
**ROLE OF TEACHER BEHAVIOR ON STUDENT MOTIVATION
AT SECONDARY SCHOOL IN RAHIM YAR KHAN ¹**

Shahid Hussain Atta

Research Scholar, Department of Education, The National College of Business
Administration and Economics, Pakistan
Email: mh7641924@gmail.com

Dr. Khadija Shoukat

Research Scholar, School of Management, Wuhan University of Technology,
Wuhan, China Email: ryk2022@whut.edu.cn

Dr Hussan Ara Magsi

Associate Professor, Department of Political Science, University of Balochistan,
Quetta Email: hussanara.uob@gmail.com

ABSTRACT

Explore the impact of teacher's perceived differential behavior on students' achievement motivation and examine the indirect effects of self-esteem and self-identity. Two hundred eighty-seven secondary school students were tested and analyzed using the teacher differential behavior (TDB) scale, self-esteem (SE) scale, self-identity (SI) scale, and achievement motivation scale in Rahim Yar Khan, Punjab, Pakistan. The results showed that at the individual level, teacher differential behavior could, to some extent, directly and indirectly, predict students' achievement motivation through the chain mediation of self-esteem and self-identity. At the class level, teachers' differential behavior has no significant impact on students' achievement motivation. In the teaching process, teachers should pay attention to educational fairness, avoid the negative impact of discriminatory conduct, create a better learning environment for students, and encourage the development of their physical and mental health.

Keywords: Achievement motivation, Self-esteem, Self-identity, Teacher differential behavior

INTRODUCTION

¹ The author(s) wish to acknowledge Dr. Jam Muhammad Zafar (Assistant Professor, Department of Education, Khawaja Fareed University of Engineering & Information Technology (KFUEIT), Rahim Yar Khan, Punjab-Pakistan) for providing the facilities and funding needed for this research work.

Teacher differential behavior (TDB) refers to how teachers adopt different emotional and behavioral performances towards students based on their different acts during the teaching process (Babad, 1993). It originates from the theory of teacher expectations (Brattesani, 1984) and is reflected in various stages of teaching activities. These differential behaviors can vary significantly regarding language differences for different students and can be as small as a glance or a movement. They can have a specific impact on students' learning attitude, sense of self-worth, and even social development once they become aware of them (Wu, 2022). To get more students' attention by using modern technologies such as artificial technology (Niaz, 2022), digital twin (Shoukat, 2023), cloud computing (Jabeen, 2022), etc. Therefore, this article aims to explore in depth the mechanism of teacher differential behavior on students to provide a basis for better regulating teacher behavior and promoting educational equity.

The secondary school stage is a period of frequent psychological conflicts and behavioral problems among students. Secondary school students' self-esteem (SE), self-identity (SI), and achievement motivation are dynamic stages of change. As essential individuals in their academic careers, teachers' different treatment of students is bound to have a certain impact on their psychology and behavior (Davis, 2003). Previous studies have focused more on the impact of teacher expectations on students' academic performance (Tao, 2022) but have overlooked the internal drivers of changes in academic performance, such as students' achievement motivation. This article aims to conduct in-depth research on this and propose hypothesis 1: The perceived teacher differential behavior of secondary school students can predict students' achievement motivation.

A student's internal qualities, such as their sense of worth and identity, also play a role in shaping their internal drive to succeed (Newman, 2015). Research has shown that social support from parents or teachers can affect students' SE (Yang, 2021), and students' self-esteem can indirectly affect their mental health level through SI (Hsieh, 2019). Main achievements of this research are:

- Research has found that SE can also predict students' achievement motivation to a certain extent (Stavroulaki, 2021). So, will students' SE also be affected when they feel that the teacher treats other

students differently from their own behavior? Which in turn affects SI and achievement motivation?

- This article also intends to delve into and propose hypothesis 2 in this regard: SE and SI play a chain mediating role in the impact of teacher differential behavior on students' achievement motivation.
- Through research, we can better understand the teacher-student relationship, understand the ways in which teachers' differential behavior affects students' psychology, and at the same time, it is beneficial for teachers to reflect on themselves, grasp the level of accuracy in conveying teacher expectations to students, and avoid the negative effects of differential behavior.

RESEARCH OBJECTS AND METHODS

Research Subjects: Using cluster sampling method, a total of 287 secondary school students from three grades in a certain secondary school in Rahim Yar Khan City, Punjab Province participated in a questionnaire survey, of which 250 were valid questionnaires. The age range of participants is between 14 and 18 years old, with 79 participants in first grade, 83 participants in second grade, and 88 participants in third grade; 135 males and 115 females. There are 48 team members and 202 non team members.

Research Methods: *TDB scale:* Using the TDB Scale developed by McDermott et al. (1999), this scale includes three subscales: version A, version B, and version C, which measure students' perceived behavior of teachers towards good students, poor students, and themselves. Each subscale contains 23 items, covering four dimensions: opportunity privilege, guidance and control, negative feedback, and emotional support. Using a 5-point scoring method, 'never so' scores 1 point, and 'always so' scores 5 points. This study selects the homeroom teacher as the evaluation object for students. The consistency coefficients of each subscale are 0.836 for version A, 0.815 for version B, and 0.858 for version C. *achievement motivation scale:* This scale was developed by Yousef et al. (2021). There are a total of 30 questions, using a 4-point scoring format from "completely inconsistent" (1 point) to "completely consistent" (4 points), which can measure students' motivation to pursue success, avoid failure, and total achievement. The higher the total score of achievement motivation, the

higher the level of achievement motivation. The consistency coefficient of this scale in this study is 0.724.

SE scale: Using the revised Pakistani version of the SE scale compiled by Ashraf et al. (2022). This scale consists of 10 questions, with a 4-point scoring format ranging from "very inconsistent" (1 point) to "very consistent" (4 points). Among them, 5 questions are reverse scoring questions. A study found that the expression of question 8 conflicts with one's own culture, and it should be positively scored or deleted to improve the reliability and validity of the scale. Therefore, this study adopts a positive scoring method for question 8, with higher scores indicating higher levels of SE.

SI scale: the scale chosen for this study utilizes the SI scale as originally established by Oakes et al. (13). The questionnaire consists of a total of 19 inquiries, each evaluated using a 4-point scoring scheme. A score of 1 point is assigned to the response "not applicable at all", while a score of 4 points is assigned to the response "very appropriate". Among the questions, there are a total of 12 items that require reverse scoring. The scale utilized in this study was derived from the works of Bach, denoted as α . The value of the coefficient is 0.611.

Research Framework: The main subjects of this study are psychology graduate students who have undergone brief training and a secondary school male teacher. They are evaluated as a group in a class setting, with no information sharing between groups. Secondary school students taking the test should be given a unified message about test day procedures, including what to expect, how to prepare, and how to answer questions. Make sure the homeroom instructor is not there and that all surveys are collected on the spot throughout the testing period. Each test takes roughly 30 minutes in total. At last, Excel sheet was used to filter the questionnaire's responses and enter the legitimate ones into the analysis.

RESULTS ANALYSIS

1. Common method deviation test: The Harman single factor method was used to test the questionnaire. The results showed that 40 factors had eigenvalues greater than 1, and the first factor had a variance interpretation rate of 10.66%, which was lower than the

critical standard of 40%. Therefore, the impact of common method bias on the data in this study was not significant.

2. Analysis of the correlation between teachers' differential behaviors and SE, SI, and achievement motivation: Individual level: In order to investigate the dynamics of the relationships between the many variables, a Pearson correlation analysis was carried out. The findings of an individual level analysis on teacher differential behavior revealed that the behaviors of opportunity privilege, guidance control, and emotional support given by teachers to students were significantly positively correlated with students' total achievement motivation, as well as with students' pursuit of success motivation. This was the case regardless of whether the students were pursuing success or total achievement. There is a considerable positive correlation between the negative feedback given by teachers to students and the student's motivation to succeed in their academic endeavors. The results are shown in Table 1.

Variables	M	SD	1	2	3	4	5	6	7	8	9
1.Opportunity privilege	2.18	0.76	1								
2. Guidance and control	2.80	0.81	0.58**	1							
3. Negative feedback	3.16	0.80	0.02	0.10	1						
4. Emotional Support	2.96	0.87	0.64**	0.60**	-0.13*	1					
5. Self Esteem	2.75	0.47	0.22**	0.11	0.02	0.15*	1				
6. Self-identification	2.63	0.34	0.26**	0.21**	-0.05	-0.05	0.44**	1			
7. Pursuing Success Motivation	2.53	0.50	0.25**	0.21**	0.08	0.21**	0.31**	0.12	1		
8. Avoiding Failure Motivation	2.32	0.53	-0.09	-0.08	0.20**	-1.15	-0.23**	-0.41**	-0.07	1	
9. Achievement motivation	0.21	0.8	0.23**	0.19**	-0.09	0.24**	0.37**	0.37**	0.71**	-0.75**	1

NOTE: * P<0.05, ** P<0.01.

Class Level: There is no significant correlation between the differential behavior of teachers at the class level, specifically the difference in how they treat good and bad students, and the students'

motivation to pursue success, avoid failure, and overall achievement motivation in all dimensions. There is also no significant correlation between the differential behavior of teachers and the students' SE and SI. The specifics are outlined in Table 2.

TABLE-2
CLASSROOM LEVEL TEACHER DIFFERENTIAL BEHAVIOR AND
CORRELATION ANALYSIS AMONG VARIOUS VARIABLES

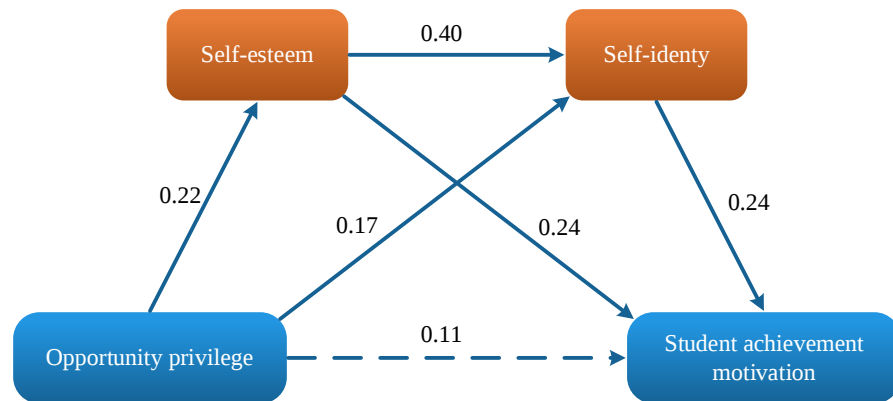
Variables	M	SD	1	2	3	4	5	6	7	8	9
1. Opportunity privilege	0.91	0.99	1								
2. Guidance and control	0.28	1.21	0.53**	1							
3. Negative feedback	-	0.91	0	0.15*	1						
4. Emotional Support	0.95	1.10	0.72**	0.57**	-0.13*	1					
5. Self Esteem	2.75	0.48	0.08	0.02	0	0.12	1				
6. Self-identification	2.63	0.34	-0.08	-0.06	0.02	-0.05	0.44**	1			
7. Pursuing Success Motivation	2.53	0.50	-0.06	0.06	0.03	0.06	0.31**	0.12	1		
8. Avoiding Failure Motivation	2.32	0.53	-0.02	0.07	0.05	0.06	-	-	-0.07	1	
9. Achievement motivation	0.21	0.75	0.05	0	-0.01	0	0.37**	0.37**	0.71**	-	1
										0.75**	

NOTE: * P<0.05, ** P<0.01.

3. Analysis of the chain mediating effect of SE and SI:

Opportunity Privilege Dimension: Regression analysis of the opportunistic privilege dimension showed that opportunistic privilege could significantly positively predict students' SE ($\beta=0.22$; $P<0.01$) and SI ($\beta=0.17$; $P<0.01$). Students' SE could positively predict SI ($\beta=0.40$; $P<0.01$). At the same time, students' SE ($\beta=0.24$; $P<0.01$) and SI ($\beta=0.24$; $P<0.01$) could directly and positively predict students' achievement motivation. When SE and SI were added, the effect of opportunity privilege on achievement motivation was no longer significant ($\beta=0.11$; $P>0.05$). Therefore, SE and SI play a complete chain mediating role in the influence of students' perceived opportunity privilege on their achievement motivation. The results are shown in Figure 1.

FIGURE-1
THE CHAIN MEDIATING EFFECT OF OPPORTUNITY PRIVILEGE
DIMENSIONS SUCH AS SE AND SI



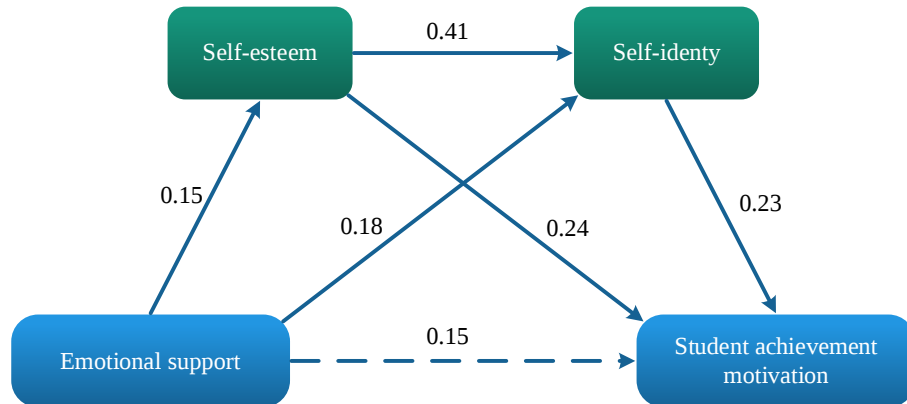
Guidance Control Dimension: Regression analysis of the instructional control dimension showed that although instructional control could predict students' SI ($\beta=0.16$; $P<0.01$) and achievement motivation ($\beta=0.12$; $P<0.05$), and it could not significantly predict students' SE ($\beta=0.11$; $P>0.05$). Therefore, SE and SI do not play a chain mediating role in the influence of students' perceived instructional control on their achievement motivation.

Negative Feedback Dimension: Regression analysis of negative feedback dimension showed that although negative feedback could predict students' SI ($\beta=-0.06$; $P>0.05$) and achievement motivation ($\beta=-0.09$; $P>0.05$), it could not significantly predict students' SE ($\beta=0.02$; $P>0.05$).

Emotional Support Dimension: Regression analysis of the dimension of emotional support showed that emotional support could significantly and positively predict students' SE ($\beta=0.15$; $P<0.05$) and SI ($\beta=0.18$; $P<0.01$). Students' SE could positively predict SI ($\beta=0.40$; $P<0.01$). At the same time, students' SE ($\beta=0.24$; $P<0.01$) and SI ($\beta=0.23$; $P<0.01$) could positively predict students' achievement motivation. When SE and SI were added, the emotional support felt by students still had a significant effect on their achievement motivation ($\beta=0.15$; $P<0.05$). Therefore, SE and SI play a partial mediating role in

the impact of students' perceived emotional support on their achievement motivation, as shown in Figure 2.

FIGURE-2
THE CHAIN MEDIATING EFFECT OF EMOTIONAL SUPPORT
DIMENSIONS SUCH AS SE AND SI



DISCUSSION

1. Differences between individual level and class level: This study investigates the relationship between teachers' differential behaviors and students' individual and group levels of SE, SI and AM, and drive to succeed in academic endeavors. The findings indicate that individual-level differential behaviors do in fact positively predict students' AM; however, the impact of teachers' differential behaviors on students' AM at the class level is not obvious. This is primarily due to the fact that the teacher's differential behavior at the class level examines the difference between teachers' behavior towards good students and poor students, and it has no direct relationship with the students themselves, so it has a limited relationship with the students.

2. Discussion of different dimensions of differential behavior: The results show that the impact of teachers' differential behaviors on students' SE and SI is mainly concentrated in the dimensions of opportunity privilege and emotional support, but not obvious in the dimensions of instructional control and negative feedback, mainly because the differences in teachers' negative feedback among different student groups are small. The negative feedback affects students'

satisfaction with teachers after triggering students' negative emotions (Karababa, 2022), but has little impact on students' SE. However, the teacher's guidance and control over students is universal, and its main purpose is to maintain order in the class and regulate students' behavior (Gentrup, 2020), and students can easily accept and adapt to such behavior, so that it does not affect SE.

3. The chain mediating effect of self-esteem and self-identity:

This paper further explores the role of students' SE and SI in the process of teachers' differential behaviors affecting students' achievement motivation. Partially supporting our hypothesis 1, the study indicated that teacher-level differential actions do affect student achievement motivation, particularly along the dimensions of opportunity privilege and emotional support. In addition, we also found that SE and SI play a chain mediating role, that is, teachers' differential behaviors will directly affect students' achievement motivation on the one hand, and can also indirectly affect students' achievement motivation by affecting students' SE and SI, which also validates our hypothesis 2. Individuals with higher SE have higher SE and more harmonious interpersonal relationships, which is also conducive to students achieving a better level of SI (Newman, 2015). In addition, people with high SE and SI are more inclined to internal attribution (Karababa, 2022), so they are more willing to put in the effort to achieve their goals when faced with challenging things, and their levels of achievement motivation are higher, which is also consistent with our research.

CONCLUSION AND RECOMMENDATIONS

At the class level, the findings indicate that teachers' behaviors do not obviously affect students' motivation to achieve. At the same time, the individual level, particularly regarding teachers' opportunity privilege and emotional support for students. Teachers' differential behaviors affect students' self-esteem and self-identity levels, which in turn affect students' motivation to achieve. This was found to be the case despite the fact that teachers' behaviors do not have an obvious effect on students' achievement motivation at the class level. As a response to this conclusion, the following suggestions and recommendations are proposed.

- Teachers are vital to secondary school students' academic careers since their physical and mental growth is still imbalanced and their emotional experience is deeper. Thus, when interacting with students, teachers should focus on educational methods, maximize the positive aspects of their expectations, minimize the negative aspects, especially in emotional support and opportunity privilege, give students more support, and reduce differential treatment. Teachers should guide and regulate students and give negative feedback to prevent toxic emotions and academic decline.
- Teachers should be aware of the ideological dynamics of their students, understand the class's developmental tendency, and reflect well on their own practice. Demonstrate the ability to predict and fix issues, develop focused strategies, and guide the parents of the students to improve the classroom environment. Encourage the emotional and physiological well-being of students.
- Teachers should help students develop a positive and optimistic learning attitude, form reasonable attribution methods, focus on their own progress and improvement, and reduce academic problems caused by excessive teacher dependence and other behaviors.
- Students should always improve and reflect on their issues. Demand yourself in studying and feel accomplished by accomplishing academic assignments well. Students should promptly communicate with their teachers and actively seek answers to academic and life issues. Students should also self-evaluate, actively pursue interests and hobbies, gradually find their path, and develop the necessary achievement motivation.
- The school principal should improve oversight, address major instructional unfairness, and offer acceptable criticism and assistance to teachers. Regular lectures or special training can improve teacher communication and learning. Schools, instructors, students, and parents work together to improve education and student growth.

REFERENCES

- Ashraf, F., Lee, S. A., & Elizabeth Crunk, A. (2022). Factorial validity of the Urdu version of the Obsession with COVID-19 Scale: Preliminary investigation using a university sample in Pakistan. *Death Studies*, 46(5), 1059-1064. Retrieved from: <https://doi.org/10.1080/07481187.2020.1779436>
- Babad, E. (1993). Teachers' differential behavior. *Educational Psychology Review*, 5, 347-376. <https://doi.org/10.1007/BF01320223>
- Brattesani, K. A., Weinstein, R. S., & Marshall, H. H. (1984). Student perceptions of differential teacher treatment as moderators of teacher expectation effects. *Journal of Educational Psychology*, 76(2), 236. Retrieved from: <https://psycnet.apa.org/doi/10.1037/0022-0663.76.2.236>
- Davis, H. A. (2003). Conceptualizing the role and influence of student-teacher relationships on children's social and cognitive development. *Educational Psychologist*, 38(4), 207-234. https://doi.org/10.1207/S15326985EP3804_2
- Gentrup, S., Lorenz, G., Kristen, C., & Kogan, I. (2020). Self-fulfilling prophecies in the classroom: Teacher expectations, teacher feedback and student achievement. *Learning and Instruction*, 66, 101296. Retrieved from: <https://doi.org/10.1016/j.learninstruc.2019.101296>
- Hsieh, K. Y., Hsiao, R. C., Yang, Y. H., Lee, K. H., & Yen, C. F. (2019). Relationship between self-identity confusion and internet addiction among college students: the mediating effects of psychological inflexibility and experiential avoidance. *International Journal of Environmental Research and Public Health*, 16(17), 3225. <https://doi.org/10.3390/ijerph16173225>
- Jabeen, N., Hao, R., Niaz, A., Shoukat, M. U., Niaz, F., & Khan, M. A. (2022, December). Autonomous Vehicle Health Monitoring Based on Cloud-Fog Computing. In 2022 International Conference on Emerging Trends in Electrical, Control, and Telecommunication Engineering (ETEECTE) (pp.1-6). IEEE. <https://doi.org/10.1109/ETEECTE55893.2022.10007162>
- Karababa, A. (2022). School engagement and self-esteem among Turkish secondary school students: A moderated-mediation model for academic achievement and gender. *Psychology in the Schools*, 59(6), 1088-1104. Retrieved from: <https://doi.org/10.1002/pits.22663>
- McDermott, P. A. (1999). National scales of differential learning behaviors among American children and adolescents. *School Psychology Review*, 28(2), 280-291. <https://doi.org/10.1080/02796015.1999.12085965>
- Nawaz, S. A., Li, J., Bhatti, U. A., Shoukat, M. U., & Ahmad, R. M. (2022). AI-based object detection latest trends in remote sensing, multimedia and agriculture applications. *Frontiers in Plant Science*, 13, 1041514. Retrieved from: <https://doi.org/10.3389/fpls.2022.1041514>
- Newman, J., Gozu, H., Guan, S., Lee, J. E., Li, X., & Sasaki, Y. (2015). Relationship between maternal parenting style and high school achievement and self-esteem in China, Turkey and USA. *Journal of*

- Comparative Family Studies*, 46(2), 265-288. Retrieved from: <https://doi.org/10.3138/jcfs.46.2.265>
- Shoukat, M. U., Yan, L., Zhang, J., Cheng, Y., Raza, M. U., & Niaz, A. (2023). Smart home for enhanced healthcare: exploring human machine interface oriented digital twin model. *Multimedia Tools and Applications*, 1-19. Retrieved from: <https://doi.org/10.1007/s11042-023-16875-9>
- Stavoulaki, E., Li, M., & Gupta, J. (2021). Perceived parenting styles, academic achievement, and life satisfaction of college students: the mediating role of motivation orientation. *European Journal of Psychology of Education*, 36, 693-717. Retrieved from: <https://doi.org/10.1007/s10212-020-00493-2>
- Tao, Y., Meng, Y., Gao, Z., & Yang, X. (2022). Perceived teacher support, student engagement, and academic achievement: A meta-analysis. *Educational Psychology*, 42(4), 401-420. Retrieved from: <https://doi.org/10.1080/01443410.2022.2033168>
- Wu, F., Jiang, Y., Liu, D., Konorova, E., & Yang, X. (2022). The role of perceived teacher and peer relationships in adolescent students' academic motivation and educational outcomes. *Educational Psychology*, 42(4), 439-458. Retrieved from: <https://doi.org/10.1080/01443410.2022.2042488>
- Yang, X., Liu, R. D., Ding, Y., Hong, W., & Jiang, S. (2021). The relations between academic procrastination and self-esteem in adolescents: A longitudinal study. *Current Psychology*, 1-15. Retrieved from: <https://doi.org/10.1007/s12144-021-02075-x>
- Yousef, A. M. F. (2021). Augmented reality assisted learning achievement, motivation, and creativity for children of low-grade in primary school. *Journal of Computer Assisted Learning*, 37(4), 966-977. Retrieved from: <https://doi.org/10.1111/jcal.12536>
-