of SRQ-A

	External Regulation	Introjected Regulation	Identified Regulation
External Regulation	-		
Introjected Regulation	$.467_{(.000)}$	-	
Identified Regulation	$-.048_{(.641)}$	$.326_{(.001)}$	-
Intrinsic Motivation	$-.052_{(.613)}$	$.311_{(.002)}$	$.803_{(.000)}$

The Constructs of SRQ-A and PAS questionnaire were also tested with the help of factor reduction through SPSS. Average Variance (AVE) was calculated from the loaded factors (Components Matrix). The average variance (AVE) for intrinsic motivation was (0.56), identified regulation (0.57), introjected regulation (0.50) and external regulation (0.60). The AVE for the PAS questionnaire was (0.67). All these values depicted an acceptable level of convergent validity. For discriminant validity, the square root of average variance (AVE) of all four constructs i.e. intrinsic motivation (0.75), identified regulation (0.76), introjected regulation (0.71) and external regulation (0.77) of SRQ-A and PAS questionnaire (0.81) was calculated and crossed checked with Pearson's Correlation coefficient of the questionnaires. No value was found greater than the square root of the average variance for all constructs of SRQ-A and PAS questionnaire, confirmed their discriminant validity.

Data Collection and Analysis

Data were collected by the researchers through personal visits to the 656 students. The researcher provided help to those students who were facing problems in filling the questionnaires. The data were analysed through mean score, standard deviation, percentage and Spearman correlation coefficient.

Perceived Autonomy Support (PAS) Questionnaire

Perceived Autonomy Support questionnaire (PAS) (Solberg & Halvari, 2009) is unidimensional questionnaire and it has 15 items. This questionnaire has been used in number of studies to find that to what extent a teacher or an instructor or coach or physical teacher's behaviour is autonomy supportive (Solberg & Halvari, 2009; Standage, et al., 2005; Bean et al., 2016). Table 3 shows mean score and standard deviation of students' responses about their teachers' behaviour of autonomy support.

Table 3
Mean score and SD for the "Perceived Autonomy Support (PAS)" Questionnaire

Variable	N	Mean score	SD
PAS	656	4.52	91

The score for the teachers' behavior of autonomy support (PAS) (M= 4.52, SD = .91) as given in table 03 indicated that students perceive their teachers highly autonomy-supportive, cooperative, and facilitative in their learning. It showed that students could ask questions without feeling any hesitation and discuss their problems with their teachers in classroom openly without any fear.

Results & Findings

Self-Regulation Questionnaire

Academic motivation of the students was measured by using Self-Regulation Questionnaire (Ryan & Connell, 1989). It contained 32 items and it was a 4-point scale. In SRQ-A, seven items each for intrinsic, seven identified regulation, nine items for external and nine for introjected regulation were present. Each statement of the questionnaire was followed by four options: strongly agree, agree, disagree, and strongly disagree. Table 04 is the construct wise representation of the score of 656 students.

Table 4
Construct wise mean score and standard deviation forSRQ-A.

Constructs of SRQ	N	Mean	SD
Identified Regulation	656	3.78	0.61
Intrinsic Motivation	656	3.68	0.63
Introjected Regulation	656	3.25	1.14
External Regulation	656	2.65	1.15

If we compare the mean score of all four types of motivation, identified regulation had the highest level (M= 3.78, SD= .61) (table 4). As we know that the origin of identified regulation is the importance or value of the task (Ryan & Deci, 2000b; Ryan & Deci, 2000a), it showed that the biggest reason behind the motivation of the students of district Swabi for their academic activities was the importance or the value that they give to their education. After identified regulation, intrinsic motivation had the second highest score (M=3.68, SD= .63) (table 4). Introjected regulation was at the third-highest level (M= 3.25, SD= 1.14) (table 4). When the reason behind an activity or task is to avoid the feeling of shame and guilt then this type of motivation is called introjected regulation (Ryan & Deci, 2000b; Ryan & Deci, 2000a). It indicated that the third biggest reason behind the motivation of the students of district Swabi for their academic activities was to avoid the feeling of shame and guilt. The lowest level (M= 2.65, SD= 1.15) of motivation of the students in district Swabi is external regulation (as shown in table 4).

Table 5
Mean score for autonomous academic motivation.

Main Category of Motivation	N	Mean score for the construct of Autonomous Motivation	Mean score for the construct of Intrinsic Motivation	Mean score for the construct of Identified Regulation
Autonomous Motivation	656	3.73	3.68	3.78

The combination of two most self-endorsed types of motivation (i.e. intrinsic motivation and identified regulation) form autonomous motivation. The mean score for autonomous motivation is (M=3.73) as shown in table 5. Autonomous motivation is the combination of both interest and importance that one feels for a task or an activity (Ryan & Deci, 2000b; Sheldon & Elliot, 1999; Ryan & Connell, 1989).

Table 6

Mean score for controlled regulation

Main Category of motivation	N	Mean score for the construct of Controlled Regulation	Mean score for the construct of External Regulation	Mean score for the construct of Introjected Regulation
Controlled Regulation	656	2.95	2.65	3.25

When the two most controlled types of regulation (i.e. external and introjected regulation) combine, they form "controlled motivation". We can see in tables 5 and 6 that the score of "Autonomous academic motivation" (M=3.73) of the students of district Swabi is higher than the level of "controlled academic motivation" (M=2.95). One of the objectives of the study was to find correlation between teachers' behavior of Autonomy Support (PAS) and students' Academic Motivation in district Swabi.

Table 7

Descriptive Statistics and Correlations for Study Variables

Variables	n	M	SD	1	2	3	4	5	6
1.PAS	656	4.52	.91	-					
2.Autonomous	656	3.73	.72	.496**	-				
3.Controlled	656	2.95	1.01	-.069	.061	-			
4.Intrinsic	656	3.68	.63	.479**	.918**	.028	-		
5.Identified	656	3.78	.61	.477**	.816**	.057	.569**	-	
6.Introjected	656	3.25	1.14	.022	.197**	.840**	.157**	.184**	-
7.External	656	2.65	1.15	-.129**	-.090*	.871**	-.106**	-.086*	.483**

There was a moderate, positive and statistically significant correlation between the PAS score and the autonomous motivation of students (r = .496, p < .01), as shown in table 7 [Ho1 rejected]. There was a weak, negative and statistically significant association between teachers' behaviour of autonomy support and the level of students' controlled academic motivation in district Swabi (r = -.069, p > .05) [Ho2 rejected].There was a moderate, positive and statistically significant correlation between teachers' behaviour of autonomy support and the level of students' intrinsic academic motivation (r = .479, p < .01), as shown in table 07 [Ho3 rejected]. There was a moderate, positive and statistically significant correlation between students' perception of their teachers' behaviour of autonomy support and the level of students' identified regulation (r = .477, p < .05), as shown in the table 7 [Ho4 rejected]. There was a negligible positive or almost no correlation between teachers' behaviour of autonomy support and students' introjected academic regulation (r = .022, p > .05), as shown in table 07 [Ho5 accepted]. There was a very weak, negative and statistically significant correlation PAS and external regulation was found (r = -.129, p < .05) [Ho6 rejected]. There was a very weak correlation between students' Autonomous academic motivation and controlled academic motivation in district Swabi. Overall, there was no correlation between students' autonomous academic motivation and controlled academic motivation (r = .061, p > .05) [Ho7 rejected].

Table 8

Correlation of demographic variables with other variables of the study

Variables	n	1	2	3	4	5
1.Parents Edu	656	-				
2.Students' Age	656	-	-			
3.Identified	656	.102**	-.007	-		
4.introjected	656	-.027	.078*	.184**	-	
5.External	656	-.022	.082*	-.086*	.483*	-
6.Controlled	656	-.023	.094*	.057	.840**	.871**

Parents' education has a very weak, positive and statistically significant correlation with identified

regulation (r = .102, p< .05). It indicates that those students whose parents are literate, considered academic tasks more important (or valuable) as compared to those students whose parents were not [Ho8 rejected]. Students' age has a very weak but positive and statistically significant correlation with all controlled types of academic motivation (r = .094, p < .05) as shown in table 08. It indicated that increase in age was correlated with increase in controlled (external and introjected) academic regulation of the students [Ho9 rejected].

Discussion

Based on the findings of this research study, most of the students of district Swabi, perceived their teachers' behaviour as highly autonomy-supportive as shown in table 3. Autonomy supportive behaviour of the teachers of district Swabi indicated that the teachers satisfied all the three basic psychological needs of the students. (i.e. the need for autonomy, competence and relatedness (Deci & Ryan, 2000; Baard, et al., 2004; Vallerand, 2007). According to Wijsman, et al., (2018) autonomous academic motivation was positively correlated with school outcomes. According to the conceptual review of Ma (2021), students in an autonomy supportive class climate take more interest, feel less pressure and anxiety, and have greater energy. Positive academic outcomes, positive reactions, more satisfaction, enthusiasm and determination all are very mandatory for actively engage in the learning process and it is only possible when teachers are autonomy-supportive (Reeve & Jang, 2006; Kaur, et a., 2017).

According to the result of this research study, teachers' behaviour of autonomy support has a moderate, positive and significant correlation with students' autonomous academic motivation as shown in table 07. The result of this relationship was not only very much in line with SDT (Deci & Ryan, 2000) but also in line with the result of other studies (Standage, et al., 2005; Hein, 2012; Beig et al, 2013; Bean, et al., 2016). Moreover, in this research study, autonomous motivation is a major category of motivation. It is made from the combination of two most self-endorsed types of motivation (intrinsic academic motivation and identified academic regulation) (Deci & Ryan, 2000; Milyavskaya, et al., 2015). It indicated that when students perceived their teachers' behaviour as highly autonomy supportive, they not only take interest in their academic activities (intrinsic motivation) but also consider it personally important and valuable (identified regulation). According to Milyavskaya, et al., (2015), autonomously motivated people do a task willingly and effortlessly as compared to people whose motivation is controlled.

This study recorded very weak correlation between students' autonomous academic motivation and controlled academic regulation (r = .061, p = .121) (see table 07). The result of the study is in very much consistent with the report of some recent research studies which reported that the dimensions of both autonomous motivation and controlled motivation are orthogonal with a weak positive or negative association (Amoura, et al., 2015; Lepper, et al., 2005; Brunet, et al., 2015; Kauffman, et al., 2011; Ratelle, et al., 2007). It also indicated that a person could have both autonomous academic motivation and controlled academic motivation simultaneously at the same time and same situation. The result of our study in this case slightly diverted from the line of SDT, but it was very much consistent with more recent studies (Kauffman, et al., 2011; Ratelle, et al., 2007; Amoura, et al., 2015). Pelletier, et al., (2001) reported that on one side teachers' autonomy-supportive behavior has a positive correlation with students' autonomous academic motivation, while on the other side teachers' controlling interpersonal behavior is positively correlated with students' controlled academic motivation. Bartholomew, et al., (2009) found the same result in sports, and Soenens and Vansteenkiste (2010) in parenting. The independent existence of both autonomous and controlled regulation of the students in district Swabi depicted that the interpersonal styles of the teachers are simultaneously both autonomy-supportive and controlling.

CONCLUSION

According to the result of this research study, the main academic motivation of the students in district Swabi is identified regulation. The second-ranked academic motivation of the students is intrinsic motivation and the third-ranked academic motivation of the students is introjected regulation. Similarly, the fourth-ranked or the lowest level of motivation of the students in district Swabi is external regulation. The level of autonomous academic motivation of the students of district Swabi is higher than the level of controlled academic motivation. According to the findings of this research study, the students of district

Swabi perceived their teachers as highly autonomy-supportive. It means that the teachers of district Swabi satisfied all three basic psychological needs (i.e. the need for competence support, the need for autonomy support and the need for relatedness support. Teachers' behaviour of autonomy-support has a moderate, positive and significant correlation with students' autonomous academic motivation, identified academic regulation and intrinsic academic motivation. This result was very much consistent with the SDT. This research study has also concluded that teachers' behaviour of autonomy-support has no or very weak correlation with students' controlled academic motivation, introjected and external regulation. Similarly, students' autonomous academic motivation has no correlation with students' controlled academic regulation in district Swabi. It showed that both autonomous academic motivation and controlled academic regulation could exist at the same time and same situation (simultaneously) for a person. This result was not consistent with SDT but is very much consistent with more recent research studies.

Recommendations

It is suggested that the teachers of district Swabi may adopt autonomy-supportive behaviour and teaching style rather than controlling in their interpersonal behaviour with students to build a supportive classroom environment. A progressive teaching approach leads to autonomous academic motivation that is highly recommended for the psychological well-being, learning outcomes and effective performance of the students. The school administrators like heads of the schools of district Swabi, District Education Office Swabi (DEO Swabi) and the Directorate of Elementary & Secondary Education (KPESE) may emphasize the autonomy-supportive behaviour of teachers at the elementary level and to supervise the teachers to motivate their students with highly autonomy-supportive behaviour for maintaining positive learning climate in the classroom. The provincial institutes of teacher education (PITE) and regional institutes of teacher education (RITE) may focus on motivation in the teaching training and professional development workshops. In future, another study may be conducted to investigate the relationship between autonomous motivation and students' academic performance at the elementary level.

Competing Interest

The authors had no competing interests.

References

Amoura, C., Berjot, S., Gillet, N., Caruana, S., Joanna Cohen, J., & Finez, L. (2015). Autonomy-Supportive and Controlling Styles of Teaching, *Swiss Journal of Psychology,* 74 (3), 141–158.

https://doi.org/10.1024/1421-0185/a000156

Baard, P. P., Deci, E. L., & Ryan, R. M. (2004). Intrinsic need satisfaction: a motivational basis of performance and weil-being in two work settings 1. *Journal of Applied Social Psychology*, *34*(10), 2045-2068.

https://doi.org/10.1111/j.1559-1816.2004.tb02690.x

Babakus, E., & Mangold, W. G. (1992). Adapting the SERVQUAL scale to hospital services: an empirical investigation. *Health Services Research*, *26*(6), 767.

http://www.ncbi.nlm.nih.gov/pmc/articles/pmc1069855/

Bartholomew, K. J., Ntoumanis, N., & Th⊘ gersen-Ntoumani, C. (2009). A review of controlling motivational strategies from a self-determination theory perspective: Implications for sports coaches. *International Review of Sport and Exercise Psychology*, *2*(2), 215-233.

https://doi.org/10.1080/17509840903235330

Bean, C., Harlow, M., & Forneris, T. (2016). Examining the importance of supporting youth's basic needs in one youth leadership program: A case study exploring program quality. *International Journal of Adolescence and Youth*, 22(2), 195-209.

https://doi.org/10.1080/02673843.2016.1152986

Brunet, J., Gunnell, K. E., Gaudreau, P., & Sabiston, C. M. (2015). An integrative analytical framework for understanding

the effects of autonomous and controlled motivation. *Personality and Individual Differences*, *84*, 2-15.

https://doi.org/10.1016/j.paid.2015.02.034

Deci, E. L, Olafsen, A. H., & Ryan, R. M. (2017). Self-detrmination theory in work organization: The state of a science. *Annual Review of Organizational Psychology and Organizational Behavior,* 4(1), 19-43.

https://doi.org/10.1146/annurev-orgpsych-032516-113108

Deci, E. L., & Ryan, R. M. (2000). The" what" and" why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, *11*(4), 227-268.

https://doi.org/10.1207/S15327965PLI1104_01

Deci, E. L., & Ryan, R. M. (2013). *Intrinsic motivation and self-determination in human behavior*. Springer Science & Business Media.

Feng, X., Xie, K., Gong, S., Gao, L., & Cao, Y. (2019). Effects of parental autonomy support and teacher support on middle school students' homework effort: Homework autonomous motivation as mediator. *Frontiers in psychology*, *10*, 439624.

https://doi.org/10.3389/fpsyg.2019.00612

Hein, V. (2012). The effect of teacher behaviour on students motivation and learning outcomes: A review. *Acta Kinesiologiae Universitatis Tartuensis*, *18*, 9-19.

http://dx.doi.org/10.12697/akut.2012.18.02

Kakar, S. K., & Pathan, Z. H. (2017). Exploring the motivational strategies practiced by Pakistani EFL teachers to motivate students in learning English language. *International Journal of English Linguistics; 7(2), 117-123*.

http://dx.doi.org/10.5539/ijel.v7n2p117

Kauffman, D. F., SOYLU, M. Y., & Bryan, D. U. K. E. (2011). Validation of the motivation to teach scale. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, *40*(40), 279-290.

Kaur, A., Hang, B. T. T., & Nur, A. H. B. (2017). A self-determination theory based motivational model on intentions to drop out of vocational schools in Vietnam. *Malaysian Journal of Learning and Instruction (MJLI)*, *14*(1), 1-21.

https://repo.uum.edu.my/id/eprint/29461

Khurshid, K., Noureen, S., & Tirmazi, S. H. (2011). A study on the significance of motivational classroom strategies as conceived by science teachers at secondary level. *Pakistan Journal of Education*, 28(2), 75-84.

https://doi.org/10.30971/pje.v27i1.1268

Legault, L. (2017). *Self-determination theory*. In: Zeigler-Hill, V., Shackelford, T. (eds) Encyclopedia of Personality and Individual Differences. Springer, Cham.

https://doi.org/10.1007/978-3-319-28099-8_1162-1

Lepper, M. R., Corpus, J. H., & Iyengar, S. S. (2005). Intrinsic and extrinsic motivational orientations in the classroom: Age differences and academic correlates. *Journal of Educational Psychology, 97*(2), 184–196.

https://psycnet.apa.org/doi/10.1037/0022-0663.97.2.184

Ma, Q. (2021). The role of teacher autonomy support on students' academic engagement and resilience. *Frontiers in Psychology*, *12*, 778581.

https://doi.org/10.3389/fpsyg.2021.778581

Maldonado, E., Zamaripa, J., Ruizjuan, F., Pacheco, R., & Delgado, M. (2019). Teacher autonomy support in physical education classes as predictor of motivation and concentration in Mexican students. *Movement Science and Sports Psychology*. 10, 2834- 2842.

https://doi.org/10.3389/fpsyg.2019.02834

Milyavskaya, M., Hope, N., & Inzlicht, M. (2015). Say "NO" to temptation: want-to motivation improves self-regulation by reducing temptation rather than increasing self-control. *Journal of Social Psychology,*109(4), 677-693.

https://doi.org/10.1037/pspp0000045

Pelletier, L. G., Fortier, M. S., Vallerand, R. J., & Brière, N.M. (2001). Associations among perceived autonomy support, forms of self-regulation, and persistence: A prospective study. *Motivationand Emotion, 25*(4), 279–306.

http://dx.doi.org/10.1023/A:1014805132406

Ratelle, C. F., Vallerand, R. J., Senecal, C., Larose, S. & Guay, F. (2007). Autonomous, Controlled and Amotivated types of Academic moitivation: A Person Oriented Analysis. *Journal of Education Psychology.* 99(4),734-746.

http://dx.doi.org/10.1037/0022-0663.99.4.734

Reeve, J., & Jang, H. (2006). What teachers say and do to support students' autonomy during a learning activity. *Journal of Educational Psychology, 98(1)*, 209-218.

https://psycnet.apa.org/doi/10.1037/0022-0663.98.1.209

Ryan, R. M., & Connell, J. P. (1989). Perceived locus of causality and internalization: Examining reasons for acting in two domains. *Journal of Personality and Social Psychology,* 57(5), 749-761.

https://psycnet.apa.org/doi/10.1037/0022-3514.57.5.749

Ryan, R. M., & Deci, E. L. (2000a). Intrinsic and Extrinsic Motivation: Classic definitions and New Directions. *Contemporary Educational Psychology, 25(1)*, 54-67.

http://dx.doi.org/10.1006/ceps.1999.1020

Ryan, R. M., & Deci, E. L. (2000b). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55(1)*, 68-78.

https://doi.org/10.1037/0003-066X.55.1.68

Ryan, R. M., & Deci, E.L. (2017). Self-Determination Theory: Basic psychological needs in motivation, development, and wellness. New York: Guilford Publishing.

Sheldon, K. M., & Elliot, A. J. (1999). Goal striving, need satisfaction and longitudinal well-being: The self-Concordance model. *Journal of Personality and social Psychology*, 76(3), 482-497.

https://doi.org/10.1037/0022-3514.76.3.482

Soenens, B., & Vansteenkiste, M. (2010). A theoretical upgrade of the concept of parental psychological control: Proposing new insights on the basis of self-determination theory. *DevelopmentalReview,* 30(1), 74–99.

http://dx.doi.org/10.1016/j.dr.2009.11.001

Solberg, P. A., & Halvari, H. (2009). Perceived autonomy support, personal goal content, and emotional well-being among elite athletes: Mediating effects of reasons for goals. *Perceptual and Motor Skills*, *108*(3), 721-743.

https://doi.org/10.2466/pms.108.3.721-743

Standage, M., Duda, J. L., & Ntoumanis, N. (2005). A test of self-determination theory in school physical education. *British Journal of Educational Psychology*, 75(3), 411-433.

https://doi.org/10.1348/000709904X22359

Sulaiman, G. ., Khan, M. W. J. ., Ali, I. ., & Ahmed, Z. . (2020). Nexus of students behaviour and teacher attitudes with corporal punishment in Peshawar schools. *Sulaiman, G., Khan, MWJ, Ali, I., & Ahmed*, (2020), 359-370.

https://doi.org/10.47067/real.v3i3.81

Tanveer, M. A., Shabbir, M. F., Ammar, M., Dolla, S. I., & Aslam, H. D. (2012). Influence of teacher on student'learning motivation in management sciences studies. *American Journal of Scientific Research*, *67*(1), 76-87.

Vallerand, R. J. (2007). Intrinsic and extrinsic motivation in sport and physical activity: A review and a look at the future. In G. Tenenbaum & E. Eklund (Eds.), *Handbook of sport psychology*, 59–83. New York: Wiley.

http://dx.doi.org/10.1002/9781118270011.ch3

Wang, W., Lee, H., & Fetzer, S.J. (2006). Challenges and strategies of instrument translation. *Western Journal of Nursing*

Research, 28(3), 310-321.

https://doi.org/10.1177%2F0193945905284712

Wijsman, L.A., Saab, N., Warrens, M. J., Van, D., and Westenberg, P. (2018). Relations of autonomous and controlled motivation with performance in secondary school students' favoured and disfavoured subjects, Educational Research and Evaluation. *International Journal on Theory and Practice,* 24(1–2), 51–67.

https://doi.org/10.1080/13803611.2018.1512872