Relationship Between Science Classroom Psychosocial Learning Environment and Secondary School Students’ Motivation

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ARTICLE DETAILS

ABSTRACT

The learning environment of a classroom plays an integral role in students’ life. If a student’s surrounding environment is good then they perform well in studies. Learning environments are of different types like physical environment, social environment, psychological environment, instructional environment and psychosocial environment. Among these, Psychosocial learning environment is very important. It not only encourages the science learners to learn new things but also enhances their motivation for science learning. The aim of this study is to investigate relationship between science classroom psychosocial learning environment and secondary school students’ motivation. The research design used is descriptive and quantitative in nature. Population of the study consisted of 10th grade Secondary School Students’ who enrolled in all the campuses of District public school Okara during academic session 2016-2018. The total numbers of students were 1146. The random sampling technique was used to select the sample. Two Questionnaires were used to collect the data about the perceptions of students for psychosocial environment and motivation. Collected data were tabulated in SPSS (version 24) and then analyzed by using one sample t-test, and two way between groups analysis of variance (Two-way ANOVA). Significant difference between science classroom psychosocial learning environment and secondary school students’ motivation in science classes was found for Student Cohesiveness, Teacher Support, Involvement, and Equity.

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1. Introduction

Getting education has become of utmost importance for everyone to live their lives in this world. In the development of a country, education plays an integral role. It refers to the systematic process of gaining knowledge and skills. It also gives positive impact in our life. No country can progress in this
world without education. Any country and society can shape their future in a bright way with the help of education.

Science education becomes very important now a days. Science takes a great change in all fields of life. Science education is the key for bright future of a nation (Khalid & Tanvir, 1998). Many countries have achieved so much in the area of information and technology with the help of scientific experience in education. Without science education we are not able to communicate and share information with each other.

Many factors like teachers, parents; text books, school and classroom learning environment etc. may contribute in the effectiveness of educating science at secondary level. Among all these factors, teacher plays a major part in promoting the interest for science subjects among students. They are always the role models for students. They encourage and inspire us to live a successful life.

“Learning is termed as the constant changes in attitude, knowledge, skills or behavior that could be located through social or psychological experiences” (Sutton, K. and Seifert, R., 2009).

“The process of gaining knowledge through study, observation, and instruction is called learning” (Lee, 2005).

The learning environment of a classroom plays an integral role in students’ life. If a student’s surrounding environment is good for study then they perform well in studies. If you want that students enhance and grow up in the field of science then you have to provide them conducive learning environment. The learning environment must be helpful where they learn new things and do experiments on the ideas which are in their mind. Students must be encouraged by the Teachers and school administration when they try to invent new theories in science.

Learning environments are of different types like physical environment, social environment, psychological environment, instructional environment and psychosocial environment. Among these, Psychosocial learning environment is very important. It not only encourages the science learners to learn new things but also enhances their motivation for science learning (Urdan & Schoenfelder, 2006). Psychosocial classroom learning environment describes environment in which psychological, social and physical aspects are involve or as the case teaching takes place (Cleveland & Fisher, 2014).

The learning surroundings within a class may include instructional, physical and psychosocial surrounding. Klarner in 2003 described that in physical environment furniture arrangement, furniture style, audio-visual aids, equipment, air quality, size of the room, lightning, temperature, schedule of the class, general cleanliness, and availability of setting is involved.

Motivation is a reason or doing something or behaving in a particular way it is to success (Garrison and Broussard, 2004; Stevens and Beal, 2007; Sandra, 2002; Jhonson, 2996; S. Skaalvik, and E.M. Skaalvik, 2006; Leung, and Zhu, 2011). The significance for motivation at any stage of learners’ is never given much importance by teachers. It is more like a term of state that has the power to give lead, energize, sustain the attitude or performance for the attainment of the goals.

Psycho-social environment cannot be desires without a helpful and supportive Learning. Everlasting change in behaviour that is happens when social links cooperates formally and informally
according to Johnson and Johnson (2009). Learning environment is very helpful to build a learning community which support to all students according to their potential to get their learning goals described by Tanner, (2000).

Najjar, Luo and Huang (2007) described the opinion of Tanner (2000) they consider learning surroundings to be important enough to define the attitudes of the learners and student achievement that can easily be affected if the learning surroundings are of social perspective, pedagogical and psychological. Classrooms should be supportive where teachers encouraged their learners and give out friendly, warm, needed respectful and active involvement to help them to achieve their academic goals (Rudasill, Gallagher, & White, 2010).

A learning surrounding is divided into six functions like collaborate, support, inform, manage produce, and communicate according to Sandberg (1998). It represents the entire combination of activities and components which takes place in learning. Students motivated through emotional supportive classroom which help to increase their interest, enjoyment and less violent behaviour, engagement and academic achievement. (Pianta, Belsky, Vandergrift, Houts, & Morrison, 2008; Curby et al, 2009; Rudasill, Gallagher & White, 2010).

Classroom has important effect for contributing a major part as physical and psychological elements in the process of learning. Student's attitude, achievement and perception are affected by the learning environment stated that “Klarner (2003).According to Dorman (2002), Students learning outcomes and cognitive are increase with the use of Positive psychosocial environment.

Science is a different and abstract subject of teaching as compare to all other subjects. Student's attitude, achievement and perception are affected by the learning environment stated that “Klarner (2003).According to Dorman (2002), Students learning outcomes and cognitive are increase with the use of Positive psychosocial environment. Smith and Ouston, Mortimore, Maughan, and Rutter; Fraser, 2001 pointed that students spend almost 15000 hour in classroom according to an assessment. Learners experience and face a lot of situation which affect their learning outcome such as teaching nature there interaction with teaching learning. Teacher interaction in the classroom and Psychosocial learning environment always got most neglected in our education learning methods. The department of education should make necessary policies to call this matter.

Effective teaching can be attained through the developing a positive learning environment. The learners should be confident enough about their capabilities and skills to get success. Klarner in 2003 pointed that students can explore and increase their knowledge in a positive learning environment and also fosters their feelings which allowing them to get skills without anything holding them back.

**Statement of the Problem**

In this competent world education took an important place in our lives. Without education no one can survive in this world. Science education took a serious and high place in our education system. It is revealed that generally science students are not getting good marks in Secondary school certificate examination. Secondary school examination taken by BISE, Sahiwal in 2017, 27089 students opting science subjects was appeared. Numbers of students who got marks in C and below grades were 13630 which are 50.32% of the total appeared students. This shows that more than 50 % students are not high achievers. Even 19 % of the total appeared students are getting F grade.
This shows that science students are facing difficulties in studying science subjects. This might be due to low motivation and poor psychosocial learning environment. Researcher is going to conduct this study with the intention to explore science students’ motivation and their classroom psychosocial learning environment. Moreover researcher wanted to explore the relationship in psychosocial classroom learning surroundings and secondary school student’s motivation.

**Significance of the Study**

This research was significant in both practical and theoretical approach. Psychosocial science classroom learning environment gives a lot of information about students learning achievement and behavior towards science education. The findings from this study can be used for further research in the area of psychosocial classroom learning surroundings. If the curriculum for a class is adjusted taking account of all the findings provided by this research it will help improve the learning capacity of the students and their motivation. All the conclusions drawn from this study will eventually be helpful at the time of policy making for enhancing students’ motivation. Science motivation and Classroom learning environment are beneficial study for educators when it comes to enhance their teaching and classrooms ‘learning environment. Many other researcher workers can benefit from the findings for this study for developing a relationship regarding psychosocial learning. It helps to develop new curriculum which is proposed to aid the educators for enhancing the learning in the classroom.

**Objective of Research**

- To explore science classroom psychosocial learning environment across different campuses of district public school and collage Okara.
- To point out science student’s motivation enrolled in different campuses of district public school Okara.
- To explore the connection in psychosocial classroom learning surroundings and motivation of science students.

2. METHODOLOGY

2.1 Research Design

A descriptive and quantitative research method was used to achieve the objectives.

2.2 Population of the Study

All secondary school science students (10th grade) registered in all of the campuses of district public school Okara during academic session 2016-2018, were the sample for this study. There are 16 campuses of District Public School Okara. Total enrolled students in all these campuses were 1146. Total strength of boy enrolled in 10th grade was 728, while the female strength was 418. Campus wise strength of 10th grade science students has been reported in table 3.1 given below.

2.3 Sample of the Study

Present study had their population sample spread across 16 different campuses of Okara District. Researcher employed the stratified random sampling procedure to choose from the given sample. Following criteria were adopted to make a sample more representative. For taking the sample 25 percent of population was chosen whereas population size is more than 200 in 10th graders. For the purpose of sampling, 50 percent of population was chosen whereas population size is more than 100 in 10th graders. The whole population was included as a sample whereas population size is less than 100. Stratification was mad only on the base on gender number of 10th grade science students selected as sample for the research is reported in table 1.
Table 1: The size of sample selected from each campus of DPS

<table>
<thead>
<tr>
<th>Campus Name</th>
<th>Population Size</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
</tr>
<tr>
<td>DPS Okara</td>
<td>392</td>
<td>242</td>
</tr>
<tr>
<td>DPS Depalpur</td>
<td>102</td>
<td>63</td>
</tr>
<tr>
<td>DPS Renala Khurd</td>
<td>103</td>
<td>62</td>
</tr>
<tr>
<td>Hujra Shah Muque</td>
<td>53</td>
<td>22</td>
</tr>
<tr>
<td>DPS Sadar Gogera</td>
<td>37</td>
<td>17</td>
</tr>
<tr>
<td>DPS Haveli</td>
<td>33</td>
<td>7</td>
</tr>
<tr>
<td>DPS Basirpur</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td>Grand Total</td>
<td>730</td>
<td>423</td>
</tr>
</tbody>
</table>

2.4 Research Instruments

Two tools were employed to harvest all of the above mentioned data about students.

First, questionnaire was developed to analyze the perception of students about psychosocial learning surroundings of classroom and called WIHIC in this ongoing study.

Second questionnaire is expected to measure the motivation level of science students for science subjects as optional and this too was called SMQ.

2.5 Measuring Classroom Learning Surroundings Through Instruments

To analyze the perception of students regarding classroom learning surroundings a questionnaire WIHIC was developed which is an acronym for, what is happening in Class? The questionnaire was developed in 1996 by Fisher, Fraser, and McRobbie. With the help of this questionnaire all of the seven aspects of the learning surroundings for classroom were analyzed to measure the perceptions of students. But in this study researcher used six aspects of the learning surroundings of classroom. The aspects of the study were named teacher support, student cohesiveness, task orientation, involvement, equity, and cooperation.

2.6 Instrument for Measuring Students’ Motivation towards Science

The objective of the research was to explore the motivation level of students for science subjects and that was measured by using the questionnaire over motivation for science developed by Glynn et al., in 2009. The motivation for science subjects was measured through four factors. These four factors are named assessment anxiety and self-efficacy, personal relevance and intrinsic motivation, extrinsic motivation and self-determination.
2.7 Delimitation
The study at hand, due time and finical constant, is delimited to;

1: Secondary school students enrolled in different campuses of district public school situated in district Okara.

2: Secondary school students opting science as optional subjects

Pictorial diagram of the study has been shown in fig. 1

Exploring the connection between the psychosocial learning surroundings of the classroom and the motivation level of the students for science subjects was the objective of this study. Data was obtained through questionnaires viz. WIHIC and SMQ to collect the data on learning environment and motivation level. MS-Excel 2016 was used for data entry and then to analyze the data SPSS 24 was used.

To figure out the relation between psychosocial learning surroundings of the classroom with science student’s motivation Pearson product moment correlation was employed.

To present the data in empirical figures both inferential and descriptive statistics are used to analyze and interpreted the data of this study.

Table 2: Comparison of Perception of Students about Psychosocial Learning surrounding in Science Classes

<table>
<thead>
<tr>
<th>Factors of Classroom Psychosocial learning environment</th>
<th>Me</th>
<th>Cu</th>
<th>S.</th>
<th>M.</th>
<th>t-value</th>
<th>Sig (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student</td>
<td>3.4</td>
<td>3.</td>
<td>0.</td>
<td>0.</td>
<td>14.</td>
<td>0.000</td>
</tr>
</tbody>
</table>
To figure the difference on mean samples of score from cut value, the researcher used the t-test. Mean differences in table 2 informs that students’ perceptions on all the aspects of the psychosocial learning surroundings of the classroom Viz. Students’ Cohesiveness (t-value=14.71, p=0.000< α= .05), Teacher Support (t-value=12.42, p=0.000< α= .05), Involvement (t-value=13.25, p=0.000< α= .05), Task Orientation (t-value=12.53, p=0.000< α= .05), Cooperation (t-value=14.69, p=0.000< α= .05), Equity (t-value=15.67, p=0.000< α= .05) differ significantly from cut value. Students’ perceive almost always Teacher Support, Students Cohesiveness, Cooperation, Involvement, and Equity in the classrooms at secondary level where as they perceived that they are involved often in tasks of science classes. On the whole psychosocial learning environment (t-value=17.11, p=0.000< α= .05) differs significantly from cut value. Students’ perceived their psychosocial learning environment conducive.

Table 3: Comparison of Students Perceptions about Motivation towards Science

<table>
<thead>
<tr>
<th>Factors of Science Motivation Questionnaire</th>
<th>Mean (M)</th>
<th>Cut Value (C)</th>
<th>S.D.</th>
<th>Mean Deviation (M.D)</th>
<th>t-Value</th>
<th>Sig (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intrinsic Motivation</td>
<td>3.46</td>
<td>3.0</td>
<td>0.7</td>
<td>0.4</td>
<td>13.4</td>
<td>0.000*</td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td>3.51</td>
<td>3.0</td>
<td>0.8</td>
<td>0.5</td>
<td>13.8</td>
<td>0.000*</td>
</tr>
<tr>
<td>Self-Determination</td>
<td>3.50</td>
<td>3.0</td>
<td>0.8</td>
<td>0.5</td>
<td>12.7</td>
<td>0.000*</td>
</tr>
<tr>
<td>Extrinsic Motivation</td>
<td>3.50</td>
<td>3.0</td>
<td>0.9</td>
<td>0.5</td>
<td>12.1</td>
<td>0.000*</td>
</tr>
<tr>
<td>Overall</td>
<td>3.49</td>
<td>3.0</td>
<td>0.7</td>
<td>0.4</td>
<td>15.3</td>
<td>0.000*</td>
</tr>
</tbody>
</table>

N= 471, df= 470, *p<.05, **p<.01

To find the difference in mean sample score from cut value a sample t-test was conducted by the researcher. Mean differences presented in table 3 informed about students’ perceptions on all dimensions of science motivation questionnaire Viz. Intrinsic motivation (t-value=13.40, p=0.000< α= .05), Self-
Efficacy (t-value=13.89, p=0.000 < α = .05), Self- Determination (t-value=12.78, p=0.000 < α = .05), and Extrinsic Motivation (t-value=12.14, p=0.000 < α = .05), in their science class at secondary level. On the whole Science motivation (t-value=15.37, p=0.000 < α = .05) differs significantly from cut value. Students’ perception about their motivation towards science is more satisfied.

**Table 4:** Relationship in psychosocial learning surroundings of science classroom and motivation towards science

<table>
<thead>
<tr>
<th></th>
<th>Intrinsic Motivation</th>
<th>Self-Efficacy</th>
<th>Self-Determination</th>
<th>Extrinsic Motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students Cohesiveness</td>
<td>.622 .000</td>
<td>.639 .000</td>
<td>.607 .000</td>
<td>.561 .000</td>
</tr>
<tr>
<td>Teacher Support</td>
<td>.561 .000</td>
<td>.561 .000</td>
<td>.541 .000</td>
<td>.466 .000</td>
</tr>
<tr>
<td>Involvement</td>
<td>.450 .000</td>
<td>.472 .000</td>
<td>.414 .000</td>
<td>.402 .000</td>
</tr>
<tr>
<td>Task Orientation</td>
<td>.591 .000</td>
<td>.559 .000</td>
<td>.535 .000</td>
<td>.482 .000</td>
</tr>
<tr>
<td>Cooperation</td>
<td>.602 .000</td>
<td>.633 .000</td>
<td>.563 .000</td>
<td>.542 .000</td>
</tr>
<tr>
<td>Equity</td>
<td>.628 .000</td>
<td>.645 .000</td>
<td>.568 .000</td>
<td>.510 .000</td>
</tr>
<tr>
<td>Overall</td>
<td>.711 .000</td>
<td>.722 .000</td>
<td>.664 .000</td>
<td>.609 .000</td>
</tr>
</tbody>
</table>

N = 471, df = 470, *p<.05, **p<.01

To find the connection in psychosocial learning surroundings of the classroom and motivation of science students the Pearson correlation was employed by researchers. The correlation values between two variables have been reported in table 4. Student Cohesiveness was seen to be significantly, strongly and positively correlated with Intrinsic Motivation (R-value=0.622, p=0.005 < α=0.01), Self-efficacy (R-value=0.639, p=0.005 < α=0.05), Self-determination (R-value=0.607, p=0.005 < α=0.01), and Extrinsic Motivation (R-value=0.561, p=0.005 < α=0.01).

When correlation between Teachers Support and different factors of Science Motivation was sought, it was found that Teacher support is significantly and positively correlated with Intrinsic Motivation (R-value=0.561, p=0.005 < α=0.01), Self-efficacy (R-value=0.561, p=0.005 < α=0.05) and Self-determination (R-value=0.541, p=0.005 < α=0.01) whereas Extrinsic Motivation is moderately correlated (R-value=0.466, p=0.005 > α=0.01).It was found that Involvement is significantly and positively moderate correlated with Intrinsic Motivation (R-value=0.450, p=0.005 < α=0.01), Self-efficacy (R-value=0.472, p=0.005 < α=0.01) and Self-determination (R-value=0.414, p=0.005 > α=0.01) Extrinsic Motivation (R-value=0.402, p=0.005 < α=0.01). Intrinsic Motivation (R-value=0.591, p=0.005 < α=0.01), Self-Efficacy (R-value=0.559, p=0.005 < α=0.01), and Self-Determination (R-value=0.535, p=0.005 < α=0.01) are strongly correlated whereas Extrinsic Motivation (R-value=0.482, p=0.005 < α=0.01), is moderately correlated with Task orientation.
Significant, Positive and Strong correlation are found between Cooperation and Intrinsic Motivation (R-value=0.602, p= 0.005< α=0.01), Self-efficacy (R-value=0.633, p= 0.005< α=0.01), Self-determination (R-value=0.563, p= -0.005< α=0.01) and Extrinsic Motivation (R-value= 0.0542, p=0.005> α=0.01).

It was found that Equity is significantly, positively and Strong correlated with Intrinsic Motivation (R-value=0.628, p=0.005< α=0.01), Self-efficacy (R-value=0.645, p=0.005< α=0.01), Self-determination (R-value=0.568, p=0.005< α=0.01) and Extrinsic Motivation (R-value=0.510, p=0.005< α=0.01). Equity was found to be more related to self-determination, positively. When correlation between Psychosocial Science Classroom Learning Environment and different factors of Science Motivation was sought, it was found that Psychosocial Science Classroom Learning Environment is significantly and positively correlated with Intrinsic Motivation (R-value=0.711, p=0.005< α=0.01), Self-efficacy (R-value=0.722, p=0.005< α=0.01), Self Determination (R-value=0.664, p=0.005< α=0.01) and Extrinsic Motivation (R-value=0.609, p=0.005> α=0.01). Intrinsic Motivation, Self-Efficacy and Extrinsic Motivation all were strongly correlated with Psychosocial Science Classroom Learning Environment.

3. Findings

Following were the findings of the study:-

1. Students’ perceptions on all dimensions of psychosocial learning environment Viz. Students’ Cohesiveness (t-value=66.78, p=0.000< α = .05), Teacher Support (t-value=48.85, p=0.000< α = .05), Involvement (t-value=54.45, p=0.000< α = .05), Task Orientation (t-value=37.21, p=0.000< α = .05), Cooperation (t-value=69.31, p=.000< α = .05), Equity (t-value=69.92, p=0.000< α = .05) differ significantly from cut value. On the whole psychosocial learning environment (t-value=69.51, p=0.000< α = .05) differs significantly from cut value. Students’ perceived their psychosocial learning environment conducive.

2. Students’ perceptions on all dimensions of science motivation questionnaire Viz. Intrinsic motivation (t-value=46.18, p=0.000< α = .05), Self- Efficacy (t-value=67.21, p=0.000< α = .05), Assessment Anxiety (t-value=48.45, p=0.000< α = .05), Self- Determination (t-value=69.13, p=0.000< α = .05), and Extrinsic Motivation (t-value=39.29, p=0.000< α = .05), in their science classes at secondary level. On the whole Science motivation (t-value=51.91, p=0.000< α = .05) differs significantly from cut value. Students’ perception about their motivation towards science is more satisfied.

3. It was found that Student Cohesiveness is significantly and positively correlated with Intrinsic Motivation (r-value=0.62, p=0.003< α=0.01) and Self-efficacy (r-value=0.45, p=0.038< α=0.05) whereas significant and negative correlation was found with Assessment Anxiety (r-value=-0.28, p=0.023< α=0.05). Intrinsic Motivation was strongly correlated, Self-Efficacy was moderately correlated and Assessment Anxiety was weekly correlated with Student Cohesiveness. Insignificant correlation was found between Student Cohesiveness and Self-determination (r-value=0.03, p=0.078> α=0.05) and Extrinsic Motivation (r-value=0.21, p=0.067> α=0.05).

4. It was found that Teacher support is significantly and positively correlated with Intrinsic Motivation (r-value=0.75, p=0.000< α=0.01), Self-efficacy (r-value=0.56, p=0.025< α=0.05) and Extrinsic Motivation (r-value=0.35, p=0.005< α=0.01). Intrinsic Motivation and Self-Efficacy both were strongly correlated with Teacher Support whereas Extrinsic Motivation was moderately correlated with Teacher Support. Insignificant correlation was found between

Teacher Support and Assessment Anxiety (r-value= -0.12, p=0.324> α=0.05), and Self-determination (r-value=0.09, p=0.541>α=0.05).

5. It was found that Involvement is significantly and positively correlated with Intrinsic Motivation (r-value=0.52, p=0.003< α=0.01) and Self-efficacy (r-value=0.35, p= -0.045< α=0.05) and Extrinsic Motivation (r-value=0.23, p=0.043< α=0.05). Intrinsic Motivation was strongly correlated whereas Self-Efficacy and Extrinsic Motivation were moderately correlated with Involvement. Insufficient correlation was found between Involvement and Assessment Anxiety (r-value= -0.05, p=0.567> α=0.05), and Self-determination (r-value=0.07, p=0.987>α=0.05).

6. It was found that Task Orientation is significantly and positively correlated with Intrinsic Motivation (r-value=0.43, p=0.046< α=0.05), Self-efficacy (r-value=0.32, p= 0.032< α=0.05) and Extrinsic Motivation (r-value=0.12, p=0.0431< α=0.05). Both the variables Intrinsic Motivation and Self-Efficacy were moderately correlated with Task Orientation whereas Extrinsic Motivation was weekly correlated with Task Orientation. Insufficient correlation was found between Task Orientation and Assessment Anxiety (r-value= 0.02, p=0.876> α=0.05), Self-determination (r-value=0.01, p=0.0676> α=0.05).

7. It was found that Cooperation is significantly, negatively and weekly correlated with Assessment Anxiety (r-value= -0.19, p=0.021< α=0.05). Insignificant correlation was found between Cooperation and Intrinsic Motivation (r-value=0.22, p=0.067> α=0.05), Self-efficacy (r-value=0.12, p= 0.452> α=0.05), Self-determination (r-value=0.03, p=0.0598 >α=0.05) and Extrinsic Motivation (r-value=0.18, p=0.234> α=0.05).

8. It was found that Equity is significantly and positively correlated with Self-determination (r-value=0.19, p=0.045< α=0.05) and Extrinsic Motivation (r-value=0.45, p=0.025< α=0.05). Self-determination was weekly correlated whereas Extrinsic Motivation was moderately correlated with Equity. Insufficient correlation was found between Equity and Intrinsic Motivation (r-value=0.12, p=0.123> α=0.01), Self-efficacy (r-value=0.10, p= 0.654> α=0.05), and Assessment Anxiety (r-value= -0.09, p=0.432> α=0.05).

9. it was found that Psychosocial Science Classroom Learning Environment is significantly and positively correlated with Intrinsic Motivation (r-value=0.46, p=0.006< α=0.01), Self-efficacy (r-value=0.35, p=0.012< α=0.05) and Extrinsic Motivation (r-value=0.39, p=0.024> α=0.05). Intrinsic Motivation, Self-Efficacy and Extrinsic Motivation all were moderately correlated with Psychosocial Science Classroom Learning Environment. Moreover Psychosocial Science Classroom Learning Environment was significantly, negatively and weekly correlated with Assessment Anxiety (r-value=-0.21, p=0.035< α=0.05). Insufficient correlation was found between Psychosocial Science Classroom Learning Environment and Self-determination (r-value=0.18, p=0.562>α=0.05).

4. Conclusions

Following conclusions were drawn from the findings of the study:

1. Students’ perceive almost always Students Cohesiveness, Teacher Support, Involvement, Cooperation and Equity in their science classes at secondary level where as they perceived that they are involved oftenly in tasks of science classes. On the whole secondary school students' perceived their psychosocial learning environment in science classes conducive.

2. Students’ perception about their motivation towards science is more satisfied.

3. Student Cohesiveness is significantly and positively correlated with Intrinsic Motivation and Self-efficacy whereas significant and negative correlation was found with Assessment Anxiety. Intrinsic Motivation was strongly correlated, Self-Efficacy was moderately correlated .Teacher support is significantly and positively correlated with Intrinsic Motivation, Self-efficacy and
Extrinsic Motivation. Intrinsic Motivation and Self-Efficacy both were strongly correlated with Teacher Support whereas Extrinsic Motivation was moderately correlated with Teacher Support.

4. Involvement is significantly and positively correlated with Intrinsic Motivation and Self-efficacy and Extrinsic Motivation. Intrinsic Motivation was strongly correlated whereas Self-Efficacy and Extrinsic Motivation were moderately correlated with Involvement.

5. Task Orientation is significantly and positively correlated with Intrinsic Motivation, Self-efficacy and Extrinsic Motivation. Both the variables Intrinsic Motivation and Self-Efficacy were moderately correlated with Task Orientation whereas Extrinsic Motivation was weekly correlated with Task Orientation.

6. Equity is significantly and positively related with extrinsic motivation and self-determination. Self-determination was weekly correlated whereas to extrinsic motivation was moderately connected to Equity.

7. Psychosocial Science Classroom Learning Environment is significantly and positively correlated with extrinsic motivation and self-efficacy, and Intrinsic motivation all were moderately correlated with psychosocial learning surroundings of a classroom.

8. Recommendations

9. Following are the recommendations of study given on the bases of conclusions:

10. An orientation of assigned task to students in science classes may be given so that they may complete the assigned task effectively.

11. An awareness campaign may organize to develop interest about science among male students.

12. Psychosocial Science Classroom Learning Environment is significantly and positively correlated with Intrinsic Motivation, Self-efficacy and Extrinsic Motivation. Conducive psychosocial learning environment in science classes may be helpful in enhancing motivational level of science students. Necessary arrangements may be arranged to develop the conducive psychosocial learning environment.

13. Psychosocial Science Classroom Learning Environment is significantly, negatively and weekly correlated with Assessment Anxiety. Conducive psychosocial science classroom learning environment may decrease students’ assessment anxiety.

14. This study was conducted for science students enrolled in District public school Okara. Future researcher may conducted this study for science students enrolled in other private institutions.

15. It was quantitative research study. A qualitative or mixed-method research study may also be conducted for science students.

16. This research was done on the secondary level students. It is highly recommended to conduct this research on primary, or college students.

References


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