Impact of Technology Usage and Improved Teaching Styles on Effective Learning of Students: The Moderating Effect of Resistance to Change

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Abstract

This study aims to empirically investigate and verify the impact of effective learning techniques that can help and aid in effective learning. This study tends to focus the education sector and tries to find out that how can students use advanced technology for the effective learning of students. In order to collect the data from the respondents, a survey method was conducted by distributing questionnaires in the students. 410 responses were collected using a non-probability convenience sampling technique. The data analysis was done by using SPSS (Statistical Package for Social Sciences). Findings show that resistance to change strengthens the positive relationship between the motivation of technology usage and student perception for effective learning. The results provide helpful information to the policymakers and academic institutes from which they could develop and improve appropriate strategies and provide essential assistance to the teachers in educational institutes.

Keywords:

Teaching Style, Learning, Resistance, Change, Technology
Introduction

In the 21st century, knowledge has increased rapidly (Hislop, 2005). Under this context, the role of education has also transformed because it is impossible to teach or collect such huge amounts of knowledge. In Pakistani learning systems, we see a set pattern of making students learn new knowledge (Hamza et al., 2018; Jan et al., 2018). These teaching methods are now becoming obsolete and require enhancement so that students can effectively learn. Educational practices have been criticized for not developing these fundamentals of professional proficiency (Renkl et al., 1996). An imperative challenge for today’s higher education is the development and implementation of instructional practices that will foster in students the skill to apply knowledge efficiently. New and profound techniques to study must be applied in our educational systems so that increasing knowledge creates new problems for all countries.

Technology is one of the major forces that has been revolutionizing a different aspect of our lives (Burke et al., 2009; Chatterji, 2018). From the corporate world to the practical world and even the education sector every little aspect of our life has a touch of the tech world. Technology has the power to enhance things as well it has the power to bring revolutionary changes in our society (Collins et al., 2018). Education has the power to build nations, and the way technology has overcome so many things in our education sector the way students learn things and concepts is changing (Halász, 2018).

Human resources and technology are considered to be an essential element for sustainable organizations (Inam et al., 2018; Najam et al., 2018; Sheikh et al., 2018, 2019). Teachers in the educational institute are an important resource because they are responsible for organizational progress and student’s performance. It is believed that teaching style can influence and impact a student’s learning (Cuseo, 2018; Van Klaveren, 2011). The quality and quantity of education have a relationship with the teaching styles and techniques. The more new and advanced teaching techniques the more effective quality of education would be provided to students. Students are always looking for new and advanced ways to learn and acquire knowledge (Entwistle, 2018a, 2018b; Overby, 2011). Hence to make them learn new things effectively, it is vital to use new and advanced methods of teaching so that they knowledge transferred and given to them remains with them (Schwartz et al., 2012). Teaching techniques help students as well as teachers to influence and educate students in a way that the knowledge transferred in
the students remains with them for a longer time. This happens when the instructors or teachers use advanced and proficient ways of teaching for their students. A lot of students are being left behind by such educational systems that are not prone to various advancements happening in our society and are not applying them in their educational reforms (Dunlosky et al., 2013). Refining and the improvement of educational sources will require efforts on many fronts, but a central focus should be on the students that how can we regulate their learning using modern and effective learning techniques. A lot of advancements in teaching and technology have been made that could be a proper source of help for students as well as teachers (Mooney, 2018).

Last two decades have seen a great amount of interest in human resource management practices and organizational performance (Marchington et al., 2000). This set of human resource management practices was named as learning and development as well as training and development (Whitfield et al., 1997). The major focus has been teaching techniques and learning needs that could be fulfilled by the proper use of advanced technology and effective teaching methods. Human resource management practices in the education sector are deliberated to upgrade the abilities and effectiveness of advanced teaching methods (Messersmith et al., 2011). According to Garavan et al., (2008), human resource management policy and its arrangement is a key that can perform a vibrant part in increasing human resource management practices. Zheng & Lamond, (2010) found some noticeable elements of learning and development at educational sectors.

A number of researches have exposed the significance of learning techniques and advancement in teaching methods (Osmani et al., 2018; Slavich et al., 2012; Sullivan et al., 2018). Liu, Chen, & Chang (2010) discussed the student’s perceptions of different teaching styles and how these can be implemented on learning strategies as they have a very vital role on the learning and understanding capacity of the student. Dochy, Segers, Van den Bossche, & Gijbels (2003) conducted a meta-analysis on problem-based learning techniques and their influence on students. This meta-analysis aimed to discuss the main effects of problem-based learning on two categories of outcomes: knowledge and skills; and also addressed potential moderators of the effect of problem-based learning. Dunlosky et al. (2013) discussed that how effective learning techniques can improve students learning and how it can build their capacity to learn and understand the things that they are taught. These are few of the studies that have been a part of the human resource learning and development research areas and such studies have
majorly impacted the processes of learning and have strongly affected learning techniques for students as well as teachers.

The main objective of this study is that how effective and advanced learning techniques can play a vital role in the learning and development of the students. Moreover, it also addresses the relation of Human Resource Management Practices (HRP) and effective learning techniques in enhancing the student’s learning.

The major significance of this study would be upon the academia and majorly on the education sector. Since the study is focusing directly on students’ perceptions of effective learning and advanced ways of teaching with the help of technology can have an impact on effective earning and as well as learning capacity of the students. Since when we talk about academics what we majorly focus is how it can have an impact on the education sector, such studies can help students as well as teachers to change their ways and practices of teaching and the methods that they adapt to teach. This can improve and change how we teach in traditional set up to new and modern learning systems and approaches.

The practical significance discusses somewhat the same issues. This study can help our education sector to opt for advanced learning techniques that have a greater impact on the students learning and are also an effective way to teach them. This could also open doors in helping to understand that what things are necessary for making students learn and understand the concepts taught to them in a more effective and long-lasting manner. This could also bring about changes in the old school teaching methods of our education system as well.

Overall policymakers of the education sector or our institutes or either government officials can get insights from this study about the cascading effects of their carrying out of HRP on their image in outside public from both their internal (trainers) and external customers (students) They may set their HR policies right in accordance with the perceptions of satisfaction of both the entities.

**Theoretical Foundation**

Our study concentrates on the theories that are related to effective learning or experiential learning techniques. A well-known social learning theory developed by Albert Bandura, who works within both cognitive and behavioral frameworks that embrace attention, memory, and motivation (Bandura, 1978). His theory of learning suggests that people learn within a social
context and that learning is facilitated through concepts such as modeling, observational learning, and imitation. Bandura put forward “reciprocal determinism” that holds the view that a person’s behavior, environment, and personal qualities all reciprocally influence each other’s. He argues that children learn from observing others as well as from “model” behavior, which are processes involving attention, retention, reproduction, and motivation. The importance of positive role modeling on learning is considered for the development of the conceptual framework.

Experiential learning theories build on social and constructivist theories of learning but situate experience at the core of the learning process (Gallagher, 2017). They aim to understand the manners in which experiences motivate learners and promote their learning. Therefore, learning is about meaningful experiences in everyday life that lead to a change in an individual’s knowledge and behaviors. Carl Rogers is an influential proponent of these theories, suggesting that experiential learning is “self-initiated learning” as people have a natural inclination to learn; and that they learn when they are fully involved in the learning process (Rogers, 1956). Rogers put forward the following insight: (1) “learning can only be facilitated: we cannot teach another person directly”, (2) “learners become more rigid under threat”, (3) “significant learning occurs in an environment where threat to the learner is reduced to a minimum”, (4) “learning is most likely to occur and to last when it is self-initiated”. He supports a dynamic, continuous process of change where new learning results in and affects learning environments. This dynamic process of change is often considered in the literature on organizational learning.

The above-mentioned theories are the foundation of the research model of this study.
Figure 1: Proposed Theoretical Framework

Literature Review and Hypotheses Formulation

Technology and Effective Learning

Many students are being left behind by an educational system that some people believe is in crisis. Improving educational outcomes will require efforts on many fronts, but a central premise of this critique is that one part of a solution involves helping students to better regulate their learning through the use of effective learning techniques (Dunlosky et al., 2013). Effective learning is induced when efficient techniques are introduced in the learning process. One of the techniques could be the use of technology in the educational system. Technology is the collection of skills, methods, and processes used in the production of goods or services or in the accomplishment of objectives, such as scientific investigation. Technology can be the knowledge of techniques, processes, or it can be embedded in machines to allow for operation without the detailed knowledge of their workings (Liao, 2003; Neches R. Fikes RE. et al., 1991).

When students will be provided with advanced and new technology it would have an impact on their fast learning as students of today’s era are much more prone to technology usage and
are totally at ease to use technology hence it is being assumed here that the more usage of technology the more learning would be done effectively. Today, various institutes in countries such as the USA are investing a considerable amount of their annual budgets on technologies in education with an objective of improving academic performance. Most of the public schools have access to internet-connected computers and thus, schools are in a much better position to implement technologies in classrooms (Cheung et al., 2013). These arguments are the basis of the following hypothesis.

Hypothesis 1: Technology usage Motivation has a positive significant relationship with the effective learning of students

Self-Efficacy and Effective Learning

Self-efficacy is the confidence in our own-self and how much potential we can put into any task that we perform or any situation that we go through (Bandura Albert, 1994). It is one's belief in one's ability to succeed in specific situations or accomplish a task. One's sense of self-efficacy can play a major role in how one approaches goals, tasks, and challenges.

During the past two decades, self-efficacy has emerged as a highly effective predictor of students' motivation and learning. Self-efficacy beliefs have been found to be sensitive to subtle changes in students' performance context, to interact with self-regulated learning processes (Zimmerman, 2000). The more the able student will be and the more the student will be confident about his own skills and abilities the more potential for effective learning and better understanding could be effectively created. The way depicting these behaviours is closely related to teachers’ self-efficacy and teaching style (De Smul et al., 2018; Joo et al., n.d.; S. Liu et al., 2018). Following the hypothesis is made based on the discussed literature.

Hypothesis 2: Self-efficacy has a positive significant relationship with the effective learning of students

Teaching Style and Effective Learning

An effective teaching style engages students in the learning process and helps them develop critical thinking skills. Traditional teaching styles have evolved with the advent of differentiated instruction, prompting teachers to adjust their styles toward students' learning needs (Hidalgo-cabrillana et al., 2015; Zhu et al., 2018).
The most important advantage of the expert teaching style is teachers need less time to teach and it is advantageous while teaching big groups (Judson et al., 2018). Teaching Style is also a teacher-oriented teaching style. The teacher is the main authority of the classroom and explicitly tells this situation. Teacher fold in this group may ignore individual differences; furthermore, teachers who have this teaching style are inflexible (Bligh, 1993). However, students are aware of what is expected of them. Teachers who prefer Personal Teaching Style are the role model for students (Heimlich et al., 1994). The disadvantage of this style is that students are always depended on teachers or try to imitate their teachers and not consider another way of solutions of the problems (Brattesani et al., 1984; S.Yoon, 2002). However, Personal teaching style enables students to take responsibility to their own learning. These teaching styles can result in the effective learning of students.

Hypothesis 3: Teaching style has a positive significant relationship with the effective learning of students.

Physical Environment and Effective Learning

The physical environment consists of people and our surroundings (Stedman, 2003). These surroundings have a greater impact on our learning and the way in which we behave (Arens et al., 2016; Pawlowska et al., 2014). The physical environment makes it evident that what is the level of engagement on an individual. This directly affects the physical environment of the classroom because the class must be equipped with problems to explore and resources to solve them. According to (Torrance, 1981), the purpose of creative teaching is to create a “responsible environment” through appreciation of individual differences, high teacher enthusiasm, and so on. It is believed that by forming a creative climate is vital to inspire creative thinking and effective learning (Sawyer, 2004; Woods et al., 1996). The more equipped the physical environment of the class would be the more it would be a source of students to learn effectively.

Hypothesis 4: Physical environment has a positive significant relationship with the effective learning of students.

Moderating Effects of Resistance to Change

One of the most baffling and recalcitrant of the problems which organizations face is resistance to change (Agasisti et al., 2018; Dow et al., 2013). All too often when executives encounter
resistance to change, they explain it by quoting the cliché that “people resist change” and never look further. A key role for educational leaders is to continually improve the quality of education (Sundberg et al., 2017). Here the resistance to change acts as a moderator between technology usage motivation and effective learning. It may strengthen or weaken their relationship. Students at time resist adopting big changes during the particular teaching styles and the way they earn any concept (Sparks, 1988). As technology acts as a big breakthrough hence sometimes it’s a little troublesome to adapt to it.

Hypothesis 5: Resistance to Change has a moderating effect on technology usage motivation and effective learning.

Resistance to change can act as a moderator and influence the students into not applying or showing their full capabilities because this kind of resistance can also affect behavior (Oreg, 2003). Intolerance to the adjustment can also occur period involved in change. A distinct aspect of individuals’ psychological resilience is their ability to adjust to new situations (Ong et al., 2006; Wagnild, 2009). Some researchers have suggested that people resist change because it often involves more work in the short term (Kanter, 1985). New tasks require learning and adjustment, and it may be that some individuals are more willing and able to endure this adjustment period. Others who may support a change in principle may still resist it because of their reluctance to undergo the required adjustment period.

Hypothesis 6: Resistance to Change has a moderating effect on self-efficacy and effective learning.

When a student resists any kind of new teaching style applied to him it can have an impact on the students effective learning process. One of the most baffling and recalcitrant of the problems which organizations face is resistance to change. All too often when executives encounter resistance to change, they “explain” it by quoting the cliché that “people resist change” and never look further. A key role for educational leaders within undergraduate medical education is to continually improve the quality of education; global quality health care is the goal (Sundberg et al., 2017).

Hypothesis 7: Resistance to Change has a moderating effect on teaching style and effective learning.
Wenglinsky (2002) worked on how the classroom environment and practices work in effective leaning and teachings. Moreover, he also discusses the link that a teacher establishes within the classroom environment. Gallagher (2017) reprovingly did a research on how physical space and physical environments of the classroom can have an impact on the learning and the creativity level of the students. Such things that are a part of the external environment are said to play an important role in the learning and development of the student.

Hypothesis 8: Resistance to Change has a moderating effect on the physical environment and effective learning.

**Methodology**

Structural equation modeling which is a multivariate statistical analysis technique was adopted to analyze the proposed hypotheses. Tools used in this study were SPSS and AMOS-SEM. Techniques used for analysis were initial screening data, regression analysis, and correlation analysis.

As this study tends to focus on effective learning techniques and the major role of technology advancements applied in as new methods to teach students the education sector would be an impactful medium to study. Therefore, the population consists of students of major cities of Pakistan. The students were targeted so that their proper opinion about effective learning criteria could be attained. The study’s sample comprised of students of major universities of Pakistan who come across various teaching techniques through their teachers. The primary data from 410 participants were collected using questionnaires. Out of 500 responses, 410 were usable for analysis making it 85% response rate.

The convenience sampling technique was used. The reason why most studies use convenience sampling is that it is not possible to gather a fixed number of respondents which is found totally appropriate and a perfect match for the study among such an enormous population. The cross-sectional research design was conducted as it collects data from the population at a point of time. The survey included a total of 35 items. The data was collected under the time period of 2-3 months. Students were required to answer the survey on the spot. Hence each of them was contacted personally or through online means. The respondents were clearly introduced and familiarized by the research topic and the purpose of the study and were asked for their consent in order to record responses.
Measures

For self-efficacy, 5 items scale has been adapted from Jones (1986). However, technology usage motivation was measured with 5 items scale developed by Meuter, Bitner, Ostrom, & Brown (2005). Moreover, the physical environment was measured using 3 items scale, which has been adapted from Schuhwerk & Lefkoff-Hagius (1995). Further, four item scale of Resistance to change has been adapted from (Oreg, 2003). Student perception of effective learning was measured with four item scale and adapted from (Chou et al., 2010). Lastly, five items scale of teaching style was adapted from (Oreg, 2003). Respondents were asked to choose the most suitable answer through a five-point Likert Scale ranging from (1=Strongly Disagree to 5=Strongly Agree).

Data analysis

From the finalized 410 responses, 14.8% of the respondents were below 25 years of age, 68.7% were among the age group of 28, 11.2% were under the age group of 28-38, 3.4% were between 38-48 years and 1.7% were above 48 years. Similarly, when asked about the qualification level, 24.8% of the respondents were qualified at the intermediate level, 32.3% were bachelor’s degree holders, and 29.9 had a master’s degree. Similarly, 10.4% of the respondents.

As mentioned before, the data was collected from 4 cities in Pakistan. The demographic statistics of the cities included Lahore, Islamabad, Multan, and Bahawalpur in which Lahore stood out having the highest response percentage of 39.3%, 24.4% of the responses were obtained from Islamabad, 21% of the responses were obtained from respondents of Multan and around 15.2% of the respondents were from Bahawalpur. This is shown in Table 1.

The Chronbach’s alpha, Average Variance Extracted (AVE), and Maximum Shared Variance (MSV) values of the constructs including Self Efficacy (α = 0.863, AVE = 0.634, MSV = 0.42), Technology Usage Motivation (α = 0.842, AVE = 0.673, MSV = 0.45), Physical Environment (0.829, AVE = 0.594, MSV = 0.38), Effective Learning (α = 0.864, AVE = 0.636, MSV = 0.42), Teaching Style (α = 0.789, AVE = 0.610, MSV = 0.40), and Resistance to Change (α = 0.753, AVE = 0.672, MSV = 0.45) shows that the variables are reliable and valid. Moreover, for multicollinearity issues, the Variance Inflation Factor (VIF) was calculated. The values obtained for all the variables were less than 4 which shows that there exist no multicollinearity issues in the independent variables.
Table 1: Demographical Details

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Characteristics</th>
<th>Frequency</th>
<th>Percentage %</th>
<th>Mean</th>
<th>S.D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Age</td>
<td>1.Below 28</td>
<td>74</td>
<td>14.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.18-28</td>
<td>343</td>
<td>68.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.28-38</td>
<td>56</td>
<td>11.2</td>
<td>2.09</td>
<td>.744</td>
</tr>
<tr>
<td></td>
<td>4.38-48</td>
<td>17</td>
<td>3.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5.Above 48</td>
<td>9</td>
<td>1.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Qualification</td>
<td>1.Intermediate</td>
<td>124</td>
<td>24.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.Bachelors</td>
<td>161</td>
<td>32.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.Masters</td>
<td>149</td>
<td>29.9</td>
<td>2.34</td>
<td>1.043</td>
</tr>
<tr>
<td></td>
<td>4.M. Phil</td>
<td>52</td>
<td>10.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5.Ph. D</td>
<td>13</td>
<td>2.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5.Student</td>
<td>333</td>
<td>66.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.Above 60</td>
<td>16</td>
<td>3.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 City</td>
<td>1.Multan</td>
<td>105</td>
<td>21.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.Bahawalpur</td>
<td>76</td>
<td>15.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.Lahore</td>
<td>196</td>
<td>39.3</td>
<td>3.53</td>
<td>.747</td>
</tr>
<tr>
<td></td>
<td>4.Islamabad</td>
<td>122</td>
<td>24.4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: S.D=Standard Deviation

After performing analysis and improving model fitness, the items with the lowest factor loadings and unsuitable modification indices were deleted. A total of 2 items were deleted from the measurement model. One from teaching style and one from self-efficacy. After this the fit indices including CMIN/DF (3.72), RMR (0.092), CFI (0.91), RMSEA (0.075), P-Close (0.99), AGFI (0.90) fell into the acceptable region.

Table 2 shows that technology usage motivation has a positive significant relationship between TUM and EL ($\beta = 0.499$, $p < 0.05$), between TS and EL ($\beta = 0.928$, $p < 0.05$), between SE and EL ($\beta = 0.615$, $p < 0.05$), and in between PE and EL ($\beta = 0.795$, $p < 0.05$). Hence accepting Hypotheses 1, 2, 3, and 4 respectively.
Moderation analysis was conducted in SPSS. The structural model was comprised of a path in which Technology usage motivation was the independent variable and student perception of effective learning was the dependent variable. Resistance to change was added as a moderator in the path. Regression analysis in SPSS was opted to check the effect of moderation by resistance to change. Then interaction variable was created from the interaction of independent and moderator. After figuring all the required values for analysis, regression analysis was run for the structural path of moderation.
It is evident from the Figure 1 that when there is low resistance to change at low technology usage motivation level, effective learning is low but where resistance to change is increased at high technology usage motivation level, effective learning level is increased in a greater rate than TUM. Hence proved that Resistance to change strengthens the positive relationship between technology usage motivation and student perception of effective learning. In the second moderation, the structural model was comprised of a path in which teaching style was taken as an independent variable and student perception of effective learning was taken as dependent variable. Resistance to change was added as a moderator. The results show that when there is low resistance to change at low teaching style level, effective learning is low but where resistance to change is increased at high teaching style level, effective learning level is increased in more rate than TS. Hence proved that Resistance to change strengthens the positive relationship between teaching style and student perception of effective learning. Hence the hypotheses H5, H7 are accepted except H6 and H8.

**Table 2. Direct Effects and Moderation Analysis**

<table>
<thead>
<tr>
<th>Direct effects</th>
<th>Estimate (β)</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology Usage Motivation → Effective Learning</td>
<td>0.499</td>
<td>***</td>
</tr>
<tr>
<td>Teaching Style → Effective Learning</td>
<td>0.928</td>
<td>***</td>
</tr>
<tr>
<td>Self-Efficacy → Effective Learning</td>
<td>0.615</td>
<td>***</td>
</tr>
<tr>
<td>Physical Environment → Effective Learning</td>
<td>0.795</td>
<td>***</td>
</tr>
</tbody>
</table>

**Moderation Analysis**

**Moderation 1** – IV (Technology Usage Motivation), Mod (Resistance to Change), DV (Effective Learning)

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology Usage Motivation</td>
<td>0.47</td>
<td>0.000***</td>
</tr>
<tr>
<td>Resistance to Change</td>
<td>-0.20</td>
<td>0.000***</td>
</tr>
<tr>
<td>Interaction (TUM x RC)</td>
<td>0.42</td>
<td>0.010**</td>
</tr>
</tbody>
</table>

**Moderation 2** – IV (Teaching Style), Mod (Resistance to Change), DV (Effective Learning)

| Teaching Style | 0.63 | 0.000*** |
| Resistance to Change | -0.03 | 0.003** |
| Interaction (RC x TS) | -0.02 | 0.063 |

**Moderation 3** – IV (Self-Efficacy), Mod (Resistance to Change), DV (Effective Learning)

| Self-Efficacy | 0.39 | 0.000*** |
| Resistance to Change | 0.39 | 0.000*** |
| Interaction (RC x SE) | 0.01 | 0.606 |

**Moderation 4** – IV (Self-Efficacy), Mod (Resistance to Change), DV (Effective Learning)

| Physical Environment | -0.05 | 0.000*** |
| Resistance to Change | -0.05 | 0.007*** |
| Interaction (RC x PE) | 0.01 | 0.470 |

Note. TUM = Teacher Usage Motivation, RC = Resistance to Change, TS = Teaching Style. SE = Self Efficacy, PE = Physical Environment.
Discussion

Our first hypothesis explains that technology usage motivation has a significant impact on the effective learning of the students. According to Desimone (2009) when the students would be provided with efficient technology and latest advances in technology, they would proficiently utilize it, furthermore, Chauhan (2017) suggests that the higher level students the more proficient use of technology can be made. Our second hypotheses assumed that self-efficacy has a significant relationship with the effective learning of students. This hypothesis was rejected. To reason with the rejection of this hypothesis Bandura (1997) suggested that self-efficacy works as the ability to be confident and be self-confident in your own abilities hence Bandura suggested that it has nothing to do with creativity or learning new techniques as learning is another concept Pajares & Graham (1999) said that self-efficacy works with motivation when the students are confident and motivated, they will tend to be more easy with themselves and self-reliant, but Pajares suggested this has nothing to do with learning and development of a person. The third hypothesis discussed that teaching style has a significant relationship with the effective learning of students. According to Bartholomew et al. (2018), the more efficient and resourceful the teaching style would be, the students would tend to learn new concepts and ideas more rapidly. The most important advantage of the expert teaching style is teachers need less time to teach and it is advantageous while teaching big groups. Teaching Style is also a teacher-oriented teaching style. The teacher is the main authority of the classroom and explicitly tells this situation. Teacher fold in this group may ignore individual differences; furthermore, teachers who have this teaching style are inflexible.
However, students are aware of what is expected of them. Teachers who prefer Personal Teaching Style are the role model for students. The disadvantage of this style is that students are always depended on teachers or try to imitate their teachers and not consider another way of solutions to the problems (Bevilacqua et al., 2018). However, Personal teaching style enables students to take responsibility to their own learning. These teaching styles can result in the effective learning of students.

The fourth hypotheses discussed that Physical environment has a significant relationship with the effective learning of students. This hypothesis was rejected. According to Gallagher (2017), the physical environment of the place where the students are sitting to learn has a slight impact on the creativity of the students but has no effect on the learning and effectivity of learning as external stimulus do not impact learning to that much extent.

The fifth hypothesis is related to resistance to change, it has a moderating effect on technology usage motivation and effective learning, this hypothesis was accepted. According to Gong, Ramkissoon, Greenwood, & Hoyte, 2018; Madara, Maheshwari, & Selvan (2018) technology is something that the younger generation is more prone to use hence when they feel that ease to use it makes them more inclined to resist changes that are made for effective learning. Oreg (2003) suggested that resistance to change is an ingredient that is present in not all the people around us as some people easily accept changes while others resist them. Similarly, if advanced technology has the ability to reform teaching techniques that students are more likely to accept these changes. The sixth hypotheses state that Resistance to Change has a moderating effect on self-efficacy and effective learning. This hypothesis was proven wrong as people with higher self-esteem have a chance of higher possibility to resist changes. The seventh hypothesis states that resistance to change has a moderating effect on teaching style and effective learning. This hypothesis was proven right and was accepted as students sometimes have the tendency to resist new changes and teaching styles. This, in turn, makes them resist any kind of new teaching styles and techniques that they will be introduced with. The more various and different teaching styles the more the students will resist this kind of teaching techniques (Inquiry et al., n.d.; Jessee et al., 2006). The eighth hypothesis stated that resistance to change has a moderating effect on the physical environment and effective learning. This hypothesis was proven unsupported as stated before that physical environment affects the creativity of the student and as resistance to change works as a moderator so there will be student’s hindrance and resistance while their perception of effective learning.
Implications of Study

This study can help our education sector to opt for advanced learning techniques that have a greater impact on the students learning and are also an effective way to teach them. This could also open doors in helping to understand that what things are necessary for making students learn and understand the concepts taught to them in a more effective and long-lasting manner.

All researches performed and conducted have their very own significance. The current study addresses the relation of Human Resource Management Practices (HRP) and effective learning techniques which could be a source of help for our students. This study will have significance for academia, in the practical world as well as for policymakers too. On by one, we would briefly discuss that how such studies and their repercussions can have an impact on our learning and advanced teaching styles.

The major significance of this study would be upon the academia and majorly on the education sector. Since the study is focusing directly on students’ perceptions of effective learning and advanced ways of teaching with the help of technology can have an impact on effective earning and as well as learning capacity of the students. Since when we talk about academics what we majorly focus is how it can have an impact on the education sector, such studies can help students as well as teachers to change their ways and practices of teaching and the methods that they adapt to teach. This can improve and change how we teach in traditional set up to new and modern learning systems and approaches.

The practical significance discusses somewhat the same issues. This study can help our education sector to opt for advanced learning techniques that have a greater impact on the students learning and are also an effective way to teach them. This could also open doors in helping to understand that what things are necessary for making students learn and understand the concepts taught to them in a more effective and long-lasting manner. This could also bring about changes in the old school teaching methods of our education system as well.

Overall policymakers of the education sector or our institutes or either government officials can get insights from this study about the cascading effects of their carrying out of HRP on their image in outside public from both their internal (trainers) and external customers (students) They may set their HR policies right in accordance with the perceptions of satisfaction of both the entities.
Conclusion

Teaching style can influence and impact a student’s learning a lot. The quality and quantity of education have a relationship with the teaching styles and techniques. The more new and advanced teaching techniques the more effective quality of education would be provided to students. Students are always looking for new and advanced ways to learn and acquire knowledge. Effective learning is a vital thing so that our students and the things that are taught to them are made more resourceful. From the corporate world to the practical world and even the education sector every little aspect of our life has a touch of the tech world. Technology has the power to enhance things as well it has the power to bring revolutionary changes in our society. Education has the power to build nations, and the way technology has overcome so many things in our education sector the way students learn things and concepts is changing.

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