Role of Time Management in Developing Self-Regulating Study Habits among Students at University Level

Malika Kanwal¹, Sadaf Abbasi², Dr. Sidra Kiran³, Dr. Quratulain⁴

Abstract
The research work conducted on the topic of role of time management in developing self-regulating study habits among students at University level. In order to achieve the objectives, this study used descriptive survey design. Total population was 792 students from public sector universities of okara region. 70% sample of total population was selected. Consequently, 167 male and 217 female students were selected from University of Okara. Whereas, 91 male 80 female students were selected from the University of Agriculture Faisalabad (sub campus Depalpur Okara). All of these students were selected from various departments (Statistics, Islamic Studies, Physics, Mathematics, Education, Biology, English, Zoology, Chemistry, and Computer Science). A self-structured questionnaire was used to collect data for the students. It was a 5-point scale type consisting 40 statements along with 2 questions as open ended to assess the role of time management in developing self-regulating study habits among students at university level. Systematic random sampling method was used to select sample size of 555 students. The purpose of this study was to achieve the following objectives, 1 assess the effect of time management on self-regulating study habits of students at university level, 2 to analyze the important factors that affect the study habits of students at university level, 3 to compare the effect of time management techniques on the basis of gender, locality, university and departments (science and arts). Present study was aimed to answer the following questions, 1) how the time management effect self-regulating study habits of students at university level? 2) What are the factors that affect the study habits of students at university level? 3) What is the effect of time management techniques on the basis of gender, locality, university and departments (science and arts)? The results help in the field of education specially and for the bright future of students generally. The major findings of this study indicate that majority of the students have agreed about the importance of time management for achieving high ranks at university level. They feel stressed due to over work and try to minimize interruptions. Most of the students have reported that they share their academic issues with family and home environment affect the students grades. Students also reported that class environment also affects student learning. The study concluded that importance of time management can never be neglected. It indicates that time management is a key to success and is very important for the development of self-regulating study habits among students at university level. The study also concluded that there is no significant difference between the students on the basis of gender, locality, university and science and arts departments regarding the role of time management in developing self-regulating study habits among students at university level.

Keywords: study habits, university students, time management

1. Introduction
In every era of life, time is an important element and plays a significant role. It depends on its effective usage. A proper time management is helpful for getting productive outcome. Effective time management is not important only for a single person but also for the student in developing self-regulating study habits as well. It allows students to complete their tasks or assignments on time. Self-regulating study habits are more helpful in goals setting, usage of different techniques and to judge the whole learning process.

Some time management strategies also have great importance in a student’s life (Hamid, Kader, & Eissa, 2015). Such as students should have an activity diary which will help them to know how they spent most of their time. Self-regulation is a key to success for the students. They should have great knowledge about their academic performance, their thought and goals. Some sort of self-regulating study habits are more useful in learning process, such as:

1.1. Goals setting
Goal setting is much important for developing self-regulating study habits among students at university level. Students set their long term goals, for this purpose they adopt some time management strategies. They make a schedule and follow it. In this way, they become well aware about their academic and nonacademic activities. As a result they achieve their goals.

1.2. Planning
Planning plays a significant role for developing self-regulating study habits and to attain the goals. Students plan that how much time is required for the fulfillment of a specific task.

1.3. Self- Motivation
Self-motivation can keep the students too self-regulated. They get some sort of external rewards by themselves.

1.4. Self-Evaluation
Time to time self-evaluation is likely to be more effective for the development of self-regulating study habits. Summative assessments or exams are useful for students to judge their learning outcomes and to overcome their mistakes (Zumbrunn, Tadlock, & Roberts, 2011). According to previous studies a number of elements have great impact on student’s academic performance. Time management is one of them. Sometime students show some sort of irresponsible behavior. They come to class without any preparation or some students prefer the last minute cramming. In order to overcome the problems, time management strategies are more useful (Kwan, 2014; Iqbal & Mehmoood, 2024; Batool & Azam, 2024).

Previous research also shows that less attention is given to the role of time management in developing self-regulating study habits among students at university level. According to a previous research not only classroom environment affect the student’s performance but also their self-regulating study habits (Duckwoth & Seligman, 2005). Time management affects the ability of using the time of every individual.

Previous study shows that the time management techniques can be trained and the trained students can manage the time more wisely. Some important factors have great impact on time management such as, reading environment, content of study and the

¹PhD Scholar, Alhamd Islamic University Islamabad, Pakistan, malihakanwal@gmail.com
²PhD Scholar, Alhamd Islamic University Islamabad, Pakistan, sadafabbasi67@gmail.com
³Assistant Professor, Alhamd Islamic University Islamabad, Pakistan, sidra.kiran@auu.edu.pk
⁴Head of Department, Alhamd Islamic University Islamabad, Pakistan, Quratul.ain@alhamd.pk
interest level of the students (MacCann, Gerard, & Richard, 2012). Time management research is also influenced by individual abilities and other factors (Claesens, 2007; Iqbal & Ali, 2024; Hassan, 2024). Experience based results also effect the time management. The more ambitious and successful students are considered as more self-regulated (Zimmerman & Martinez - Pons, 1990). These students are also very conscious about managing their time.

Education is a perspective through which a nation can build the potential in people and make them beneficial for their society. National policy on education (2004) of Nigeria indicates that education is like a development tool for the state. According to a previous research that has been conducted on “student’s time management strategies, study habits and academic performance of secondary school students in Osun state” the main aim of education is the complete inclusion of individuals in the society and to provide the equal opportunities of education to all citizens.

In order to continue the basic goal of learning, student’s educational attainment will be well considered. The research indicates that in some previous years the poor educational attainment of students has been observed. Poor teaching performance, inadequate funding, poor instructional material curriculum and other economic factors are considered as main reasons behind the poor academic performance. While the main effort of federal and local government is to provide the basic facilities of education. Despite this there was a need to improve academic performance.

Therefore, some factors that affect the academic performance of the students were examined and it was discovered that some psychological factors such as, intelligence, time management and study habits also affect the academic performance. So, in order to solve the problems and to make the performance better students should adopt study habits and time management strategies. Such as, clock based alert, reminder, goal setting, giving priority to the important tasks and scheduling (Sulaiman, 2016).

Above mentioned study habits and time management strategies are helpful in making students self-regulated specially at university level. Self-regulation has a vast meaning in itself. It is an ability to get command on one’s actions, feelings or responses in order to achieve long term goals. According to Zimmerman self-regulated students can turn their intellectual potential into work-related expertise (Zimmerman, 2001).

Self-regulation is important for university students. In order to complete the specific task or assignments it can proved to be helpful in this regard. Self-regulated students have other expertise of self-boosting, self-inspection and self-control along with understanding their learning environment and adopting their university culture (Harris & Grahim, 1999). In order to be self-regulated students should focus on their thinking and learning process (Zimmerman, 2001).

The development of self-regulation in the students at university level is obligatory. According to Pintrich, during the procedure of learning, the self-regulated students produce different plan of actions and objectives. In order to check the appropriateness of their academic situation and make some required changes, the self-regulated students use objectives and worth.

Moreover, the self-regulatory process can be used to increase the educational outcome of these students (Ozan & Celkan, 2012). Students should differentiate important and less important tasks. In the view of Aduke (2015), the students can easily and efficiently accomplish the important assignments by giving them priority. With the help of prioritizing the assignments, the level of high pressure of the students can also decrease. Getting knowledge about managing the time is an obligatory process for the students at university level. According to Sevari and Kandy (2011), although students have knowledge about the effect of time management on educational performance, but still they do not pay required attention on time management (Khan, Ashraf, & Nadeem, 2020).

Self-regulated students have the habit of continuously reading until they fully understand the content. The students who have not self-regulating study habits often face failure to judge their own learning. In order to complete their assignments or other projects they rely on their peers. According to some writers developing self-regulating study habits is a difficult but not impossible process for individuals. Self-regulating study habits can be developed with the help of parents, fellows and teachers (Monique, 2017).

Self-regulation is a self-starting process in which goal setting, to control all the efforts towards the goal and time management are included. Furthermore, there is a positive relationship between self-regulating study habits and academic performance of the students at university level. This positive relationship is helpful for the legislators and educators. Many legislators and teachers are in the favor of teaching self-regulating expertise to the students (Xiao, Yao, & Wang, 2019).

Furthermore, self-regulating study habits are key elements in the learning process of university students. Some previous studies show the positive relation with study habits. In these study habits reading, proper attention, class work, accomplishment of assignments and guessing examination questions are included (Sulaiman, 2016). In the view of Palani, study habits are the key factor in the formation of an educated state (Palani, 2012). It is helpful in forming the character of people and to enable them to think appropriately.

Singh (2011) also conducted a research on one hundred randomly selected students from higher secondary schools. The research shows the difference between girls and boys about their study habits and academic performance (Rabia, Mubararak, Tallat, & Nasir, 2017). Self-regulating study habits are very important for university students. These self-regulating study habits are following:

- Self-regulated students make a schedule and try to follow it.
- They find a place where they can focus on their studies properly.
- They are well known about their goals.
- Self-regulated students always read their notes before the accomplishment of assignment.
- They try to eliminate the distractions.

Students are the nation-builders. University students are considered as mature students because they have to balance their life in various concerns such as, academic performance, different duties and other household activities. All the self-regulating study habits which are mentioned above can be developed in university students with proper time management.

In order to manage their time student should adopt some necessary strategies:

- Students should try to complete the difficult assignment first.
- During the study, students should turn off their mobile phones.
- Students should also decide the quantity of reading or writing material.
- A short break of 15-20 minutes can helpful for mind relaxation.
In any institution all the other resources and even human resources can be changed, reduced and increased. Time is another element which cannot be stock and obtained. In order to be successful, time management plays a significant role. In the modern era of life, the increasing level of knowledge and techniques put more emphasize on time planning. From an early age, the competitive climate focuses on planning and managing time. In a competitive climate, the efficient usage of time is helpful for the high performance of employees of an institution or directors.

The previous study indicates that every student should know about the skills of time management. Self-motivation is another important element in time management. Sometimes students need to be self-motivated for managing the time effectively. Students lag behind in development due to misuse of time. At university level, a good outcome can be acquired with correctly applied study schedule. Time management is helpful for policy makers in making educational policies at university level (Nasrullah & Khan, 2015).

Most of the studies show only the importance of time management on developing self-regulating study habits, but the researcher found very little work on the important issues and of time management on developing self-regulating study habits at university level.

It is important to know the relevant issues (gender and locality and department related issues) which can be considered as hurdles for time management and regulating study habits for the students at university level. Therefore the study entitled “role of time management in developing self-regulating study habits among students at University level” was conducted.

1.5. Rationale of the Study

Time management is an important element in developing self-regulating study habits among students at university level. Students have to accomplish their tasks, assignments along with exam preparation and indeed it is a stressful job. But time management is helpful to overcome the stress. Students who do not follow the time management techniques often lead to failure.

Universities students need to divide their time equally for every subject otherwise last minute preparation become the case of low grades. The purpose of this study is to investigate the role of time management in developing self-regulating study habits among students at university level.

1.6. Objectives of the Study

Objectives are important to understand the problem of under consideration. The objectives are also important to complete the research.

Following objectives were formed in this study:

1) Assess the effect of time management on self-regulating study habits of students at University level.
2) Analyze the important factors of time management that affect the study habits of students at university level.
3) Compare the time management techniques on the basis of demographic variables of students i.e. gender, locality, university and departments (Science and Arts).

1.7. Research Questions

Following research questions were raised to guide the study:

1) How the time management effect self-regulating study habits of students?
2) What are the factors that affect the study habits of students at university level?
3) What is the effect of time management techniques on the basis of gender, locality, university and departments (science and arts)?

1.8. Significant of the Study

The aim of this study is to investigate the role of time management in developing self-regulating study habits among students at university level therefore this study may be very significant in the field of education specially and for the bright future of students generally. This research may be beneficial to know about the effectiveness and usefulness of time management skills for students.

It may also help to indicate the main and useful techniques of time management for the students at university level. The research may be helpful in order to get proper guidelines to overcome the factors which badly affect their study habits of students at university level. This research may be beneficial in giving some necessary suggestions for developing self-regulating study habits.

1.9. Delimitations of the Study

The study was delimitated to:

The Public sector Universities of district Okara region only.

1.10. Definitions of key terms

1.10.1. Time management

“Time management can be described as a skill of students for the efficiently usage of time at university level”.

1.10.2. Self-regulation

“Self-regulation is the process of controlling the thinking ability of students at university level and to use the ability for educational purpose”.

1.10.3. Study habits

“Study habits can be defined as study skills of the students. The students can use or adopt it for the purpose of studying effectively”.

1.10.4. Academic Performance

Academic performance comprises of all the curricular activities in the educational institution.

2. Research Methodology

2.1. Overview

This chapter deals with research methodology to analyses the role of time management in developing self-regulating study habits among students at university level. The first section shows the research design. The second section describes the detail of population and sample, development of research tool, validation and administration of research tool. The last section shows the scoring method used for the analysis.
2.2. Research Design
This study used the survey design, following the mixed method approach. The key reason behind the selection of this research design was to analyze the opinion of the large population in an effective way. The fundamental feature of this design was that the data collection was carried out by the questionnaire along with two open-ended questions. A suitable sample was selected from the large population for this particular research design. The collected data was analyzed in order to draw useful inferences and conclusion. The researcher, consequently, used this strategy to access the role of time management in developing self-regulating study habits among students at university level.

2.3. Population
In the present study population comprised of all the male and female students of second semester in all the public sector universities of okara region. In okara region there are two public sector universities named, University of okara and university of agriculture Faisalabad (sub campus depalpur okara). In population different departments were selected. In University of Okara there are round about 40 departments. In these departments almost 21000 students are getting knowledge. While the sub campus of University Agriculture Faisalabad newly established. There are almost 7 educational programs have been started. In population, ten departments from University of Okara named, Statistics, English, Islamic studies, Education, Zoology, Chemistry Biology, Physics, Mathematics and Computer science were selected. While, five departments from University of Agriculture Faisalabad sub campus depalpur okara were selected as a population. The second semester of B.S level of session 2020-2024 was selected in the population. The total strength of male and female student of every semester was given in the table

<table>
<thead>
<tr>
<th>Sr No</th>
<th>Name of University</th>
<th>Name of departments</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>University of Okara</td>
<td>Statistics</td>
<td>56</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Islamic Studies</td>
<td>30</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Physics</td>
<td>16</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mathematics</td>
<td>21</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Education</td>
<td>26</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Biology</td>
<td>11</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td></td>
<td>English</td>
<td>23</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Zoology</td>
<td>20</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chemistry</td>
<td>20</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Computer science</td>
<td>16</td>
<td>20</td>
</tr>
<tr>
<td>2.</td>
<td>University of Agriculture Faisalabad (sub Campus Depalpur Okara)</td>
<td>Physics</td>
<td>47</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chemistry</td>
<td>46</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Zoology</td>
<td>14</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Computer Science</td>
<td>20</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mathematics</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Grande Total</td>
<td>792</td>
<td></td>
</tr>
</tbody>
</table>

**Table 1: Population of the students**

*Source: University of Okara & University of Agriculture Faisalabad (sub campus Depalpur Okara) (2021).*

2.4. Sample
Systematic random sampling technique was used in this research. Systematic random sampling is a sequence-driven random sampling. In order to select a sample, a random starting point is selected but with a fixed periodic interval. In this method the sample is arranged in a systematic way. These items can also be arranged in numerically, alphabetically and geographically. The fixed interval can be concluded through the division of entire population by the desired sample. Total population / number of sample required.

It is a simple method and the sample can be easily determined. It is a systematic method therefore the possibility of biasness is on low level in it. The researcher used systematic random sampling technique to select the sample. Total population was 792 students from public sector universities of okara region. 70% sample of total population was selected. Consequently, 167 male students and 217 female students of from university of okara were selected. While 91 male students and 80 female students from university of agriculture Faisalabad sub campus depalpur Okara were selected as a sample. Whereas, the researcher used number 2 as a fixed periodic interval number which was obtained to the above mentioned formula.

2.5. Development of Research Tool
In this study, a questionnaire of five point Likert’s scale was used. The questionnaire also consisted of two questions as open-ended. The questionnaire was self-structured. There were two sections named A, and B in this instrument. Section A comprising the exploration of personal and demographic data from the respondents such as, gender, locality, name of institution, program, session and semester. Section B sought the information about role of time management in developing self-regulating study habits among students at university level. It was a 5-point response scale type consisting 40 statements along with 2 questions as open ended to assess the role of time management in developing self-regulating study habits among students at university level.

2.6. Validation of the Research Tool
The validation of the research tool is most important to ensure the validity of the tool. A technique was used to ensure the validation of the tool.
2.7. Expert Opinion
Before finalizing the questionnaire, it was checked by various educational experts. For the purpose of validation of research tool five experts were requested to read the content. They studied the questionnaire and give some suggestions. All the suggestions given by the experts have been followed the researcher. Finally 40 statements along with 2 questions as open ended were included in the questionnaire. All the experts are well-educated and well-experienced in their fields (List attached in Appendix A).

<table>
<thead>
<tr>
<th>University Name</th>
<th>Departments</th>
<th>Male Total</th>
<th>Male Selected</th>
<th>Female Total</th>
<th>Female Selected</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Okara</td>
<td>Statistics</td>
<td>56</td>
<td>40</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Islamic Studies</td>
<td>30</td>
<td>21</td>
<td>25</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Physics</td>
<td>16</td>
<td>11</td>
<td>40</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>Mathematics</td>
<td>21</td>
<td>15</td>
<td>36</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Education</td>
<td>26</td>
<td>18</td>
<td>33</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>Biology</td>
<td>11</td>
<td>7</td>
<td>36</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Zoology</td>
<td>20</td>
<td>14</td>
<td>35</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>English</td>
<td>23</td>
<td>16</td>
<td>42</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>Chemistry</td>
<td>20</td>
<td>14</td>
<td>33</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>Computer Science</td>
<td>16</td>
<td>11</td>
<td>20</td>
<td>14</td>
</tr>
<tr>
<td>University of Agriculture Faisalabad (sub campus Depalpur Okara)</td>
<td>Physics</td>
<td>47</td>
<td>32</td>
<td>25</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Chemistry</td>
<td>46</td>
<td>31</td>
<td>43</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Computer Science</td>
<td>20</td>
<td>14</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Mathematics</td>
<td>5</td>
<td>5</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Zoology</td>
<td>14</td>
<td>10</td>
<td>28</td>
<td>19</td>
</tr>
</tbody>
</table>

Grand total of sample 555

2.8. Pilot testing
Pilot testing refers to check the feasibility of a specific research tool. In pilot testing the main issues and the validation of research tool can be recognized. In order to diagnose the issues related to the topic, the developed research tool is applied on a smaller number of respondents having same characteristics of actual sample. The respondents of pilot study are not included in the actual and predetermined sample size. With the help of pilot testing the recognized issues related to the topic and sample were solved.

<table>
<thead>
<tr>
<th>Name of Institute</th>
<th>Science</th>
<th>Arts</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Okara</td>
<td>5</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>University of Agriculture Faisalabad (sub campus Depalpur Okara)</td>
<td>10</td>
<td></td>
<td>20</td>
</tr>
</tbody>
</table>

In order to check the validity of research tool pilot study was conducted in 2 public sector universities of district Okara. The totals of 20 copies of the questionnaire were filled from the students of both universities. The questionnaires were filled under the supervision of the researcher. The filled questionnaires were statistically analyzed to determine the reliability coefficient of the research tool.

2.9. Reliability of Tool
Reliability refers to the consistency of research tool. The reliability of the tool is the ability to measure the consistency of an instrument. The value of reliability was measured through SPSS and is given in the table.

<table>
<thead>
<tr>
<th>Category</th>
<th>No of items</th>
<th>Cronbach’s Alpha value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>42</td>
<td>.72</td>
</tr>
</tbody>
</table>

Above table shows that the Cronbach’s Alpha’s value of questionnaire for students was .72 which was reliable and valid.

2.10. Administration of Research Tool
After conducting pilot testing only those statements were added in the questionnaire which were found statistically with high reliability. Then further discussion with supervisor leads towards some improvements in questionnaire.

2.11. Data Collection Procedure
The data was accumulated after the validation of research tool. Due to the terrible situation of COVID19, most of the data was collected through email, Google form and other social media resources.
2.12. Analysis of Data
In any type of research, valid conclusions cannot be made without the analysis of the responses. The statistical analysis depends upon the nature of research. Different statistical techniques are available for the data analysis. In this research, descriptive statistics techniques were used to analyze the data. Mean standard deviation and frequencies with their percentage were used from descriptive statistics while independent sample t-test was used. Independent sample t-test was used in order to test the difference among the perceptions of students based on gender, locality, university and departments (science and arts).

3. Summary, Findings, Conclusion, Discussion & Recommendations

3.1. Overview
This chapter includes summary, findings, conclusions and recommendations of the study along with suggestions for the future research. The first portion of this chapter includes the brief summary of this study. The second portion explains the findings of the study based on data analysis. The third portion includes the comparison of the study with previous studies. The fourth portion includes the conclusion based on the findings and discussion. At the end some necessary suggestions for future researchers have been discussed.

3.2. Summary
Time management plays a significant role in every era of life. Time management is very important for university students in order to get high position. The importance of time management in developing self-regulating study habits among students at university level can never be neglected. The main purpose of current study was to examine the role of time management in developing self-regulating study habits among students at university level. In order to achieve the objectives of this study, the descriptive survey design was used. The purpose of this study was to achieve the following objectives, 1) to assess the effect of time management on self-regulating study habits of students at University level, 2) to analyze the important factors that affect the study habits of students, 3) to compare the time management techniques on the basis of demographic variables of students i.e. gender, locality, university and departments.

The current study was aimed to answer the following questions. 1) How the time management effect self-regulating study habits of students at university level? 2) What are the factors that affect the study habits of students? 3) What is the effect of time management techniques on the basis of gender, locality, university and departments?

The present study explored the role of time management in developing self-regulating study habits among students at university level. The results help in the field of education specially and for the bright future of the students generally. The results of this study help to understand that how the time management effect self-regulating study habits among students at university level. The study helps to investigate the important time management strategies for university students. The results of this study are beneficial to provide guidelines to overcome the factors which badly affect their study habits. The main findings of the study are helpful in giving some necessary suggestions for developing self-regulating study habits. It helps the student to manage the time effectively.

Findings of this research can also be helpful for the future researchers to know about the role of time management in developing self-regulating study habits. It provides the basis for future research on different aspects of the time management. The mixed method approach was used in this study. It was descriptive form of research which explains the role of time management in developing self-regulating study habits among students at university level.

Population of the study was based on university students. Systematic random sampling method was used for the selection of sample study. Sample of current study was consisted of 555 students. 368 students were selected from university of Okara while 187 students were selected from university of Agriculture Faisalabad (sub campus depalpur Okara).

After reviewing the literature in detail, a questionnaire along with two questions as open -ended was developed by the researcher herself. A survey questionnaire was conducted for the investigation of the perceptions of the university students about role of time management in developing self-regulating study habits among students at university level. The developed questionnaire was validated by the experts.

Pilot study was also conducted to determine the reliability of the questionnaire. By keeping in view of the terrible situation of covid 19, mostly survey was conducted online through Google forms and by using other social media resources. The collected data was analyzed by using the SPSS software. Descriptive and inferential statistics were used to conduct the results. On the basis of results, conclusions founded and recommendations were made. The research tool was developed by the researcher. By keeping in view the time and financial resources the collection of data was delimited to the public sector universities of district Okara region.

3.3. Findings
Following findings were made on the basis of data analysis:

Objective No.1.
To assess the effect of time management on self-regulating study habits of students at University level.

3.4. Time management
• The result indicates that most of the 454(81.8%) respondents were agreed with the statement “time management is a key to success” with the mean for the statement is 3.9820 which also show that majority of the respondents were agreed with the statement and standard deviation is 1.06114. It is concluded form the table that most of the students thought time management is a key to success.
• The result shows that majority of the respondents 435(78.3%) were agree with the statement, “without timetable, students face issues”. With the mean for the statement is 3.9369 and standard deviation is 1.02213. Therefore it can be said that without timetable students face issues.
• The result indicates that most of the respondents 422(76%) were agree with the statement, “my schedule helps me for the preparation of exams” with the mean and standard deviation of the statement is 3.7658 and 1.15851 respectively. It is concluded that number of students are in favor of that schedule helps in preparation of exams.
• The result represents that 417(75.1%) of the respondents were agree with the statement, “my time management helps to increase the CGPA level” with the mean and standard deviation of the statement is 3.7658 and 1.20285 respectively. It is inferred that most of the students though that time management helps to increase the CGPA level.
• The result shows that 397(71.5%) of the respondents were agree with the statement, “my time management helps me to decrease the academic stress with the mean of the statement is 3.6432 and standard deviation of the statement is 1.23236. It is concluded that majority of the students have view that time management helps to decrease the academic stress.

Objective No.2
Analyze the important factors that affect the study habits of students.

3.5. Personality/Skills
• The result indicates that majority of the respondents 398(71.7%) were agree with the statement,” I follow a detailed timetable for my studies” with the mean of the statement is 3.6054 and the standard deviation of the statement is 1.16398. It shows that most of the students followed a detailed time table for studies.
• The result represents that extreme number of respondents 387(69.7%) were agree with the statement, “I always manage my time to work efficiently” with mean and standard deviation 3.6198 and 1.19474 respectively. It is concluded that majority of the students manage their time to work efficiently.
• The result specifies that highest number of respondents 415(74.7%) were agree with the statement, “I Prioritize my tasks according to my interest” with mean of the statement is 3.7604 and the standard deviation of the statement is 1.20253. The results show that most of the students prioritize their tasks according to their interest.
• The result represents that maximum number of respondents 264(47.5%) were agree with the statement, “I leave the things to the last minute” with mean and standard deviation 3.0162 and 1.45004 respectively. It is concluded from the table that maximum number of students leave the things to the last minute.
• The result specifies that huge number of respondents 335(60.3%) were agree with the statement, “I plan on weekly basis to meet the deadlines” with mean of the statement is 3.4072 and standard deviation is 1.29423. The results of the table identify that most of the students plan on weekly basis to meet the deadlines.
• The result represents that supreme number of respondents 374(67.4%) were agree with the statement, “I leave space to deal with unexpected” with mean of the statement is 3.5622 and standard deviation of the statement is 1.27783. It is concluded that most of the students prefer to leave space to deal with unexpected.
• The result specifies that majority of the respondents 323(58.2%) were agree with statement, “I work late at night” with mean and standard deviation of the statement is 3.3315 and 1.39429 respectively. It is inferred that majority of the students preferred to work late at night.
• The result represents that peak number of respondents 427(76.9%) were agree with the statement, “I can differentiate between important and less important activities” with mean of the statement is 3.8216 and standard deviation of the statement is 1.16301. Is shows that majority of the students can differentiate between important and less important activities.
• The result indicates that highest number of the respondents 387(69.7%) were agree with the statement, “I feel stressed due to over work” with mean and standard deviation of the statement is 3.6090 and 1.34228 respectively. It represents that most of the students feel stressed due to over work.
• The result represents that majority of the respondents 314(56.6%) were agree with the statement, “I get easily distracted from my plans”. Mean of the statement is 3.2342 and standard deviation of the statement is 1.41137. It is concluded from the table that most of the students get easily distracted from plans.
• The result represents that huge number of respondents 445(80.2%) were agree with the statement, “I am able to accomplish the goals”. Mean of the statement is 3.8739 and standard deviation of the statement is 1.10396. The results of the table indicate that most of the students think that they are able to accomplish the goals.
• The result specifies that top number of the respondents 451(81.2%) were agree with the statement, “I try to minimize interruptions” with mean and standard deviation 3.9333 and 1.00767 respectively. It shows that majority of the students try to minimize interruptions.
• The result indicates that large number of respondents 401(72.3%) were agree with the statement, “I start working on long term assignments during the semester” with mean and standard deviation 3.6847 and 1.23123 respectively. It is concluded from the table that most of the students start working on long term assignments during the semester.
• The result specifies that peak number of respondents 384(69.2%) were agree with the statement, “I am satisfied with the way I use my time” with mean and standard deviation 3.5694 and 1.26039 respectively. The results of the table show that majority of the students were satisfied with the way they use their time.
• The result represents that extreme number of respondents 420(75.7%) were agree with the statement, “I judge myself by accomplishment of tasks” with mean and standard deviation 3.7834 and standard 1.19523 respectively. It indicates that majority of the student’s judge themselves by accomplishment of tasks.
• The result indicates that greatest number of the respondents 407(73.3%) were agree with the statement, “I keep up-to date on my reading”. Mean of the statement is 3.7405 and standard deviation of the statement is 1.15624. It is concluded that most of the students keep up-to date themselves on reading.
• The result specifies that most of the respondents 370(66.7%) were agree with the statement, “I read selective material by skimming” with mean and standard deviation 3.5064 and 1.25512 respectively. It shows that most of the students read selective material by skimming.

3.6. Home Environment
• The result specifies that highest number of respondents 375(67.6%) were agree with the statement, “I share my academic issues with family” with mean and standard deviation 3.5189 and 1.25211 respectively. It is inferred that most of the students share their academic issues with family.
• The result represents that huge number of the respondents 389(70.1%) were agree with the statement, “My family understands my study issues” with mean and standard deviation 3.6360 and 1.23464 respectively. It is concluded from the table that most of the student’s families understand their study issues.
The result specifies that majority of the respondents 375(67.6%) were agree with the statement, “My parents’ guide me in my studies” with mean and standard deviation 3.6180 and 1.24667 respectively. It is concluded from the table that most of the parents of students guide them in studies.

The result indicates that peak number of the respondents 388(69.9%) were agree and with the statement, “My parents help me to manage the time”. Mean of the statement is 3.6775 and standard deviation of the statement is 1.23813. It shows that most of the parents of the students help them to manage the time.

The result specifies that extreme number of the respondents 478(86.2%) were agree and with the statement, “Home environment affects student’s grades” with mean and standard deviation of the statement is 4.1856 and 1.04405 respectively. It is concluded from the table that mostly home environment affect student’s grades.

The result shows that large number of the respondents 393(70.8%) were agree with the statement, “I can easily complete my task at home”. Mean of the statement is 3.6703 and standard deviation of the statement is 1.17484. The result indicates that most of the students can easily complete their task at home.

3.7. Recreation

The result indicates that most of the respondents 291(52.4%) were agree with the statement, “I spend more time in social activities” with mean and standard deviation 3.1658 and 1.27652 respectively. It is concluded from the table that more than 40% of the students spend most of their time in social activities.

The result represents that most of the respondents 351(63.2%) were agree with the statement, “I spend my most of the time for online assignments”. Mean of the statement is 3.5477 and standard deviation of the statement is 1.25566. The results indicate that majority of the students spend their most of time for online assignments.

The result represents that majority of the respondents 300(54%) disagree with the statement, “I spend most of my free time in watching T.V”. Mean of the statement is 2.7441 and the standard deviation of the statement is 1.25867. It is concluded that majority of the students do not spend their most of free time in watching T.V.

The result indicates that huge number of the respondents 300(54.1%) were agree with the statement “I have two hours of free time to read books” with mean and standard deviation 3.2847 and 1.22917 respectively. The results of the table show that majority of the students spend their two hours of free time in book reading.

The result specifies that large number of the respondents 362(65.2%) were agree with the statement, “I have estimated the time to complete one chapter of each subject”. Mean of the statement is 3.5117 and standard deviation of the statement is 1.21711. It is concluded from the table that majority of the students have estimated their time to complete one chapter of each subject.

The result indicates that highest number of the respondents 306(55.1%) were agree with the statement, “I spend more than two hours in a library” with mean and standard deviation 3.2685 and 1.28796 respectively. It shows that majority of the students spend more than two hours in a library.

3.8. The University culture

The result specifies that large number of the respondents 452(81.5%) were agree with the statement, “My university facilitates us with teaching resources” with mean and standard deviation 3.8306 and 1.06646 respectively. It is concluded from the table most of the universities facilitate their students with teaching resources.

The result indicates that extreme number of the respondents 435(78.4%) were agree with the statement, “Class environment affects student’s learning”. Mean of the statement is 3.9315 and standard deviation is 1.14112. By keeping in view the results of the table, it can be said that class environment affects student learning.

The result shows that highest number of the respondents 451(81.3%) were agree with the statement, “I try my best to come to university on time’ with the mean and standard deviation 3.9333 and 1.07359 respectively. So, it can be said that majority of the students try to come to university on time.

The result shows that peak number of the respondents 354(63.8%) were agree with the statement, “Students, who are not punctual, got punished” with mean and standard deviation 3.4613 and 1.29000 respectively. It is concluded from the table that majority of the students thought, students who are not punctual, got punished.

The result represents that extreme number of the respondents 410(73.9%) were agree with the statement, “I always take my lectures on time” with mean and standard deviation 3.7261 and 1.19140 respectively. It is concluded from the table that most of the students always take their lectures on time.

The result indicates that most of the respondents 363(65.4%) were agree and with the statement, “My university helps me in transportation” with mean and standard deviation 3.4324 and 1.38729 respectively. It is concluded that universities mostly help their students in transportation.

Objective. No. 3. To compare the effect of time management techniques on the basis of gender, locality, university and department.

3.9. Gender based comparison

The result indicates that there is no significant difference of managing the time between male and female students at university level.

3.9.1. University based comparison

The result shows that there is no significant difference about managing the time for developing self-regulating study habits of the respondents on the base of their universities.

3.9.2. Locality based comparison

The result indicates that there is no significant difference between rural and urban respondents about managing the time for developing self-regulating study habits.

3.9.3. Department based comparison

The result indicates that there is no significant difference between the respondents about time management for developing self-regulating study habits on the basis of their departments.
4. Discussion
Current study was conducted to find out the role of time management in developing self-regulating study habits among students at university level. The study indicates the positive role and impact of time management in developing self-regulating study habits among students at university level. Different studies indicate the great link between time management and academic performance. The results of a previous study show that female students manage their time more effectively as compare to male students. Due to which their academic performance is better than male students (Khan, Ashraf, & Nadeem, 2020). But the result of current study shows that both male and female students manage their time equally. Moreover, social media has negative impact on academic performance. The study also indicates that the role of parents and teachers is also very important. They should try to motivate the students to remain busy in study-related activities. Another study shows the effectiveness of time management strategies instruction on student’s academic time management and academic self-efficacy. The results of the study indicate that time management strategies have great impact on academic performance of the students (Khan, Ashraf, & Nadeem, 2020). The study of (Terry, 2002) also showed the positive interaction between time management and self-regulation.

Current study has points out some following strategies,
- Making timetable
- Eliminate distraction
- Make best use of travelling time

Another study has founded the effect of self-regulation on academic performance. The results show that self-regulated students are considered as more successful students than others. Curriculum should be according to the learning requirements of the students and student-centered classroom should be encouraged for self-regulation (Xiao, Yao, & Wang, 2019). Another study represents that student’s time management depends on their motivation level. The study also indicates that students should be emotionally encouraged for their success. Through peer collaboration, students try to overcome the problems with their techniques. The studies describe that students who do not have their set goals also do not have idea of their practical life. The students have some knowledge about setting goals and prioritizing the task. They try to solve their problems. Students try to accomplish their tasks on time by using different techniques of self-regulation. So, different studies have shown the great impact of time management on the overall performance of students.

5. Conclusion
Time management is a key to success. Time management is not only important for job related people or workers but it is also very important for the university students. University students need to manage the time effectively for developing self-regulating study habits. It may be concluded on the basis of findings and discussion that role of time management is very important in developing self-regulating study habits among students at university level. Time is more valuable than money or anything else. It cannot be stocked and regain. Most of the university students consider that time management is an important element for success. Without timetable students face issues. The study also concludes that time management helps to develop the self-regulating study habits among students. In this way, CGPA level increase and the stress level decreases. Personality of the students also effects the time management. Most of the students point out that by prioritization of different tasks, the habit of skimming the material can be eliminated. Moreover, the students who leave the things to the last minute and they do not follow a proper timetable, mostly feel study pressure and become a stressed person. Therefor they try to complete their assignments by doing work late at night. This situation can badly affect their health. Home environment is another important factor that affect the time management. Cooperative learning environment and parents are helpful for the students to complete their tasks at home. Distractions can be eliminated by using different techniques such as, turn off mobile phones during study and motivate ourselves by giving some reward after accomplishment of a certain task. Furthermore, students have the opinion that travelling requires more time. The study also concluded that importance of time management in developing self-regulating study habits among students at university level can never be neglected. But the university students have to face some issues in managing time effectively which can be solved by using different techniques. Majority of the students have the opinion that over burden of difficult subjects is the main issue of time management. This issue can be solved by prioritizing the tasks. Mostly girls remain busy in doing household activities while boys remain busy in playing outdoor games. This type of daily routine is also the main issue of time management for students. This issue can be sort out by making to do list. The results of the study show that lack of motivation, family issues, lack of planning, lack of guidance and restless daily routine are some of the important issues of managing time for students. These issues can be solved by knowing the important, less important and urgent tasks. So, time management plays an important role for student’s life in developing self-regulating study habits. The study concludes that there is no significant difference between the students on the basis of gender, locality, university and departments regarding the role of time management in developing self-regulating study habits among students at university level.

5.1. Recommendations
Following recommendations were made by keeping in view the findings of this study.
- It is recommended that proper lectures and seminars about the importance of time management should be conducted.
- It is also recommended that all the students should be given equal chances to manage their time.
- Teachers should deliver more than one lectures about the most difficult subject for the students.
- Parent’s role is very important for students. They should help and guide them in their time management.
- There is need to facilitate the students with transportation.

5.2. Future Research Recommendations
Following are the recommendations for future research.
- It is recommended that the further study can be conducted by the perceptions of teachers.
- The further research can be conducted at elementary, secondary and higher level of the students.
- It is also recommended to investigate the study by using qualitative approach such as interviews.
Questionnaire for Students

Please fill the relevant option:

University Name ____________University of Okara (1) University of Agriculture Faisalabad (sub campus depalpur okara
(2) Department ( science 1) (Arts 2) Program___________ Session ________Semester_____________ Locality: R
(1) U (2), Gender: M(1) F(2)

Note: SDA- Strongly Disagree (1), DA- Disagree (2), UD- UN Decided (3), A- Agree (4),
SA- Strongly Agree (5).

Please, tick an option to give your opinion.

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Statements</th>
<th>SDA</th>
<th>DA</th>
<th>UD</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Time management is a key to success.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Without timetable, students face issues.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>My schedule helps me for the preparation of exams.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>My time management helps to increase the CGPA level.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>My time management helps me to decrease the academic stress.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>I follow a detailed timetable for my studies.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>I always manage my time to work efficiently.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>I priorities my tasks according to my interest.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>I leave the things to the last minute.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>I plan on weekly basis to meet the deadlines.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>I leave space to deal with the unexpected.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>I work late at night.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>I can differentiate between important and less important activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>I feel stressed due to over work.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>I get easily distracted from plans.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>I am able to accomplish the goals.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>I try to minimize interruptions.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>I start working on long term assignments during the semester.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>I am satisfied with the way I use my time.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>I judge myself by accomplishments of tasks.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>I keep up-to date on my reading.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22.</td>
<td>I read selective material by skimming.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Statements</th>
<th>SDA</th>
<th>DA</th>
<th>UD</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>23. I share my academic issues with family.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. My family understands my study issues.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25. My parents’ guide me in my studies.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26. My parents help me to manage the time.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27. Home environment affects students grades.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28. I can easily complete my task at home.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Statements</th>
<th>SDA</th>
<th>DA</th>
<th>UD</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>29. I spend more time in social activities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30. I spend my most of the time for online assignments.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31. I spend most of my free time in watching T.V</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32. I have two hours of free time to read books.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33. I have estimated the time to complete one chapter of each subject.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34. I spend more than two hours in a library.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Statements</th>
<th>SDA</th>
<th>DA</th>
<th>UD</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>35. My University facilitates us with teaching resources.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37. I try my best to come to university on time.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38. Students, who are not punctual, got punished.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39. I always take my lectures on time.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40. My university helps me in transportation.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

41. What is your opinion about issues of time management?

42. Write some techniques which are important to manage the time please.