

# A Systematic Review on Evaluating the Influence of Social Media Marketing in Higher Education in Current Scenario & Future Implications using the PRISMA Model

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## Abstract

Social media marketing has been one of the fastest adopting methods across various sectors. For the higher education sector as well the use of social media has been widely investigated by various researchers in the past. The researchers believe that social media inclusion in the learning process helps in incorporating a social context to the process and eliminates the traditional boundaries related to the higher education scenario. While realising the unlimited potential held by the use of social media in the educational sector, this study makes an attempt to investigate the past research in the field and try to determine the possible factors that have very high influencing capacities in the adoption of social media in the learning process. The study uses PRISMA model to shortlist 51 papers from the SCOPUS database and conducted an in detailed systematic review. The results of the study showed seven important factors namely performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, habit and price values. Apart from that significant influence of age and gender as moderators are also found.

**Keywords:** Social Media; Higher Education; Systematic Literature Review, PRISMA

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## 1. Introduction

Social media marketing has been one of the fastest adopting methods across various sectors. For the higher education sector as well the use of social media has been widely investigated by various researchers in the past. The researchers believe that social media inclusion in the learning process helps in incorporating a social context to the process and eliminates the traditional boundaries related to the higher education scenario (Fox & Bird, 2017; Greenhow

&Askari, 2017). It provides a forum for communication in the higher education sector and provides immense support to build up networks and encourage the informal learning possibilities (Junco, 2014; Krutka & Carpenter, 2016). While there have been e-learning methods gaining a wide acceptance, the use of social media in the e-learning process helps deep learning and creation of knowledge to a large extent (Mnkandla & Minnaar, 2018). Although these positive attributes of using social media in the education sector especially in the higher education domain, there are restrictions observed in the adoption of social media practices. This is mostly due to the cultural restrictions imposed, the infrastructure barriers and pedagogical boundaries (Manca, 2020). While realising the unlimited potential held by the use of social media in the educational sector, this study makes an attempt to investigate the past research in the field and try to determine the possible factors that have very high influencing capacities in the adoption of social media in the learning process. As the adoption is restrained due to a number of factors, this study would identify and highlight the most important factors pointed out by researchers in the past and would present a conceptual framework that can guide the upcoming researchers in the field. In this paper, a sincere attempt has been made to explore the conceptual evolution taking place in the domain of social media marketing and to facilitate a summarised version of the same through the performance of a simple meta-analysis on research articles between the time period of 2011 to 2021. The study with its ten years long time frame have compared and evaluated the status of both earlier and the recent developments. The inclusion of 10-year period is deliberate to investigate and compare significant changes in the conceptual domain of SMM. As the concept of SMM have gained popularity only in the last ten to twelve years all over, this time frame justifies the criteria. The questions which are basically attempted towards exploring includes how largely has the SMM potential increased over the period of ten years, what are the major changes identified within this period in the domain?

Therefore, the specific objectives set for the review hereby are as follows-

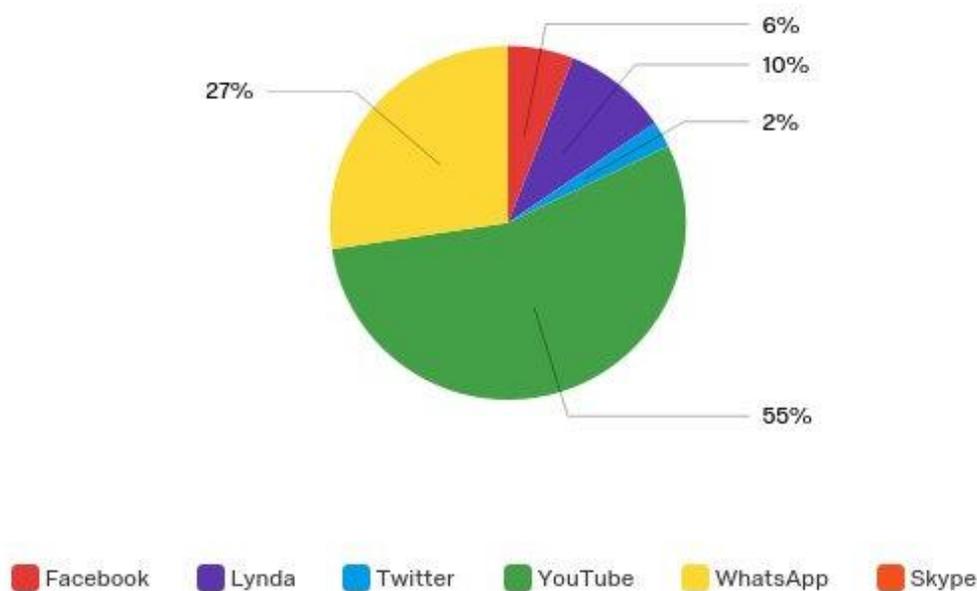
1. Evolution and identification of configurational changes in the conceptual domain of SMM especially in the higher education sector.
2. Classification of significant themes based on the contributions made by authors in the field between the period of 2011 and 2021.
3. Evolution of configurational contents and research streams of SMM in the higher education system as prospective research areas for the future

The paper includes discussion the “Influence of SMM” in the area of higher education is discusses. The method of review includes the methodology followed in detail for arriving at the results of the objectives in the study. The results section includes the summarised results from the review conducted. Finally, “Conclusion and Future Directions” presents the conclusion and future scope of this piece of research.

## 2. Background

The use of social media in the education sector have seen a rise in the recent times world-wide. It is used for a number of purposes including learning of different languages, for developments in writing, after class interactive learning sessions, community building etc. The communication channel through social media becomes easier with an efficient flow of information. It has led to the increase in student teacher communication as well as student - student communication. The social media has enhanced the online technology usage for the students and has made them further adapt to the new mode of learning. The participation and engagement of students through social media has increased as well as the awareness levels regarding various recent developments have also gained its pace in the lives of the students. The use of social media in the higher education sector has the ability to improve the pedagogy situations and make the learning process further enriching for the students as well as the teachers. Found that 58% of students prefer the use of social media to that of research schools and 17 percent of them believe that these sources are highly influential. The distribution of the social media platforms in higher education is shown by as given blow-

**Table 1- Social Media Platforms used in Higher Education (Source (Seedat et al., 2019))**



The highest use is done using YouTube and is followed by WhatsApp. This shows that the influence of social media in the lives of students have found its place in the recent times. However, in order to determine its most effective usage it is important to identify the factors that cause the maximum influence of its intention to use. This research hence, attempts to address this gap using a systematic review approach.

## 3. Materials and Methods

The study undertakes the systematic review approach to identify the influence caused by social media marketing on the field of higher education. The importance of systematic review is realised when there is a requirement to study the inputs provided by various authors on a

particular topic in hand. In order to validate the factors impacting the above concern, the process of conducting an in detailed systematic review is considered perfectly suitable. The increasing use of social media in sectors all over, it becomes essential that the role played by social media is also investigated in case of higher education sector.

### 3.1 Sources

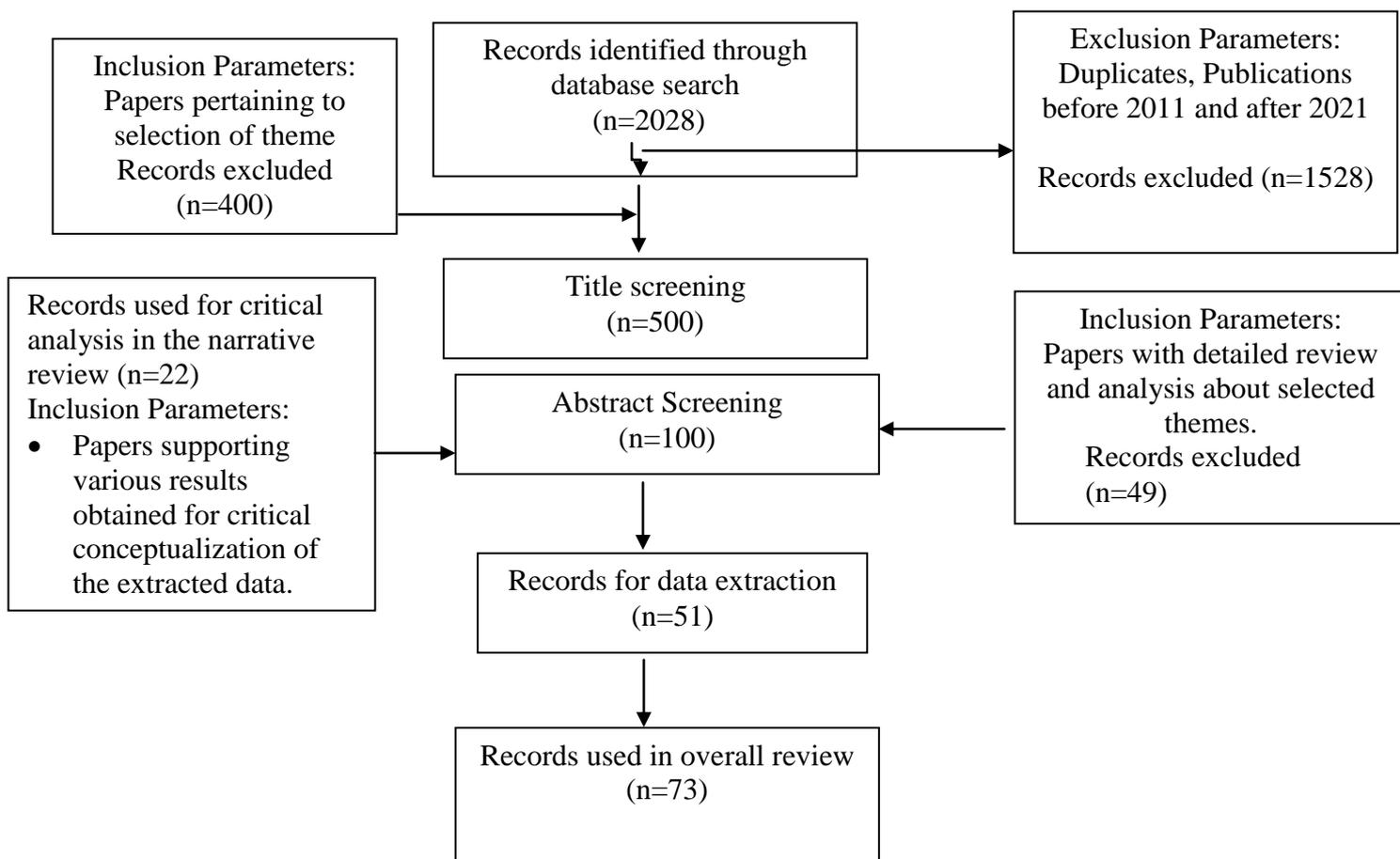
The process of the review as mentioned above is inclusive of conducting an extensive review of the existing literature. The search for relevant past researches is done in databases of SCOPUS that includes articles from the databases of Science direct as well. The web of science database is covered under the umbrella of SCOPUS and hence technically it is the SCOPUS database that includes the search process. As the SCOPUS database consist majority of the articles from renowned journals, the inclusion of it ensures good quality research. Relevant literature is identified in these databases using keywords such as “Social Media”, “Marketing”, “Higher”, “Education” etc. The process followed for arriving at the considered research papers are mentioned in the following section.

The following keywords and combinations were used for the search:

Search String Set	Keywords Used
1	(“Social Media”) AND (“Higher Education”)
2	(“Social Media”) AND (“Higher Education”) AND (“Consumer Influence”)
3	(“Social Media” OR “Higher Education”) AND (“Consumer Influence”)

### 3.2 Extraction

One important step in conducting a systematic review is to extract the most relevant articles from the databases to arrive at the desired objectives of the review. The study here followed a two-step approach to arrive at the final articles for the study. In the first step, after the results using the above-mentioned keywords are shown, these articles are scrutinised based on their titles. The ones observed to be matching with the topic in hand would be shortlisted for the next level scrutiny. In the second step, the shortlisted articles would be screened based on the abstract. After the second step is over the final list of articles for the review would be ready and the review process would begin. The study includes the PRISMA method to arrive at the final list of articles and the flow chart representing the process is shown below.



**Figure 2 – PRISMA (Source Author’s Own)**

A total of 2028 papers have been identified in the database as a whole out of which 51 papers have been selected for the final review process. These shortlisted papers are reviewed in detail to understand the main factors highlighted in determining the influence of social media marketing on higher education.

**Table1- Selected database and retrieved paperstype(Source Author’s own)**

Database	Filter	No. of retrieved studies
Scopus	Only conference paper	3
	Only research articles	48

### 3.3 Quality Parameters Used for selection

As the review is focused on including high quality articles, in order to ensure the selection of only such articles the three major criteria for quality assessment as provided by (Dybå&Dingsøyr, 2008) have been used here. These three parameters include rigorousness, credibility and relevance. This process enables the assurance of including only the high-quality papers for review. The checklist questions for each of the articles have been assigned a maximum score of 8; however, articles with a score of more than 4 can be a part of the study. The selected criteria on being achieved are assigned a score of 1 or else it is marked

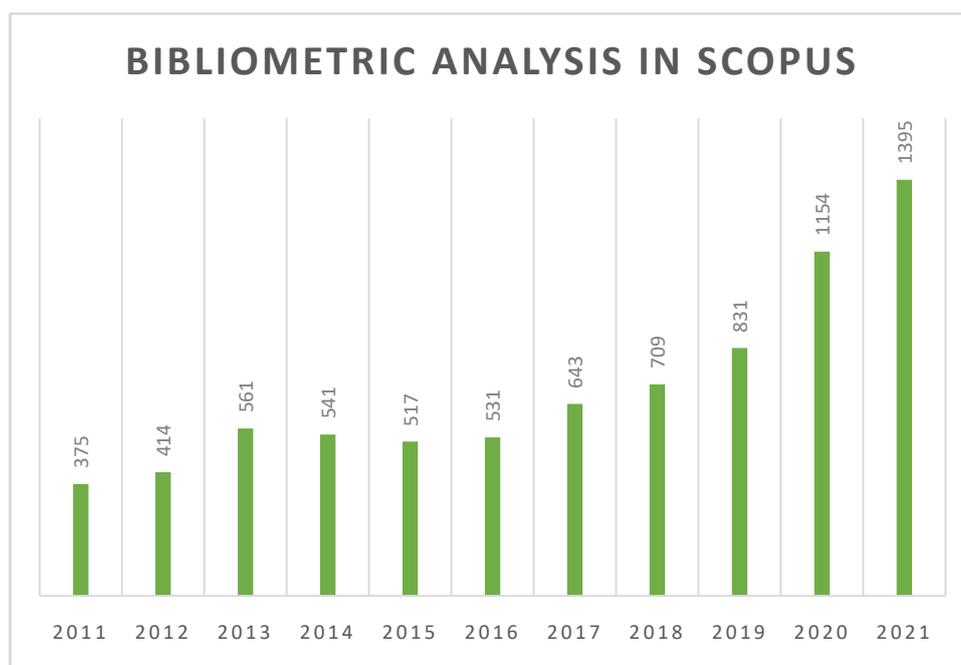
zero. The detailed process for the selection is attached in the appendix of the study. Based on the first level of screening conducted through the title of the research article, a total of 2028 papers have been shortlisted. Once the irrelevant paper from them, a total of 51 papers have been carried forward to be studied in detail to find out the factors. The findings from these 51 papers have been mentioned in detail in Table 1 in the following section.

### 3.4 Threats to validity of research and mitigations

The process of conducting a systematic review often generates the concern for construct validity and external validity. In order to overcome these problems, firstly the above-mentioned selection parameter is employed with utmost sincerity. As a follow up the use of PRISMA confirms the mitigation of validity threats arising due to systematic review paper

## 4. Results

The articles reviewed by following the above process are put forward in a tabular form indicating the important results from each of the studies. Before moving on to the table, a bibliometric analysis for the topic in hand is conducted in order to determine the number of literature available in the filed across a time period.



**Figure 3- Bibliometric Analysis of no. of publication (Source Author's own)**

The analysis is conducted to examine the number of studies focusing on the use of social media marketing in higher education especially in the SCOPUS database. The above analysis shows that during 2020 and 2021, the number of studies has significantly increased. This might be a result of the increased number of social media users in the recent past. Overall there are a significant number of studies focusing on the use of social media in the higher education aspect.

**Table 1- Extraction of secondary data from the selected literature (*Source Author's own*)**

<b>Sl No.</b>	<b>Author</b>	<b>Objective of the Study</b>	<b>Methodology Used</b>	<b>Factors highlighted in the Study</b>
1	(Al-Qaysi et al., 2021)	To identify the factors impacting the adoption process of social media in higher education	Qualitative study with secondary sources	PE EE Perceived Ease of Use Perceived Usefulness HM Subjective Norm Self-Efficacy Perceived Playfulness
2	(Hamadi et al., 2021)	To understand the role played by social media as a tool in the classrooms of higher education systems	Quantitative study with primary data collection	SI Cooperative Learning Integration Challenges Learning process
3	(E. Lacka et al., 2021)	To understand how social media use in higher education help in improving the quality of students	Quantitative study with primary data collection	FC PE EE
4	(Jain & Jain, 2021)	To examine the impact of using technologies in higher education	Quantitative study with primary data collection	PE EE SI FC
5	(Williams et al., 2021)	To understand the perception of students in the use of social media in the academic libraries	Quantitative study with primary data collection	PE EE SI FC
6	(Akande et al., 2020)	To understand the adoption of social media for the continuous engagement of	Quantitative study with primary data collection	PE EE SI FC

		students		
7	(Al-Qaysi et al., 2020)	To understand about the acceptance of social media from the perspective of education	Qualitative study with secondary sources	PE EE SI FC Perceived Ease of Use Perceived Usefulness
8	(Arulogun et al., 2020)	To find out the role played by social media in online facilitation of students during learning	Quantitative study with primary data collection	PE EE SI FC
9	(Awotunde et al., 2020)	To understand the role of social media usage among university students for the learning purposes	Quantitative study with primary data collection	PE EE SI FC
10	(Arain et al., 2019)	To understand the acceptance of mobile learning techniques in case of the higher education system	Quantitative study with primary data collection	PE EE SI FC HM Habit Ubiquity Information Quality System Quality Appearance Quality
11	(Gunasinghe et al., 2019)	To determine the intention to adopt modes of e-learning among academicians	Quantitative study with primary data collection	PE EE SI FC Price Value Personal Innovativeness HM Habit
12	(Khechine & Augier,	To understand the	Quantitative	PE

	2019)	adoption of a social learning platform in case of higher education	study with primary data collection	EE SI FC Anxiety Autonomy Attitude
13	(Almaiah et al., 2019)	To understand the acceptance of online learning systems among students	Quantitative study with primary data collection	PE EE SI FC
14	(Arpaci, 2019)	To understand the role played by cloud computing services in higher education	Quantitative study with primary data collection	Attitude Price Value SI
15	(Sarosa, 2019)	To understand the role played by social media in the acceptance of compulsory device usage	Quantitative study with primary data collection	PE EE SI FC Brand Reputation HM
16	(Chavoshi&Hamidi, 2019)	To understand in detail about the factors influencing use of e-learning processes in social media	Quantitative study with primary data collection	PE EE SI FC Perceived Ease of Use Perceived Usefulness
17	(Chiao et al., 2018)	To understand about the role played by social media in tourism education	Quantitative study with primary data collection	PE EE SI
18	(Odewumi et al., 2018)	To examine the usage of social media for interactive learning among the post graduate students in Nigeria	Quantitative study with primary data collection	PE EE SI FC
19	(Murire&Cilliers, 2018)	To identify the factors influencing social media adoption in academia	Quantitative study with primary data collection	PE EE SI FC

20	(Prasad et al., 2018)	To understand the adoption of technology and social platforms among international students	Quantitative study with primary data collection	PE EE SI FC
21	(Raman & Rathakrishnan, 2018)	To examine about the teachers adoption process for various technologies including social media	Quantitative study with primary data collection	PE EE SI FC
22	(Al-Rahmi & Zeki, 2017)	To understand the role of social media as a collaborative learning process for enhancing performance of students	Quantitative study with primary data collection	Perceived Usefulness HM Perceived Ease of Use
23	(Ali et al., 2017)	To investigate the strengthening of social media use in academics	Qualitative with primary data collection	PE SI Information Quality Content Quality
24	(Chintalapati & Daruri, 2017)	To examine the use of YouTube as a learning resource among students	Quantitative & Qualitative study with primary data collection	Perceived Usefulness SI Perceived Ease of Use
25	(Nawi et al., 2017)	To understand the acceptance of social media as a platform for the students with entrepreneurial intentions	Quantitative study with primary data collection	PE EE SI FC Trust Perceived Risk HM
26	(Suki & Suki, 2017)	To understand the intention of students towards the use of animation	Quantitative study with primary data collection	PE EE SI FC
27	(Balakrishnan & Gan, 2016)	To understand effect caused on students learning styles through the use of	Quantitative study with primary data collection	PE EE SI FC

		social media		
28	(Kaplan & Haenlein, 2016)	To determine the role of social media with respect to higher education	Quantitative study with primary data collection	Motivation Value SI
29	(Manca & Ranieri, 2016)	To understand the role of social media in the learning process	Quantitative study with primary data collection	Frequency of Use SI Prior Experience
30	(eOuardi et al., 2016)	To determine the role played by social media in the recruitment of students	Quantitative study with primary data collection	PE EE SI FC
31	(Sharma et al., 2016)	To understand the use of Facebook in higher education	Quantitative study with primary data collection	PE EE SI FC
32	(Bright et al., 2015)	To examine the impact caused by social media fatigue on students	Quantitative study with primary data collection	PE EE SI FC Perceived Ease of Use Perceived Usefulness HM Habit
33	(Dečman, 2015)	To understand about the different aspects of e-learning in higher education	Quantitative study with primary data collection	PE EE SI FC
34	(Lwoga & Komba, 2015)	To understand the antecedents of the entire web based learning system	Quantitative study with primary data collection	PE EE SI FC
35	(Okaz, 2015)	To understand more about the process of integrated blended learning in higher education	Qualitative with secondary sources	PE EE SI
36	(Magsamen-Conrad et al.,	To predict the	Quantitative	PE

	2015)	adoption of tablets in education system and other social networks	study with primary data collection	EE SI FC
37	(Agudo-Peregrina et al., 2014)	To understand the acceptance of electronic learning	Quantitative study with primary data collection	PE EE Flexibility
38	(Escobar-Rodríguez et al., 2014)	To understand the role of Facebook as a tool in the learning process	Quantitative study with primary data collection	PE EE SI FC HM Habit Price Perceived Relevance
39	(Lu & Yang, 2014)	To understand the intention to use social networking	Quantitative study with primary data collection	Task Technology Fit
40	(Nistor et al., 2014)	To examine the role of social web in learning	Quantitative study with primary data collection	Risk Value Price
41	(Raman et al., 2014)	To analyse Facebook as collaborative method of learning	Quantitative study with primary data collection	PE EE SI FC
42	(Huang et al., 2013)	To understand learning through web based technologies	Quantitative study with primary data collection	PE EE SI FC
43	(Ifenthaler&Schweinbenz, 2013)	To learn about the adoption of tablet PCs in classrooms	Qualitative with primary sources	PE EE SI FC
44	(Lin et al., 2013)	To understand podcasting methods for students and teachers and its impact	Quantitative study with primary data collection	PE EE SI FC
45	(Nikian et al., 2013)	To understand the adoption of social	Quantitative study with	PE EE

		platforms in learning among teachers in Malaysia	primary data collection	SI FC
46	(Gruzd et al., 2012)	To determine the role played by social media in the research practices undertaken by faculties in higher education	Quantitative study with primary data collection	PE EE SI FC
47	(Lai et al., 2012)	To understand about students use of technology for learning	Quantitative study with primary data collection	Perceived Usefulness Attitude Literacy
48	(Yoo et al., 2012)	To understand about the promotion of e-learning	Quantitative study with primary data collection	PE EE SI FC
49	(Chen, 2011)	To understand the effects of using technology in learning	Quantitative study with primary data collection	PE EE SI FC
50	(Šumak et al., 2011)	To understand about various aspects of e-learning processes	Quantitative study with primary data collection	Perceived Usefulness Perceived Ease of Use
51	(Terzis& Economides, 2011)	To understand the use of computer based assessment systems	Quantitative study with primary data collection	Perceived Usefulness Perceived Ease of Use
<i>Here PE indicates Performance Expectancy; EE for Effort Expectancy; SI for Social Influence; FC for Facilitating Conditions; HM for Hedonic Motivation</i>				

## 5. Discussion

The main purpose of conducting a systematic review is to be able to divide the current body of literature into themes and identify the highly influencing factors. The study here focused on determining the adoption of social media marketing techniques in the higher education perspective. Here, from the 51 research identified using the PRISMA, there are a total of seven factors that have been identified as important for the problem in hand. These seven factors are hereby discussed one by one.

### ***5.1 Performance Expectancy (PE)***

The first factor in the list is that of performance expectancy. Performance is one of the most important characteristics that motivate a user to adopt a particular innovative measure. PE is the degree to which the performance of a the product in question is enhanced with its adoption. In case of the higher education scenario, it is found that users are highly influenced when the performance is amplified through the use of social media. The outcome of the learning process can be measured effectively using the performance expectancy delivered by adopting social media in it(Akande et al., 2020; Al-Qaysi et al., 2021; Gunasinghe et al., 2019; I. Lacka&Brzezicki, 2021). Social media has helped the students to integrate their learning with further important aspects and has shown to fasten the adoption rate due to the performance levels of students and academicians as well.

### ***5.2 Effort Expectancy (EE)***

Effort expectancy can be defined as the amount of effort required by an individual to adopt a particular concept. In case of the education sector, it is found that as social media adoption in the learning process of students especially in the higher education sector is quite easy and does not require much effort from the part of the students and teachers, the adoption of social media is highly dependent on it (Jain & Jain, 2021; Khechine& Augier, 2019; Prasad et al., 2018). The behavioral intention to adopt social media in the higher education scenario can be effectively measured with the amount of effort required to get used to the process of integration.

### ***5.3 Social Influence (SI)***

The influence caused by the adoption of a particular concept on the social group is defined as social influence. In case of social media adoption it is found that the social influence caused by its adoption on the peer group of students as well as the academicians in the higher education sector is highly dependent on the behavioural intention to incorporate social media marketing techniques in the learning process (Arulogun et al., 2020; Chavoshi&Hamidi, 2019; Hamadi et al., 2021; Nawil et al., 2017). The outcomes derived from the use of social media strategies can be further enhanced if there is a positive social influence caused on the students pursuing their higher education. In case of faculties as well, social media use can enhance the research practices and social influence can use it for betterment of such situations.

### ***5.4 Facilitating Conditions (FC)***

Facilitating conditions refer to the infrastructure and support services available that makes the adoption process easier for the individuals. As the concept of learning has changed over time and with the integration of social media methods require a number of support services to facilitate the situation better, it is important that this factor is analysed when trying to learn the adoption behaviour (Arain et al., 2019; Jain & Jain, 2021; Magsamen-Conrad et al., 2015; Suki&Suki, 2017). The use of social media needs to be supported by a strong infrastructure facilitating the internet usage, hence examining the variable of facilitating condition in this regard is found mandatory.

### ***5.5 Hedonic Motivation (HM)***

The term hedonic motivation refers to the enjoyment that one receives from the use of technology. The requirement for the students or teachers to enjoy the social media integration in the process of learning is of utmost importance. The level of enjoyment derived has an impact on their intention to adopt this mode of learning faster in their day to day learning activities (Al-Qaysi et al., 2021; Arain et al., 2019; Gunasinghe et al., 2019; Sarosa, 2019). The studies have shown the positive impact of the factor over time and in order to be able to implement the use of social media in the higher education system in any form, it is important that the factor of hedonic motivation remains intact. Therefore, the need to include this factor in the process becomes highly essential.

### ***5.6 Habit***

It can be referred to as the degree to which the individuals are gravitated towards using the technology into the daily functionalities. In case of using social media one thing that must be paid attention to is the need to be consistent with the marketing strategies implementation. As the online platforms are highly dynamic, it is important that the methods implemented through it must be consistently performed (Arain et al., 2019; Bright et al., 2015; Escobar-Rodríguez et al., 2014; Gunasinghe et al., 2019). Here the need arises to examine the level to which the use of social media in higher education becomes a habit in order to ensure its adoption at a much faster pace.

### ***5.7 Price Value(PV)***

As it is evident that the implementation of any method needs to consider pricing, as an essential component of the process. Price value represents the advantages received from the use of the social media practices in the higher education sector. For measuring this aspect quantitatively and get a concrete evidence of the advantages, the perception of the users towards the price value becomes very important (Arpaci, 2019; Kaplan & Haenlein, 2016; Nistor et al., 2014). The use of social media as a part of the learning process either through marketing or through the classroom knowledge integration, the outcome and advantages must be strictly measured.

### ***5.8 Age & Gender***

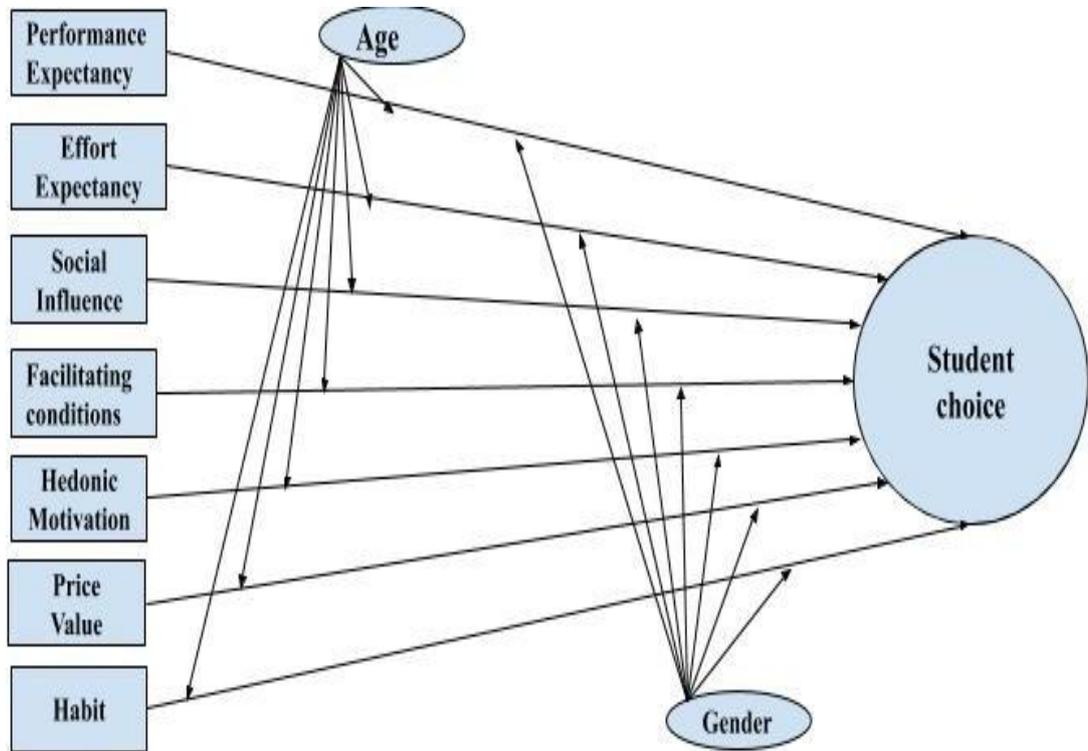
The role of demographics in research is of utmost importance and in this case as well, there have been studies which focus on the important role played by these two demographics specifically. The age of the respondents are found to moderate the intention to use social media in the higher education sector. The increasing dependency of students and other individuals in the internet based applications have caused an impact on the intentions to adopt them (Almaiah et al., 2019; Al-Qaysi et al., 2021; Odewumi et al., 2018). Moreover, based on gender there are changes in situations observed. Hence, these two form important components in determining the role of social media in the higher education sector.

## **6. Conclusion & Future Outlook**

The systematic review conducted identifies seven important factors and categorise as themes important to consider when conducting studies involving the role of social media in the

higher education sector. However, it has been observed in the literature that these factors are not studied empirically collectively in a single model. Based on the themes identified, a model has been constructed to show the elements.

**Figure 4- Conceptual Framework (Source Author's Own)**



The decision of students to integrate the use of social media in their day to day learning activities can be highly influenced by the factors shown in the model above. These factors can be used to exactly determine if the students intend to continue using social media as a part of their higher education process. The use of social media for a number of varied purposes in the recent times show that it is important for the higher education system to adopt it and utilise it to the fullest for the benefit of the students.

**6.1 Managerial Implications**

The systematic review conducted here pin points the most essential factors put forward by researchers in terms of using social media in the higher education sector. The use of SM is highly preferred in the marketing of higher educational institutes especially in a developing nation like India. Here, the growing use of SM is able to attract a more number of prospects from such regions and must be largely used. Among the elements found, social influence is seen to have a great influence on the decision of selecting any higher educational institute. This influence can be further enhanced through the use of SM as it allows to connect with the important contacts of the students and will have a positive impact overall.

## 6.2 Academic and Research Implications

In the future, the model generated above can be used to test the intention of the students with this regard and identify the significant factors across various geographic and demographic boundaries. The robustness of the model can be tested in future. Moreover, as the model found here is almost similar to that of the UTAUT 2 model, it can be compared with the same in this respect. The addition of further constructs into the model with respect to it can be undertaken in future research endeavours.

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