

# CHAPTER 5

## THE IMPACT OF A SUPPORTIVE SCHOOL CULTURE AND OF TEACHERS' PROFESSIONAL COLLABORATION, WORK ENVIRONMENT SATISFACTION, AND PROFESSIONAL SATISFACTION ON STUDENT MOTIVATION<sup>1</sup>

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### INTRODUCTION

Learning motivation is the desire of students to be a part of the learning process, to do research, and to be successful. Motivation, one of the main factors affecting student success, is an important process for the realization of learning goals (Dermitzaki & Stavroussi, 2012). As an essential factor in facilitating learning, motivation is a driving force associated with students' academic activities (Furio, Juan, Seguí, & Vivó, 2015). Highly motivated students are confident that they will be successful in the course in question and believe that they will take control of the learning process (Nukpe, 2012). Being positively motivated increases students' desire to participate in class, do research, and succeed in the course.

The concept of learning motivation, which has recently been the subject of numerous studies in the field of education, is at the center of studies in the context of learning and teaching (Pintrich, 2003). In many such studies, the factors affecting students' motivation have been examined. Knowing the factors affecting learning motivation and the relative importance of these factors will guide educational decisions whose aim is to increase student motivation (SM). Motivating students is affected by many factors; identifying and ranking these factors will directly contribute to the education process.

In this study, a model is proposed in which the effects of a supportive school culture (SSC), professional collaboration (PC), work environment satisfaction (WES), and professional satisfaction (PS) on SM are tested. In this research, the concept of SSC is characterized as mutual respect among teachers and free

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discussion in the educational institution. It is accepted that an institution with an SSC will encourage instructors to freely discuss problems they encounter in the education process and respect each other's opinions, and it is expected that teachers will be satisfied with the working environment in such an institution. There is a direct link between WES and job satisfaction. Teachers who enjoy being at their school and enjoy their job are satisfied with their work environment and can be expected to motivate their students effectively.

With regard to PC, course content is improved by teachers helping each other in matters such as curriculum development, controlling student behavior, and student development. Working in an environment in which teachers cooperate is expected to increase their level of PS. PS of educators is associated with whether they prefer teaching to another profession. PS in teaching is achieved by satisfying high-level needs, such as social relations, rather than only material issues (Pepe, Addimando, & Veronese, 2017). Educators with a high level of PS are recognized as being able to motivate their students successfully.

The model proposed in the current study was tested with a two-part questionnaire presented to participants—teachers currently working in primary, secondary, and high schools. In the first part, demographic information was collected including self-assessment of their education and teaching experience. The data obtained from 308 respondents were analyzed in a two-stage process in which the measurement model and the structural model were applied. SPSS AMOS 22 software was used in these stages, and no revisions were made to the proposed model. It was observed that an SSC had an effect on WES, and PC had an effect on occupational satisfaction. In addition, the analysis revealed that WES and PS have a positive and significant effect on SM. All hypotheses in the proposed model were accepted.

A literature review on the subject is included below which explains the concept of SM and describes previous studies on the subject. Then, the model and hypotheses proposed in the research are introduced. The next part details the data collection process and the research methodology. Finally, the findings obtained in the study are evaluated in the conclusion and discussion section.

## **LITERATURE REVIEW**

Learning motivation is the desire and determination of students to fulfil their responsibilities in the learning process. That is, students have a reason, a goal, and the energy to do their best (Nukpe, 2012). A highly motivated student listens to the lesson carefully, asks questions, and deals with the topics after the

lesson. Motivation is a valuable factor that facilitates learning. Thanks to a high level of motivation, students believe that they have the confidence and capacity to succeed and that they are in control of their own learning processes (Nukpe, 2012). Motivation, a determining force in the behavioral characteristics exhibited by students, drives their academic activities (Furio et al., 2015). Active and highly motivated students are willing to participate in activities spontaneously without expecting external rewards (Skinner & Belmont, 1993). In addition, well-motivated students positively affect the motivation of their instructor, which is more satisfying for both instructors and students (Eccles & Wigfield, 2002).

Understanding the importance of the concept of SM over the years has led to many studies on this subject in the fields of psychology and education. Research on SM is at the center of studies in the context of learning and teaching (Pintrich, 2003). Although it has been shown that motivation has a significant effect on learning, the factors affecting motivation and the extent of the impact of these factors remain unclear. However, learning about the relative importance of these factors is very important for educational decisions that may affect SM (Winberg & Palm, 2021). The motivation of the individual is affected by many different factors, and this makes it difficult to provide motivation in the classroom environment. In this literature review, previous studies that analyze the factors affecting SM are included.

Xu and Gao (2014) analyzed the relationship between motivation types for learning English and students' identity changes. Xiong, Kornhaber, Suen, Pursel, and Goins (2015) examined the relationships between SM, engagement, and retention using data from Penn State University's open online courses. Yu and Singh (2018) analyzed the relationship between high school students' success in mathematics lessons, classroom practices, and SM.

Kumar and Sangeetha (2019) examined the relationship between English course success and achievement motivation in high school students. Brandmiller, Dumont, and Becker (2020) investigated whether teacher perceptions differ according to students' socio-economic status, immigrant background, and gender. Burić and Kim (2020) aimed to examine the relationships between teacher self-efficacy, teaching quality, and SM beliefs. Faridah, Sari, Wahyuningsih, Oganda, and Rahardja (2020) measured the level of SM in the use of digital learning during the Covid-19 period. Levesque-Bristol, Richards, Zissimopoulos, Wang, and Yu (2020) evaluated an integrative model for university students that links the concepts of classroom climate, satisfaction of basic psychological needs, and self-regulated motivation with the perceived transferability of knowledge.

Al Ansari, Ward, and Hill (2021) aimed to explore SM and improve student performance through learning analytics. Atik and Çelik (2021) examined the relationships between pre-service teachers' academic motivation, commitment, burnout, and academic achievement. Liu, Bellibaş, and Gümüş (2021) analyzed the direct and indirect effects of instructional and distributive leadership on teacher job satisfaction and self-efficacy through mediator variables. Misbah, Gulikers, Widhiarso, and Mulder (2021) aimed to explore the connection between the proximity and influence dimensions of teacher behavior and student efficacy levels and whether the connection is mediated by students' intrinsic motivation.

## **METHOD**

### **Hypothesis Development**

The variables tested in the current study, their definitions and conceptual meanings used in the research, the proposed hypotheses, and the tested model are presented in this section. The variables found in the model proposed in this study are SSC, PC, WES, PS, and SM.

An SSC can ensure the development and protection of mental health by creating a sense of security and belonging among staff and students (Kaluzeviciute et al., 2021). Staff working in schools with a rich culture have effective interaction and a high sense of trust (Terosky & Reitano, 2016). In an SSC, the relationship between instructors is based on cooperation, honesty, and open communication (Koşar & Çalık, 2011). In this study, the concept was characterized by mutual respect among instructors and free discussion in the institution. It is accepted that the staff in an educational institution with a favorable SSC freely discuss the difficulties they face, they respect each other's ideas, and success is shared. In such an educational institution, teachers will be satisfied with their work environment.

**Hypothesis 1:** SSC positively and significantly affects WES.

Collaboration among teachers is measured by how often they share advice with each other on issues such as implementing a new initiative, updating course content, developing a new curriculum, and managing classroom behavior (Nathanaili, 2017). Teachers should collaborate with colleagues on issues related to student behavior, seeking ways to improve student progress and achieve school goals. Teachers' shared views and discourses serve to improve their thinking processes and abilities about classroom experiences (Elster, 2010). For professional development, responsibility must be shared, and instructors must

collaborate to enhance their own teaching and learning processes. In the current study, the concept of PC was measured by instructors sharing teaching materials with colleagues, discussing student development with each other, working with other teachers for student development, and attending professional conferences. The collaboration of teachers is expected to increase their level of PS.

**Hypothesis 2:** PC positively and significantly affects PS.

WES is an important issue that should be taken into account by administrators of educational institutions. A healthy working environment allows teachers to work in the best way and affects the conditions of welfare and job satisfaction (Ahmad & Ahmad, 2019). The link between satisfaction with the work environment and job satisfaction is clearly established. WES is associated with how employees evaluate their workspaces, taking into account both their personal characteristics and perceived and ideal workplace comparisons (Scrima, Moffat, & Rioux, 2015). In the present study, the concept was measured by the teachers' willingness to stay at their school, to enjoy working at their job, to recommend their institution to other teachers, and to be satisfied with their job. A teacher who is satisfied with the work environment is expected to motivate students more effectively.

**Hypothesis 3:** WES positively and significantly affects SM.

PS is a pleasurable or positive emotional state arising from assessing one's job or work experiences (Locke, 1976) and denotes the feeling of satisfaction obtained from the profession (Tsai & Antoniou, 2021). PS in teaching is obtained by satisfying higher-level needs, such as positive social relationships, rather than only lower-level needs, such as payment incentives (Pepe, Addimando, & Veronese, 2017). In addition, satisfaction arising from positive relationships with other teachers, parents, and students increases the positive effects of the teaching process. In the present study, job satisfaction is characterized by teachers' beliefs that the advantages of being a teacher outweigh the disadvantages and that they do not regret their decision to choose this profession over another. Teachers who are satisfied with continuing their profession are expected to show better results in motivating their students.

**Hypothesis 4:** PS positively and significantly affects SM.

SM is an essential element for quality education, and unless students are motivated, the learning process suffers. Motivated students listen to their instructors carefully, ask questions in class, respond voluntarily, and appear happy and eager (Palmer, 2007). A healthy relationship between teacher and student is

a prerequisite for students to participate in learning activities. To promote SM, the teacher must be well-trained, focused on the educational process, sensitive, and inspiring (Williams & Williams, 2011). In addition, teachers can effectively provide SM as a result of their own satisfaction with their work environment and chosen profession. In the proposed model, the activity variable in SM was used as the main dependent variable. The model proposed in this study is presented in Figure 1.

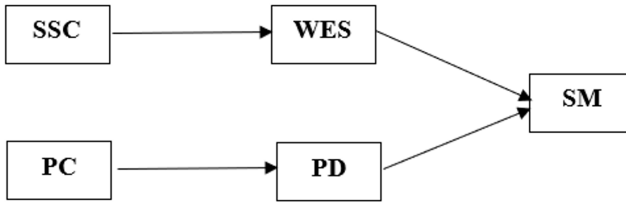


Figure 1. Proposed Model

## Data Collection

A two-part questionnaire was designed to collect data regarding the variables in the study. In the first part, participants were asked for demographic information—gender, age, marital status, work experience, and their current employer (educational institution). The next part consisted of questions about their education and teaching experience. The items used in this section were obtained by adapting the survey conducted by Liu et al. (2021). Twenty items aligned with the proposed model were determined, translated into Turkish, and adapted according to the research topic

The study was conducted between October and December 2021. The questionnaire was sent via an online platform to 500 teachers and school administrators who are currently working in primary, secondary, and high schools, and 326 (65.2% response rate) returned their answers. After eliminating 18 incomplete or incorrectly-filled questionnaires, 308 valid questionnaires remained for analysis. The demographic data of the participants are presented in Table 1.

<b>Table 1. Demographic Data of Participants</b>			
<b>Demographic information</b>		<b>Frequency</b>	<b>%</b>
Gender	Female	166	53.896
	Male	142	46.104
Age	21-30	36	11.688
	31-40	140	45.455
	41-50	104	33.766
	51 +	28	9.091
Marital status	Married	224	72.727
	Single	84	27.273
Experience (Year)	0-5	33	10.714
	6-10	49	15.909
	11-15	77	25
	15-20	72	23.377
	21 +	77	25
Educational institution	Primary school	124	40.26
	Middle school	98	31.818
	High school	86	27.922
Total		308	100

### Data Collection

A two-stage analytical process was adopted in which the measurement model and the structural model were evaluated separately. SPSS AMOS 22 software was used in both stages. No revisions have been made to the model.

### Measurement Model

The measurement model was examined through confirmatory factor analysis, and the reliability of the items was evaluated by considering the standardized factor load. To be considered reliable, the factor load of an item should be above 0.5 (Morgan, 2011). Since the factor loads were below this value, the load 0.444 was deleted. Apart from this, the loads of other factors were accepted as reliable, since they vary between 0.536 and 0.939 values.

The reliability of the constructs tested in the model was understood by the internal consistency between the items. For Cronbach's alpha, values above 0.90 are excellent, values between 0.80–0.90 are good, values between 0.70–0.80 are acceptable, values between 0.60–0.70 are suspicious, values between 0.50–0.60 are considered weak, and values below 0.50 are unacceptable (George & Mallery, 2003). In the current study, it was seen that the SSC and PC components were at a good level, while the other components returned excellent values.

Bagozzi and Yi (1998) stated that the composite reliability (CR) values of the constructs should be higher than 0.6. According to the measurement model results, the CR values of the constructs varied between 0.832 and 0.93. Another criterion used in the evaluation of the constructs, in terms of internal consistency, is the average variance extracted (AVE) value. The AVE values of the constructs should not be below 0.5 (Ramayah, Cheah, Chuah, Ting, and Memon, 2018). In the model, the AVE values of the constructs were between 0.561 and 0.771. All constructs in the model met the internal consistency conditions (Table 2).

The constructs in the proposed model were also examined in terms of their discriminant validity. The concept of discriminant validity reveals whether a construct in the model is a reflection of a different construct. The results shown in Table 3 indicate that the model is suitable in terms of discriminant validity.

### ***Structural Model***

To test the suitability of the structural model, a fit analysis process was performed. Many indices are used for fit analysis in the literature. In this study, /df, TLI, CFI, NFI, and RMSEA indices were used for fit analysis. The fit indices considered in the model evaluation showed that there is a good fit between the data and the model constructs (Table 4).

SSC had a positive and significant effect on WES ( $\beta = 0.586, p = ***$ ), and PC had a positive and significant effect on PS ( $\beta = 0.294, p = ***$ ). Therefore, Hypotheses 1 and 2 are accepted. In addition, WES positively affected SM effectiveness ( $\beta = 0.246, p = ***$ ), and PS had a significant effect on SM effectiveness ( $\beta = 0.418, p = ***$ ). Therefore, Hypotheses 3 and 4 are accepted (Table 5). The hypothesis test results of the model are presented in Table 2.



<b>Table 2. Measurement Model Results</b>					
<b>Construct</b>	<b>Item</b>	<b>Factor loading</b>	<b>Cronbach's alpha</b>	<b>CR</b>	<b>AVE</b>
<b>SSC</b>	1	0.536	0.813	0.832	0.561
	2	0.865			
	3	0.863			
	4	0.682			
<b>PC</b>	1	0.823	0.885	0.873	0.696
	2	0.874			
	3	0.804			
	4	<b>0.444</b>			
<b>WES</b>	1	0.820	0.912	0.92	0.744
	2	0.939			
	3	0.932			
	4	0.744			
<b>PS</b>	1	0.717	0.925	0.93	0.771
	2	0.928			
	3	0.928			
	4	0.921			
<b>SM</b>	1	0.840	0.914	0.915	0.728
	2	0.883			
	3	0.840			
	4	0.850			

<b>Table 3. Discriminant Validity</b>					
<b>Construct</b>	<b>SSC</b>	<b>PC</b>	<b>WES</b>	<b>PS</b>	<b>SM</b>
SSC	0.749	-	-	-	-
PC	0.699	0.834	-	-	-
WES	0.569	0.472	0.863	-	-
PS	0.266	0.294	0.645	0.878	-
SM	0.285	0.345	0.480	0.541	0.853

Fit indices	Model	Recommended values	References
/df	3.386	≤ 4	Schumacker & Lomax (2004)
NFI	0.895	≥0.8	Singh et al. (2011)
RMSEA	0.088	≤0.9	Henry & Stone (1994)
TLI	0.911	≥0.9	Hu & Bentler (1999)
CFI	0.923	≥0.9	Corrigan et al. (2001)

Hypothesis		Beta ( $\beta$ )	p-value
H1	SSC → WES	0.586	***
H2	PC → PS	0.294	***
H3	WES → SM	0.246	***
H4	PS → SM	0.418	***

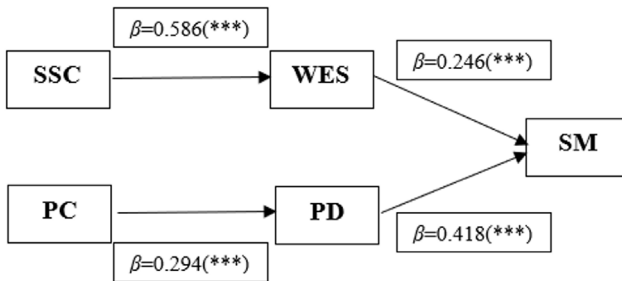


Figure 2. Proposed Model and Hypothesis Results

## CONCLUSION AND DISCUSSION

SM—the desire and determination of students to do their best in educational activities—is one of the main factors affecting the success of learning. Motivation, which is an effective factor in facilitating learning, is known to increase students’ academic efficiency. Although learning motivation is at the center of many studies in the fields of education and psychology, the factors that affect motivation and the level of importance of these factors have remained unclear. SM is affected by many factors, and identifying these factors will provide useful findings for educational decisions to enhance motivation. The current study posited that an SSC has an effect on WES, and teachers’ PC has an effect on PS. In addition, the hypothesis that teachers’ WES and PS increase the effectiveness of SM was proposed. As a

result of the research, all these proposed hypotheses were accepted.

An SSC leads personnel to have effective communication and a high sense of trust in each other. It is very important for teachers' well-being and mental health that they work in an educational institution with SSC. In the study, it was observed that working in an SSC has a highly favorable impact on teachers' satisfaction with their work environment. Managers need to create an SSC in educational institutions in order for their teachers to be satisfied with their working environment. This is possible in an environment where educators can discuss freely among themselves the teaching-related problems they face, their ideas are respected, and success achieved is shared by all employees.

PC is achieved when teachers cooperate on subjects such as course content, curriculum, communication with students, and managing classroom behavior. Considering the different opinions and suggestions of teachers will increase their performance in the profession, improve their thinking processes, and enhance the level of satisfaction with their profession. In this study, it was observed that PC affects occupational satisfaction. To increase the level of satisfaction with their profession, teachers should be encouraged to cooperate with their colleagues, share educational materials, exchange ideas with their colleagues on issues related to student development, and participate in professional conferences.

WES is associated with teachers' emotional and cognitive attitudes about intentions to change the educational institution they work for when they have the opportunity. The work environment directly affects teachers' well-being and job satisfaction, and educators who are satisfied with the work environment are expected to motivate their students effectively. In the present study, the hypothesis that WES has a positive effect on SM and effectiveness was accepted. Teachers who enjoy working in their educational institution, recommend it to other teachers, and do not intend to change their school will be more enthusiastic about motivating their students.

PS is the degree of satisfaction that teachers get from their profession. Compared to other professions, the satisfaction of high-level needs, such as social relations rather than financial issues in teaching, is more effective in the formation of PS (Pepe et al. 2017). Teachers who do not regret choosing the teaching profession, who think that the advantages of the profession outweigh the disadvantages, and who do not plan to change their profession are expected to be more interested in motivating their students. In this study, it was determined that PS strongly affects the effectiveness of SM.

This study's aim was to contribute to determining the factors that affect SM and to present useful findings to academicians and educational institution administrators who deal with this subject. Other potential research in the future might focus on different aspects. For example, in the present study, teachers working in primary, secondary, and high schools were surveyed. In future studies, conducting a study with educators working in higher education and comparing the results may contribute meaningfully to the literature. In addition, the proposed model can be enriched with different variables. Antecedent variables that are likely to affect WES and PS could be included in the proposed model.

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