

# Role of Social Media Motives in Driving Consumer Buying Behaviour in Online Brand Community of Pakistan

<sup>1</sup>Waiza Rehman, <sup>2</sup>M. Arif Khattak, <sup>3</sup>M. Asif Khurshid, <sup>4</sup>Mian M. Osman Bin Saif

**Abstract--***In this era of mushroom growth of companies, it is essential for companies to engage the consumers with them for long run. Social media is the most used tool now in this digital world. This paper intended to explore the role of social media motives in consumer engagement and further on brand loyalty. This study enlighten the impact of social media motives i.e. information, environment, social aspect and self-seeking status on consumer engagement, further the impact of consumer engagement on consumer's brand loyalty is also observed. The sample of 255 was taken from population of Pakistan. The study focused on online survey strategy through purposive data sampling technique. Path analysis of structural equation modelling via AMOS and moderated regression analysis via SPSS were applied. The study elaborates that there is a strong and positive relationship between consumer engagement and social media motives. Whereas consumer engagement plays adequate role in developing brand loyalty in online brand community. Companies can build marketing strategies that are fixated on these four motives in order to engage and lead to being loyal in this digital era.*

**Key words--***Consumer engagement, social media motives, information, entertainment, social aspects, self-seeking status, brand loyalty, positive word of mouth*

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## I. INTRODUCTION

### Background of the study

Online networking, basically, elaborates a term, "a gathering of Internet-based applications which are made in light of the ideological and innovative establishments of Web 2.0 apparatuses, and these apparatuses give clients a stage to conceive, produce and offer applications which have User Generated Content" (Kaplan & Haenlein, 2010). Moreover, Drury (2008), sees web-based social networking as online assets which have been utilized to share content between clients. In this way, it infers that web-based social networking comprises of two primary parts: online assets and sharing of the data available online. For online assets, it is frequently communicated as a stage in which clients are permitted to share content. Those assets, as per Drury (2008) contain among others, interpersonal organizations, podcasts, websites, open bookmarking and wikis. Facebook, Bebo and Myspace are general cases of systems and their administration of the online networking while the other remaining part includes the sharing of this online substance. Content sharing can happen in an assortment of various ways which could be, among others, as a video, content, picture or a thought and feeling (Drury, 2008);(Barger, Peltier, & Schultz, 2016), (Simon & Tossan, 2018).

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<sup>1</sup>Management Sciences, Bahria University, Islamabad, Pakistan. Email: waizarehman.mir@gmail.com

<sup>2</sup>Management Sciences, Bahria University, Islamabad, Pakistan.

<sup>3</sup>Management Sciences, Bahria University, Islamabad, Pakistan.

<sup>4</sup>Management Sciences, Bahria University, Islamabad, Pakistan.

With regards to the time of web-based social networking, the advertiser's control of the given viewpoints, for example, timing, substance and consistency of data has been decreased (Mangold & Faulds, 2009). This infers that the power that was once in the hands of advertisers and those in advertising, has now been accumulated by groups and people on the web. Thus, online clients are presently allowed to examine brands without the brand themselves having a part in regards to this topic (Kietzmann, Hermkens, McCarthy, & Silvestre, 2011). What's more, online networking and its resultant showcasing is lauded for the potential it has with regards to the idea of engagement of its business potential (Tuten, 2008)

A particular definition that can be given about the purchaser and his choice's engagement is, "a mental condition which is produced through client's encounters whose attributes are themselves an association with somebody or something" (Brodie, Hollebeek, & Smith, 2011). This definition is connected to the change from an unbiased point of view, to a dynamic purchaser with regards to customer conduct in regards to brands (Pagani, Hofacker, & Goldsmith, 2011). Likewise, engagement is viewed as "behavioral expressions concentrating on organizations or brands, instead of on straightforward exchanges" (Van Doorn et al., 2010). Accordingly, buyer engagement can be made when people are associated with organizations and brands through web-based social networking and the substance which is displayed online and the correspondence it involves (Van Laer, De Ruyter, & Cox, 2013).

In this continually changing and dynamic set of preferences of shopper conduct, customers engagement in relation to the brands has a focal part in the promoting zone while having the buyers being the fundamental performers (Gambetti & Graffigna, 2010). Accordingly, in this exceptionally aggressive condition, supervisors are required to to repress them from changing to different organizations (Hollebeek, Glynn, & Brodie, 2014) address the need of containing their beneficial shoppers and furthermore the need to repress them from changing to different organizations (Hollebeek et al., 2014).

The intuitive components of Web 2.0 apparatuses and the open doors they offer as far as making close connections amongst organizations and customers through online networking have prompted wide consideration with respect to purchaser engagement (Sashi, 2012). It is particularly apparent that inside Web 2.0 devices, advanced media innovations are always developing and more open doors are given to person's dynamic and intuitive practices via web-based networking media (Baek, Holton, Harp, & Yaschur, 2011). Furthermore, it is trusted that shopper engagement originates from various thought processes (Van Doorn et al., 2010).

The interaction with the end consumers has been generally utilized as a part of the computerized perspective where organizations attempt to undertake continuous endeavors not only exclusively to keep the clients loyal with the organization but also to build up a concrete and beneficial correspondence with them (Tripathi, 2009). In particular, the enthusiasm exhibited by the participants for participation in the engagement in Web 2.0 instruments, which incorporate online networking is continually developing (Hennig-Thurau et al., 2010). Engagement with the end consumers can be made in an advanced media as well, since web-based social networking includes both organizations and their purchasers. They not just include organizations which can share and give shopper's related data but additionally provide what customers can utilize in online networking so as to share and trade data with different consumers (Sashi, 2012). Likewise, engagement with the customers in the online networking contexture can be characterized as a "behavioral sign" reaching as far as rapid changes in the desire of the consumers. These diverse behavioural patterns can change their course from detached

utilization of the exhibited messages , for example, watching pictures or perusing audits to dynamic commitment, for example, posting content (Men & Tsai, 2013).

The improvement of shopper engagement through online networking is seen as a chance to better serve buyers and fulfill their necessities because of the intuitive substance available on the web-based social networking and its capacity to create connections with organizations as well as the consumers themselves and in addition the chance of customers to also gain monetary benefits and other incentives through web-based social networking (Sashi, 2012; Zhang, Abound Omran, & Cobanoglu, 2017). Engagement with the end consumer includes the basic collaborations via web-based networking media which can prompt the satisfaction gained through the benefits received by shoppers who may transform into promoters of organizations' and it's offerings, henceforth, influence buyers' and their purchase choice when customers and purchaser mutual cooperation is produced (N. Kim & Kim, 2018).

Additional advantages can likewise be the obtainment of the "buyer reliability and fulfillment, purchaser strengthening, association and enthusiastic holding, trust and responsibility." (Brodie et al., 2011). Web-based social networking can be utilized as a methods for drawing in the potential shoppers and building connections because of specific characteristics, for example, intelligent and community oriented essence of the activity (Tsai & Men, 2017). These connections amongst organizations and buyers likewise make groups in which their intuitive joint effort can prompt as well as produce a distinguishing proof of issues and advancement of arrangements (Sashi, 2012).

Customer engagement is considered to be a great way of developing strong and long lasting customer brand relationships Kaplan and Haenlein (2010), which turns out to be important aspect for the brand to get firm grip on social media. There are various benefits of having high engagement which results in the generation of electronic word of mouth (Chu & Kim, 2018). This paper explore and demonstrate how the social media motives i.e. entertainment, information, self-status seeking and social aspect influence the consumers brand engagement which simultaneously outcome as consumers brand loyalty.

### **Problem Statement**

Due to boom in online brand appearance and interest of online brand community and online purchasers, studies have urged for more concrete understanding of consumers behaviour towards brand engagement and brand loyalty. This pleas for further empirical investigation of understanding the decision making process among online consumers influenced by social media and how companies engage consumers and develop the brand loyalty in them. This paper intends to explore the role of social media motives in consumer engagement and further on brand loyalty. Consumer engagement serves as a mediation between social media motives and brand loyalty.

### **Research Questions**

To obtain the above mentioned objection, following research questions are addressed.

1. What motivates consumers to engage with companies on social media?
2. Does information support consumers' engagement on social media?
3. How entertainment support consumers' engagement on social media?
4. To which extent social aspects support consumers' engagement on social media?

5. Does self-status seeking assist consumers' engagement on social media?
6. How consumer engagement assure consumers' brand loyalty?

### **Research Objective**

On the basis of brand community literature, this study links several stream of researches by focusing on following objectives:

1. To explain consumer engagement with companies on social media.
2. To identify the role of information motive in engaging consumers on social media.
3. To enlighten the role of entertainment motive in engaging consumers on social media.
4. To clarify the role of social aspects motive in engaging consumers on social media.
5. To elucidate the role self-status seeking motive in engaging consumers on social media.
6. To explore the consumer engagement influence on developing consumers loyalty.

## **II. LITERATURE REVIEW**

### **Motives for Social Media Usage and Consumer Engagement**

Thought processes inquire of the end consumers which examines the purposes for the main impetus inside people and the reasoning behind inducing them to the activities (Dessart, 2017). In research, the presumption that people are innately dynamic is primarily focused upon (Rodgers, 2002). Additionally, these customers have been seen as sound leaders and their naturally inherent and behaviourally oriented exercises are constantly led through objective based leadership which depends on their objectives or their cognitive thought processes (Nadeem, Andreini, Salo, & Laukkanen, 2015; Rodgers, 2002). Hereafter, four intentions are recognized and also debated on which also give importance to the study being conducted.

### **Information**

Data which is organized to form information has been particularly recognized as one of the constituent thought processes which prompt and influence the Internet utilization (Krämer & Winter, 2008; Park, Kee, & Valenzuela, 2009) and the engagement on consumers with their respective organizations via web-based networking media (Heinonen, 2011). In reality, data and its acquisition is by all accounts, up to a substantial degree, a variable that leads people to take part in long range informal communication taken place in the website gatherings, for example, Facebook gatherings Park et al. (2009), and causes customer engagement with respect to online groups (Brodie et al., 2011).

As indicated by Sangwan (2005), getting data which can be done so from concrete and reliable sources is a vital part of the process of satisfying practical needs and is an effort directed towards generating the needed interest in a virtual group. Likewise, customers who search for data will see a systematic virtual group which is helpful to draw in and communicate with, when different people have the rationale in their motive to give data (Dholakia, Bagozzi, & Pearo, 2004). It is likewise distinguished, as far as Facebook brand groups, for example, that the most notable portion of the people who take part in a group with a specific end goal to pick up data is by perusing them with such messages (Gummerus, Liljander, Weman, & Pihlström, 2012). Furthermore, individuals are probably going to expend the given client's forwarded content with a specific end goal which is to acquire the means of learning with regards to points that are of significance to them (Shao, 2009). Therefore

the collection and analysis of the data about something new and valuable or even new trends and perceptions of the consumers, is additionally observed as a rationale as far as long range informal communication with definite end results and destinations is utilized (N. Kim & Kim, 2018).

Shoppers can likewise also draw in their conclusions regarding the organizations and it's inter-personal interactions in relation to the end destinations of the usage of that data because of their desire to get to the desired item and then the successful administration of the acquired data (Hamilton & Tee, 2013). Acquiring data with respect to a brand or its offering as well as it's capacities likewise is considered to be a part of the entire thought process related to the web-based social networking use (Dessart, 2017; Muntinga, Moorman, & Smit, 2011). This acquisition and then the interpretation of the item related data can lead towards understanding issues that emerge in wording how to utilize an item for example (Chu & Kim, 2018; Heinonen, 2011). Buyers can likewise take an interest in online networking groups when they look for data which prompts them to take a decision to buy that product (Davis, Piven, & Breazeale, 2014). So, the date provided before the purchase facilitates the audit which can help towards taking decision in the context of purchase decision leadership since it can lead towards decreasing the sentimental hazard when directing another purchase decision (N. Kim & Kim, 2018).

It is additionally trusted that with the end goal for influencing the customers to be pulled in and, henceforth, enhance the level of shopper engagement, organizations need to furnish them with various forms of the relevant data that is available to everybody and is public (Heinonen, 2011). Likewise, with the goal of disseminating data to be transformed into a thought process, it should be helpful, effortlessly understandable and ready to draw in the customers' curiosity and consideration (Hamilton & Tee, 2013). Getting false data can therefore impact this adversely as the connection between customers and brands on the web is related to the data given by brands as well as to the data given by different buyers (Davis et al., 2014; Simon & Tossan, 2018).

## **Entertainment**

With regards to amusement caused by elements inside the media, various related parts appear to be incorporated inside this zone. These parts which comprise of terms such as unwinding, getting away from issues or the common misery, feeling happiness with the identified culture or style, sexual excitement and the progression of time (Muntinga et al., 2011). As per the outcomes from the inquests lead led by (Muntinga et al., 2011). satisfaction can be connected to the demonstration of expending on a substance which is related to the brands. What is more is that, happiness can likewise be connected to different thought processes (N. Kim & Kim, 2018; Muntinga et al., 2011). The progression of time has been seen, by an exploration of the subject in a review, as looking through a profile of any particular brand on an informal communication site because of fatigue. Another exploration subject also recommended that once they discovered data regarding a particular item, they could not pay enough attention to it because of the weariness (Muntinga et al., 2011). It can be of significance to say that, diversion has, among others, been recognized as a thought process in utilizing the Internet (Papacharissi and Rubin, 2000). Moreover, amusement inside web-based social networking assumes additionally, a part with regards to engagement with brands (Davis et al., 2014). Likewise, the sentiment of idealism and fulfillment of interest are additionally present in these thought processes in connecting with brands in this sort of media (Davis et al., 2014; Ellabban & Abu-Rub, 2016). Besides, it is recommended that idealism is fused with regards to purchasers' association with brands via web-based networking media. So conclusively,

shoppers might want encounters that give them the inverse of their what world additionally outlines for them as perfect reality (Davis et al., 2014; Zhu & Chen, 2015).

Particularly, as per analysts Gummerus et al. (2012) stimulation can be viewed as "a fascination with regards to the destinations and it is supported by the argument that one ought to give clients a diversion, for example, pictures and recordings. This can thusly, trigger customers in building an association with the site and, henceforth, utilize it more often which supports the possibility of getting them plainly intrigued by offers and organizations" (Gummerus et al., 2012). Furthermore, it is said that, among others, diversion is one of the thought processes in people, even in various nations, which utilizes the long range interpersonal communication locales (N. Kim & Kim, 2018). It is found that people are propelled by their cognition to utilize these destinations for the diversion that originates from recordings, music, data sharing and experience (Y. Kim, Sohn, & Choi, 2011). Likewise, another review that recommends that one reason for people to utilize a long range interpersonal communication site (Facebook) is because of the hunting down diversion and it's resultant satisfaction (Park et al., 2009; Simon & Tossan, 2018). Lin and Lu (2011), additionally specify that pleasure assumes a part in which people take an interest in long range interpersonal communication. However, not exclusively does it assume a part in their interest, but also it is likewise the greatest intention of cooperation in the proceeding with the utilization of interpersonal interaction (Liu, Lee, Liu, & Chen, 2018). Regarding satisfaction, long range interpersonal communication sites suppliers, in addition to other things, as those who ought to continue developing diversions and applications and also encounters which are pleasurable and would thusly prompt to create the impacts which are a result of the inter-personal communication (Dimitriu & Guesalaga, 2017). Besides, it is additionally proposed by (Heinonen, 2011), that organizations ought to deliver various types of web based amusements, and substance for elongated interpersonal communication, to achieve the desired outcomes with the end goal for clients to be kept entertained with the given content.

### **Social Aspect**

The social media application are meant to design so as to deal with the consumers interest, mind set and to remain active on social media Shao (2009). Social communication being extremely appreciated by Heinonen (2011). The reason of making of brand communities are the consumer's social communication and socially connected actions that leads to increase the social contact and communication of the social consumer (Shao, 2009); Teichert, et al., 2017). Social Interaction has been appreciated by Heinonen (2011), as he explained it in a wider range by naming it as social interaction activities. Consumer's societal connections and activities on E-Social Platforms leads to the making of brand groups which ultimately enhance the association of common interest between the buyers (Shao, 2009); (Zhang et al., 2017)). In another context, in online brand grouping, customer's association with brands is powered by their societal interface and linking activities that force them to be involved with brands on E-Social Platforms (Sung, Kim, & Choi, 2018). From this description, consumers indulge into E-Social Platforms due to 6 sub-motives i.e. Social Observation, collaborative undergoing, belonging and attachment, being up to date, keeping in touch and social collaboration.

Social Surveillance has been quoted as "focused, systematic & repetitive attention to the individual particulars for determination of stimulus, management, fortification or direction" (Liu et al., 2018). Social Surveillance usually arises in the users of E-Social Platform sites in the procedure of generating and receiving contents. (Lin & Lu, 2011; Marwick, 2012). For instance (Marwick, 2012), explained, prejudiced with social

surveillance, in the formation of E-Social Platform context, consumer check their doings on social platform keeping in view a group of people in mind that leads to the generation of content for those people. Another prominent factor is that under societal surveillance, consumers are ready to witness what other people from their belongings post on the social platform (Sung et al., 2018). Being up to date is rated as the logic that empowers people to indulge on E-Social platforms. From customer's point of view, staying up to date is rated as a societal supremacy that brings customers with a chance to know about what is going on in their whereabouts. (Barger et al., 2016; Heinonen, 2011).

### **Self-status Seeking**

While being soaked in web-based social networking, shopper conduct is boosted by the point of viewing for their own status (Park et al., 2009). (Confente, Buratti, & Russo, 2015) see eye to eye with this valuation, and from their assertion, shoppers via web-based networking media have the thought manner to probe for their status by connecting with brands. To be more particular, one case as (Confente et al., 2015) rundown is that shoppers via web-based schmoozing media are undoubtedly going to feast the e-informal exchange about organizations by posting some online remarks or making a few audits about brands and items. Their spreading of the e-informal exchange about brands via web-based networking media can be seen as one kind of engagement movement which is thrust by their point of pursuing down their status (Confente et al., 2015). (Valenzuela, Park, & Kee, 2009) quality the rise of self-status looking for about three primary slants: shoppers feeling peer weight to take an curiosity (peer-weight), buyers' investment to improve them look (impression administration) and gathering support building up one's profession (Park et al., 2009);(Zhang et al., 2017);(Dessart, 2017).

Narcissism has been honored as another intention under self-status chasing and it quantifies the degree to which one feels and turns out to be more oneself (Rogers & Carmichael, 1951). The individuals who express their actual self via web-based networking media would rest easy (Bessenoff, 2006); (Dolan, Conduit, Fahy, & Goodman, 2017). With regards to arrogance, it can identify with one's satisfaction about their life (Park et al., 2009). One case as (Park et al., 2009) list, proposes that purchasers connect with via web-based networking media since they have confidence in that gathering outlay could build up their talent which thus benefits their genuine living. Life fulfillment is developed by one's identity, which particularly identifies with one's passionate strength, extraversion and openness to involvement (Correa, Hinsley, & De Zuniga, 2010); (Moliner Tena, Monferrer Tirado, & Estrada Guillén, 2018), (Moliner Tena et al., 2018). As past reviews distinguished, one's life fulfillment has huge impact on one's conduct via web-based networking media (Park et al., 2009); (Chu & Kim, 2018) & (N. Kim & Kim, 2018). An examination led by (Ellison, Steinfield, & Lampe, 2007) demonstrates that individuals who utilize online networking have a tendency to be less happy with their life.

### **Consumer Engagement and Loyalty**

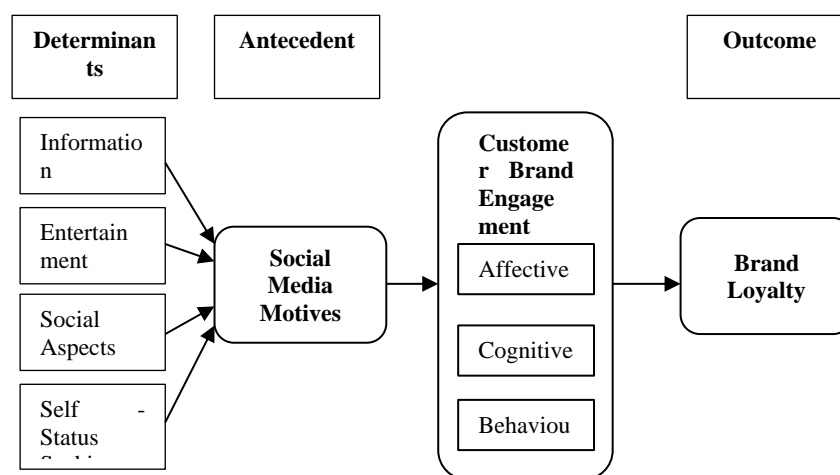
Marketing researchers have conceptualized duty as a connection between two gatherings that prompts a yearning to keep up a relationship (Muntinga et al., 2011) or as the inspiration to remain with a provider (Geyskens and (Zailskaitė-Jakštė & Kuvykaitė, 2016); (Dolan et al., 2017).

Intra-authoritative reviews split duty into various classifications or measurements – affective, calculative and normative (Kaplan & Haenlein, 2010); while between hierarchical reviews basically concentrate

on two fundamental sorts – affective and calculative responsibility. In the purchaser conduct writing, there is an inclination for sense of duty regarding be viewed as synonymous with loyalty to objects (Bloemer & Kasper, 1995); (Martin & Goodell, 1991); (Moliner Tena et al., 2018). Similarly as with responsibility, it appears to be troublesome for the marketing order to concur about the dimensionality of CBE. One model that recognizes the two ideas is the intelligent casing in which CBE is established (Brodie et al., 2011). Responsibility is not liable to be subject to intelligent settings, as CBE may be. Given that affective responsibility is the same as genuine loyalty (Bloemer & Kasper, 1995), affective duty/loyalty is a conceivable CBE impact (Brodie et al., 2011); (Hollebeek et al., 2014).

Aside from the all-around perceived customer loyalty's predecessors, the build of customer engagement is pulling in researchers to survey its impact on customer loyalty. Nonetheless, to date, just couple of studies have clarified the connection between customer engagement and customer loyalty (Yoshida, Gordon, Nakazawa, Shibuya, & Fujiwara, 2018); (Van Doorn et al., 2010). Scholastics recommend that customer engagement ought to be considered as an imperative perspective in boosting loyalty, since more educated customers together with the fast development of data innovation make the association amongst customers and organizations basic in making customer value (Brodie, Ilic, Juric, & Hollebeek, 2013); (Drury, 2008); (Liu et al., 2018). In this review, to pick up a more extensive comprehension of the elements influencing social media users loyalty, the development of customer engagement is incorporated with different determinants of customer loyalty. Moreover, the mediating part of customer engagement is likewise investigated in this review so as to develop the comprehension of the impact of customer engagement on customer loyalty.

### Conceptual Model



**Figure 1:** Conceptual Model Including the Social Media Motives (Information, Entertainment, Social Aspects and Self-status Seeking) for Engaging with Companies and further link with brand loyalty

### Hypotheses of the study

Hypotheses that are presented incorporate the fact that each one of the four motives leads to the engagement of consumers with companies on social media. Further brand engagement influences the consumers to develop consumers brand loyalty. Due to these hypotheses this conceptual model has been formed in order to represent these influences.



**H1:** Information motivates consumers to engage with companies on social media.

**H2:** Entertainment motivates consumers to engage with companies on social media.

**H3:** Social aspects motivate consumers to engage with companies on social media.

**H4:** Self-status seeking motivates consumers to engage with companies on social media.

**H5:** Brand engagement has significant role in developing consumer brand loyalty

### **III. METHODOLOGY**

#### **Population**

The population of this research comprised of social media users. So population is the social media users who are actively trending and following companies on social media.

#### **Sample size and sampling technique**

The sample size of this study consists of 255 social media users. Large sample size is selected to better understand the wholesome of data. The study selected purposive sampling technique for primary data gathering.

#### **Data Collection Method**

As the purposive sampling technique is used therefore survey is done through targeting social media users by following their comments, likes, reviews on different companies present on social media. Data collected through electronically more specifically online through social media forums. Time horizon of the study is 'cross sectional' in nature as it is according to the requirement.

#### **Instrument**

Survey based questionnaire is adapted in this research for collecting primary as previous research studies applied the same and proposed that it is appropriate for this kind of research (Lewis, 2007).

For measuring the variables, questionnaire is designed. The questionnaire is divided in two parts.

#### **Section One – Demographic**

First part was about the general information about the employees; gender, age and their usage of social media.

Second part of the questionnaire is about the assessment of independent variable Social Media; information, entertainment, social aspects and self-status seeking. Mediating variable that is Consumer Engagement and dependent variable Brand Loyalty. In the second part of the questionnaire 5 point likert scale was employed for the assessment. Respondents were asked to rate between 1 to 5, 1 for strongly disagree, 2 for disagree, 3 for neutral, 4 for agree and five for strongly agree.

#### **Section Two – Consumer Engagement**

To measure consumer engagement 5 items questionnaire revised from Men & Tsai, (2013), Sashi, (2012); Van Laer et al., (2013) is used.

### Section Three – Social Media Motives

3 items questionnaire from Hamilton & Tee, (2013), Davis et al., (2014), Heinonen, (2011) is used to measure *information*. *Entertainment* is measured by using 3 items questionnaire from Muntinga et al., (2011). *Self-Status* is measured by using 3 items questionnaire from Paluck, (2011); Krämer & Winter, (2008); Bessenoff, (2006). Whereas the *social aspect* is measured through 5 items questionnaire from Marwick, (2012); Heinonen, (2011).

### Section Four – Brand Loyalty

6 questions were on brand loyalty from Kim, Han, & Park, (2001), Chaudhuri & Holbrook (2001) & Keller (2001).

### Reliability Test

**Table 1:** Cronbach's Alpha Values of Variables

Variable	Items	Items Removed	Cronbach's Alpha
Consumer Engagement	5	0	0.855
Information	3	0	0.760
Entertainment	3	0	0.838
Social aspects	5	0	0.819
Social status seeking	3	0	0.794
Brand Loyalty	6	0	0.825

Table shows the values of Cronbach's Alpha for all variables used in this study. Nunally (1978) explained that when the value of Cronbach's Alpha is more than 0.7, this indicates higher internal consistency of the data. Table indicates that Cronbach's Alpha values for all independent and dependent variables are more than 0.7 indicating reliability of the data collected for the present study. The values are 0.855, 0.760, 0.838, 0.819, 0.794, 0.825 for consumer engagement, information, entertainment, social aspects, social status seeking and brand loyalty respectively.

## IV. RESULTS AND DISCUSSIONS

### Demographics

**Table 2:** Frequency Distribution with respect to "Sample Profile"

Demographic	Characteristics	Frequency	Percent	Cumulative Percentage
<b>Gender</b>	Male	126	49.4%	49.4%
	Female	129	50.6%	100.0%
	Total	255	100.0%	
<b>Age</b>	18-24	92	36.1%	36.1%
	25-29	105	41.2%	77.3%

	30-34	42	16.5%	93.7%
	35-39	13	5.1%	98.8%
	39above	3	1.2%	100.0
	Total	255	100.0%	
<b>Educational Level</b>	Matriculation	9	3.5%	3.5%
	Bachelor	101	39.6%	43.1%
	Masters	120	47.1%	90.2%
	PhD	25	9.8%	100.0%
	Total	255	100.0%	
<b>Social Media Usage</b>	Several times a day	219	85.9%	86%
	day	29	11.4%	98%
	Once a day	4	4.2%	98%
	Once a week	3	100.0%	2%
	Rarely	255		
	Total			

Source: Primary Data 2018

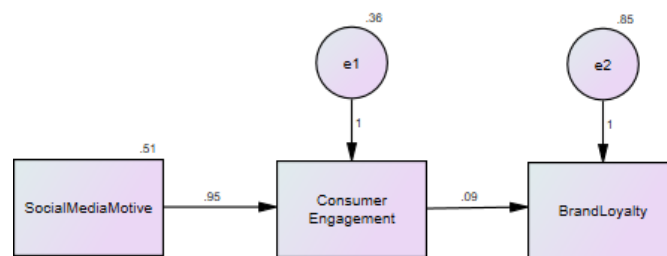
The total number of observation computed are 255 in number, these observation are used to determine the frequency about gender, age, education and usage of social media. By considering genders, the largest number of observation are taken from female that are 129 respondents with percentage of 50.6 % while rest of 126 are males which corresponds to 49.4%. In respective of age, largest number of observations are taken from range of 25-29 age that illustrates 105 respondents were lying under that age with percentage of 41.2% while the least number of respondents from age span of 39 above has frequency of 3 out of 255 with percentage of 1.2%. Only 92 were placing under age of 18-24 that corresponds to 36.1% while 13 respondents were stands under age of 35-39 which corresponds to 5.1%. On the basis of education, largest number of observation are taken from masters that are 120 respondents which corresponds to 47.1% whereas the least number of observation are taken from Matriculation that are 9 respondents which corresponds to 3.5% while only 101 respondents were graduate with the percentage of 39.6%, 25 respondents were PhD with percentage of 9.8%. In respect of Usage of Social Media, the highest amount of observations are taken at 219 respondents that use social media several times a day that is 85.9% while the least observation is 3 respondents that rarely use social media which corresponds to 100% .

**Table-3: Correlation Matrix**

<b>Correlations</b>								
<b>Constructs</b>		<b>Information</b>	<b>Entertainment</b>	<b>Self Status Seeking</b>	<b>Social Aspect</b>	<b>Social Media Motive</b>	<b>Consumer Engagement</b>	<b>Brand Loyalty</b>
Information	Pearson Correlation	1						
	Sig. (2-tailed)		.000					
Entertainment	Pearson Correlation	.735**	1					
	Sig. (2-tailed)	.000						
Self Status Seeking	Pearson Correlation	.661**	.634**	1				
	Sig. (2-tailed)	.000	.000					
Social Aspect	Pearson Correlation	.676**	.673**	.716**	1			
	Sig. (2-tailed)	.000	.000	.000				
Social Media Motive	Pearson Correlation	.883**	.878**	.866**	.863**	1		
	Sig. (2-tailed)	.000	.000	.000	.000			
Consumer Engagement	Pearson Correlation	.734**	.527**	.756**	.605**	.753**	1	
	Sig. (2-tailed)	.000	.000	.000	.000	.000		
Brand Loyalty	Pearson Correlation	.074	.140	.246	.194	.162	.191	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	

\*\*. Correlation is significant at the 0.01 level (2-tailed).

The table shows that there is strong positive relationship among information and consumer engagement, as the correlation among both variables placed at 0.734 that expresses 1% level of significance. Whereas the entertainment illustrates strong positive correlation with consumer engagement is 0.527 that shows 1% level of significance. The correlation among self-seeking status and consumer engagement stands at 0.756 that indicates perfect relationship as increase in self-seeking status would improve the level of consumer engagement. While, the correlation among social aspect and consumer engagement also shows strong positive relationship, as the correlation among both variables stands at 0.605 with 1% level of significance. Correlation between brand engagement and brand loyalty is 0.191 which shows strong positive relation. Overall, all the independent variables; information, entertainment. Self-status seeking and social aspects has directly linked with the dependent variable consumer engagement and consumer engagement is linked with consumer loyalty.



**Figure 2:** Path diagram through SEM

**Table 4:** Analysis of path diagram through SEM

			Estimate	S.E.	C.R.	P	Label
Social Media Motive	→	Consumer Engagement	.953	.052	18.235	***	
Consumer Engagement	→	Brand Loyalty	.094	.064	1.462	.144	

This table depicts that social media motives i. information, entertainment, self-seeking status and social aspects, significantly impact on consumer engagement. Results shows that when Social Media Motive goes up by 1, Consumer Engagement goes up by 0.953. The regression weight estimate, .953, has a standard error of about .052. Dividing the regression weight estimate by the estimate of its standard error gives  $z = .953/.052 = 18.235$ . In other words, the regression weight estimate is 18.235 standard errors above zero. The probability of getting a critical ratio as large as 18.235 in absolute value is less than 0.001. In other words, the regression weight for Social Media Motive in the prediction of Consumer Engagement is significantly different from zero at the 0.001 level (two-tailed). This results accept all the hypotheses in which social media motives significantly impact on consumer engagement.

Table also depicts that consumer engagement does not significantly support or peruse consumers brand loyalty. When Consumer Engagement goes up by 1, Brand Loyalty goes up by 0.094. The regression weight estimate, .094, has a standard error of about .064. The regression weight estimate, .094, has a standard error of about .064. Dividing the regression weight estimate by the estimate of its standard error gives  $z = .094/.064 = 1.462$ . In other words, the regression weight estimate is 1.462 standard errors above zero. The probability of getting a critical ratio as large as 1.462 in absolute value is .144. In other words, the regression weight for Consumer Engagement in the prediction of Brand Loyalty is not significantly different from zero at the 0.05 level (two-tailed). This results accept the hypothesis in which brand engagement does impact on consumers brand loyalty but insignificantly.

## V. CONCLUSION

The main objective of the research is to gage impact of social media motives i.e., information, entertainment, social aspect and self-seeking status on consumers engagement and impact of engagement on consumers brand loyalty. It has been evident that consumer engagement is the most important perspective for

companies because of rush in the market trends. Consumers are always looking for more as many options are available everywhere these days. Consumers are having eyes on social media trends, they are keenly observing everything posted by companies. It is important for companies to not only actively show their presence on social media but also put the content which attract and engage the consumers with them. This study also results into the agreement of above argument. Companies who provide the information based content, release and advertised with entertainment aspect, enhance self-seeking status of consumers and social aspect, does engage consumers with them successfully. For the survival of companies in this mushroom growth era, it is essential for companies to standout. However engagement does not significantly support loyalty in consumer. The reason could be the population we have chosen is new to social media exposure. It will take time to expand and build trust in consumers mind to develop loyalty for companies on the bases of social media motives and engagement.

### **Practical Implication**

With the help of this conclusion companies it is build that marketing strategies that are fixated on these four motives in order to engage and therefore maintain the interest and attention of individuals. This engagement will then hopefully lead to individuals being loyal to the company of interest and not to switch a competing company. As individuals could become loyal and promoters of a company which in turn would lead to more people having their purchase decisions influenced (Ellabban, O., & Abu-Rub, H. 2016; Kim, N., & Kim, W. 2018). This would also imply that companies could make more sales or obtain more attention just by knowing how to go about engaging consumers on social media, which is by focusing on information, entertainment, social aspect and self-status seeking aspects. As the companies will gain knowledge about what motivates consumers to engage on social media, due to the results found in this study, they will also be able to produce social media marketing.

### **Limitation and Direction for Future Research**

Purposive sampling of the non-probability sampling technique was used rather than probability sampling which limits the generalizability of findings, it is recommended to carry out the research in future with probability sampling technique to get more validate findings. Questionnaire was adapted in the study due to time constraint, more scale could be develop to get more accurate responses. This model is tested in the population where consumers are new to social media therefore the results on engagement towards loyalty of the consumers are insignificant, this model could be tested in developed social media societies and communities where consumers are much aware of all the features.

### **REFERENCES**

1. Baek, K., Holton, A., Harp, D., & Yaschur, C. (2011). The links that bind: Uncovering novel motivations for linking on Facebook. *Computers in Human Behavior*, 27(6), 2243-2248.
2. Barger, V., Peltier, J. W., & Schultz, D. E. (2016). Social media and consumer engagement: a review and research agenda. *Journal of Research in Interactive Marketing*, 10(4), 268-287.
3. Bessenoff, G. R. (2006). Can the media affect us? Social comparison, self-discrepancy, and the thin ideal. *Psychology of women quarterly*, 30(3), 239-251.
4. Bloemer, J. M., & Kasper, H. D. (1995). The complex relationship between consumer satisfaction and brand loyalty. *Journal of economic psychology*, 16(2), 311-329.
5. Brodie, R. J., Hollebeek, L. D., & Smith, S. D. (2011). Engagement: An important bridging concept for the emerging SD logic lexicon. Paper presented at the Proceedings.
6. Brodie, R. J., Ilic, A., Juric, B., & Hollebeek, L. (2013). Consumer engagement in a virtual brand community: An exploratory analysis. *Journal of business research*, 66(1), 105-114.

7. Chu, S.-C., & Kim, J. (2018). The current state of knowledge on electronic word-of-mouth in advertising research. *International Journal of Advertising*, 37(1), 1-13.
8. Confente, I., Buratti, A., & Russo, I. (2015). The role of servitization for small firms: drivers versus barriers. *International Journal of Entrepreneurship and Small Business*, 26(3), 312-331.
9. Correa, T., Hinsley, A. W., & De Zuniga, H. G. (2010). Who interacts on the Web?: The intersection of users' personality and social media use. *Computers in Human Behavior*, 26(2), 247-253.
10. Davis, R., Piven, I., & Breazeale, M. (2014). Conceptualizing the brand in social media community: The five sources model. *Journal of retailing and consumer services*, 21(4), 468-481.
11. Dessart, L. (2017). Social media engagement: a model of antecedents and relational outcomes. *Journal of Marketing Management*, 33(5-6), 375-399.
12. Dholakia, U. M., Bagozzi, R. P., & Pearo, L. K. (2004). A social influence model of consumer participation in network-and small-group-based virtual communities. *International journal of research in marketing*, 21(3), 241-263.
13. Dimitriu, R., & Guesalaga, R. (2017). Consumers' social media brand behaviors: uncovering underlying motivators and deriving meaningful consumer segments. *Psychology & Marketing*, 34(5), 580-592.
14. Dolan, R., Conduit, J., Fahy, J., & Goodman, S. (2017). Social media: communication strategies, engagement and future research directions. *International Journal of Wine Business Research*, 29(1), 2-19.
15. Drury, G. (2008). Opinion piece: Social media: Should marketers engage and how can it be done effectively? *Journal of direct, data and digital marketing practice*, 9(3), 274-277.
16. Ellabban, O., & Abu-Rub, H. (2016). Smart grid customers' acceptance and engagement: an overview. *Renewable and Sustainable Energy Reviews*, 65, 1285-1298.
17. Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook "friends:" Social capital and college students' use of online social network sites. *Journal of Computer-Mediated Communication*, 12(4), 1143-1168.
18. Gambetti, R. C., & Graffigna, G. (2010). The concept of engagement. *International Journal of Market Research*, 52(6), 801-826.
19. Gummerus, J., Liljander, V., Weman, E., & Pihlström, M. (2012). Customer engagement in a Facebook brand community. *Management Research Review*, 35(9), 857-877.
20. Hamilton, J. R., & Tee, S. (2013). Understanding social network site consumer engagements.
21. Heinonen, K. (2011). Consumer activity in social media: Managerial approaches to consumers' social media behavior. *Journal of Consumer Behaviour*, 10(6), 356-364.
22. Hennig-Thurau, T., Malhotra, E. C., Friege, C., Gensler, S., Lobschat, L., Rangaswamy, A., & Skiera, B. (2010). The impact of new media on customer relationships. *Journal of service research*, 13(3), 311-330.
23. Hollebeek, L. D., Glynn, M. S., & Brodie, R. J. (2014). Consumer brand engagement in social media: Conceptualization, scale development and validation. *Journal of interactive marketing*, 28(2), 149-165.
24. Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business horizons*, 53(1), 59-68.
25. Kietzmann, J. H., Hermkens, K., McCarthy, I. P., & Silvestre, B. S. (2011). Social media? Get serious! Understanding the functional building blocks of social media. *Business horizons*, 54(3), 241-251.
26. Kim, N., & Kim, W. (2018). Do your social media lead you to make social deal purchases? Consumer-generated social referrals for sales via social commerce. *International Journal of Information Management*, 39, 38-48.
27. Kim, Y., Sohn, D., & Choi, S. M. (2011). Cultural difference in motivations for using social network sites: A comparative study of American and Korean college students. *Computers in Human Behavior*, 27(1), 365-372.
28. Krämer, N. C., & Winter, S. (2008). Impression management 2.0: The relationship of self-esteem, extraversion, self-efficacy, and self-presentation within social networking sites. *Journal of media psychology*, 20(3), 106-116.
29. Lin, K.-Y., & Lu, H.-P. (2011). Why people use social networking sites: An empirical study integrating network externalities and motivation theory. *Computers in Human Behavior*, 27(3), 1152-1161.
30. Liu, L., Lee, M. K., Liu, R., & Chen, J. (2018). Trust transfer in social media brand communities: The role of consumer engagement. *International Journal of Information Management*, 41, 1-13.
31. Mangold, W. G., & Faulds, D. J. (2009). Social media: The new hybrid element of the promotion mix. *Business horizons*, 52(4), 357-365.
32. Martin, C. L., & Goodell, P. W. (1991). Historical, descriptive and strategic perspectives on the construct of product commitment. *European Journal of Marketing*, 25(1), 53-60.
33. Marwick, A. E. (2012). The public domain: Social surveillance in everyday life. *Surveillance & Society*, 9(4), 378.

34. Men, L. R., & Tsai, W.-H. S. (2013). Toward an integrated model of public engagement on corporate social networking sites: Antecedents, the process, and relational outcomes. *International Journal of Strategic Communication*, 7(4), 257-273.
35. Moliner Tena, M. Á., Monferrer Tirado, D., & Estrada Guillén, M. (2018). Consequences of customer engagement and customer self-brand connection.
36. Muntinga, D. G., Moorman, M., & Smit, E. G. (2011). Introducing COBRAs: Exploring motivations for brand-related social media use. *International Journal of Advertising*, 30(1), 13-46.
37. Nadeem, W., Andreini, D., Salo, J., & Laukkanen, T. (2015). Engaging consumers online through websites and social media: A gender study of Italian Generation Y clothing consumers. *International Journal of Information Management*, 35(4), 432-442.
38. Pagni, M., Hofacker, C. F., & Goldsmith, R. E. (2011). The influence of personality on active and passive use of social networking sites. *Psychology & Marketing*, 28(5), 441-456.
39. Park, N., Kee, K. F., & Valenzuela, S. (2009). Being immersed in social networking environment: Facebook groups, uses and gratifications, and social outcomes. *CyberPsychology & Behavior*, 12(6), 729-733.
40. Rodgers, S. (2002). The interactive advertising model tested: The role of motives in ad processing. *Journal of Interactive Advertising*, 2(2), 22-33.
41. Rogers, C. R., & Carmichael, L. (1951). *Client--Centered Therapy: Its Current Practice, Implications, and Theory*, with Chapters Contributed by Elaine Dorfman, Thomas Gordon, and Nicholas Hobbs: Houghton Mifflin Company.
42. Sangwan, S. (2005). Virtual community success: A uses and gratifications perspective. Paper presented at the System Sciences, 2005. HICSS'05. Proceedings of the 38th Annual Hawaii International Conference on.
43. Sashi, C. (2012). Customer engagement, buyer-seller relationships, and social media. *Management decision*, 50(2), 253-272.
44. Shao, G. (2009). Understanding the appeal of user-generated media: a uses and gratification perspective. *internet Research*, 19(1), 7-25.
45. Simon, F., & Tossan, V. (2018). Does brand-consumer social sharing matter? A relational framework of customer engagement to brand-hosted social media. *Journal of business research*, 85, 175-184.
46. Sung, Y., Kim, E., & Choi, S. M. (2018). # Me and brands: understanding brand-selfie posters on social media. *International Journal of Advertising*, 37(1), 14-28.
47. Tripathi, M. (2009). Customer Engagement-Key to Successful Brand Building. Vilakshan: The XIMB Journal of Management, 6(1).
48. Tsai, W.-H. S., & Men, L. R. (2017). Consumer engagement with brands on social network sites: A cross-cultural comparison of China and the USA. *Journal of Marketing Communications*, 23(1), 2-21.
49. Tuten, T. L. (2008). Advertising 2.0: social media marketing in a web 2.0 world: social media marketing in a web 2.0 world: ABC-CLIO.
50. Valenzuela, S., Park, N., & Kee, K. F. (2009). Is there social capital in a social network site?: Facebook use and college students' life satisfaction, trust, and participation. *Journal of computer-mediated communication*, 14(4), 875-901.
51. Van Doorn, J., Lemon, K. N., Mittal, V., Nass, S., Pick, D., Pirner, P., & Verhoef, P. C. (2010). Customer engagement behavior: Theoretical foundations and research directions. *Journal of service research*, 13(3), 253-266.
52. Van Laer, T., De Ruyter, K., & Cox, D. (2013). A walk in customers' shoes: How attentional bias modification affects ownership of integrity-violating social media posts. *Journal of interactive marketing*, 27(1), 14-27.
53. Yoshida, M., Gordon, B. S., Nakazawa, M., Shibuya, S., & Fujiwara, N. (2018). Bridging the gap between social media and behavioral brand loyalty. *Electronic Commerce Research and Applications*, 28, 208-218.
54. Zailskaitė-Jakštė, L., & Kuvykaitė, R. (2016). Conceptualizing the social media communication impact on consumer based brand equity. *Trends Economics and Management*, 10(25), 68-74.
55. Zhang, T., Abound Omran, B., & Cobanoglu, C. (2017). Generation Y's positive and negative eWOM: use of social media and mobile technology. *International Journal of Contemporary Hospitality Management*, 29(2), 732-761.
56. Zhu, Y.-Q., & Chen, H.-G. (2015). Social media and human need satisfaction: Implications for social media marketing. *Business horizons*, 58(3), 335-345.
57. Adrutdin, K. F., Ali, A., Hassan, S., Jaafar, J., A Rahim, N. S., & Qureshi, M. I. (2018). The relationship between knowledge for customer and service quality on customer satisfaction: A Study on UniKL MITEC student services. *International Journal of Engineering and Technology(UAE)*, 7(2), 69-72. <https://doi.org/10.14419/ijet.v7i2.29.13132>



58. Ahmad, A., Irshad, Z., & Qureshi, M. I. (2016). Impact of Transformational Leadership on Organizational Performance: A Case Study of Banks in Pakistan. *IBA Business Review*, 11(2).
59. Ahmad, M. H. B. H., Sarmin, N. H., & Qureshi, M. I. (2018). Selected Peer-Reviewed Articles from the International Conference on Science, Engineering, Management and Social Sciences (ICSEMSS 2016), Johor Bahru, Malaysia, 6–8 October, 2016. *Advanced Science Letters*, 24(6), 3823–3824. <https://doi.org/10.1166/asl.2018.13052>
60. Al-Kumaim, N. H., Hassan, S. H., Mahmood, A., Qureshi, M. I., & Khan, N. (2020). Exploring the determinants that control information overload and postgraduate research performance: conceptual model and implications for future research. *International Journal of Psychosocial Rehabilitation*, 24(1), 918–943. <https://doi.org/10.37200/IJPR/V24I1/PR200198>
61. Alamer, A. R. A., Salamon, H. Bin, Qureshi, M. I., & Rasli, A. M. (2015a). A new business process and outcome oriented corporate social responsibility index for islamic banking. *International Journal of Economics and Financial Issues*, 5(1S), 207–214. Retrieved from <http://www.econjournals.com/index.php/ijefi/article/view/1386>
62. Alamer, A. R. A., Salamon, H. Bin, Qureshi, M. I., & Rasli, A. M. (2015b). CSR's measuring corporate social responsibility practice in Islamic banking: A review. *International Journal of Economics and Financial Issues*, 5(Special Issue)), 198–206.
63. Ali Alamer, A. R., Salamon, H. Bin, Qureshi, M. I., & Rasli, A. M. (2015). How do we measure corporate social responsibility of islamic banks through their business processes and oriented outcomes? *International Journal of Economics and Financial Issues*, 5((Special Issue), 190–197.
64. Ali, M., & Qureshi, M. I. (2018). Social entrepreneurs' musings: A premise for value creation. *International Journal of Engineering and Technology(UAE)*, 7(4), 411–414. <https://doi.org/10.14419/ijet.v7i4.28.22622>
65. Ali, M., Qureshi, M. I., & Mustapha, I. (2019). SROI in Social Enterprises: A Systematic Literature Review of Recent Trends and Future Agenda. *Societal Entrepreneurship and Competitiveness*, 203–226. <https://doi.org/10.1108/978-1-83867-471-720191014>
66. Arai, T., Fuji, K., & Yanagida, M. (2018). Moderating effect of social support on the relationship between psychopathic traits and immoral behaviors. *Shinrigaku Kenkyu*, 89(1), 1–11. <https://doi.org/10.4992/jjpsy.89.16003>
67. Ashfaq, M. (2018). Effect Of Workplace Spirituality On The Affective Commitment Of Pakistani Bank Employees. *The European Proceedings of Social & Behavioural Sciences*, 40, 525–532. <https://doi.org/10.15405/epsbs.2018.05.41>
68. Ashfaq, M., Muhammad Imran Qureshi, D., Irum, S., Fadillah Ismail, D., & Rabeatul Husna, D. (2018). Mediating Role of Psychological Contract in the Relationship between Workplace Spirituality and Affective Commitment. *International Journal of Engineering & Technology*, 7(3.30), 369. <https://doi.org/10.14419/ijet.v7i3.30.18335>
69. Ashfaq, M., Qureshi, I., Irum, S., Mehmood, N., Khan, N., & Ahmad, H. (2020). Effect of green logistics on sustainability performance in Malaysia manufacturing companies. *International Journal of Psychosocial Rehabilitation*, 24(1), 784–792. <https://doi.org/10.37200/IJPR/V24I1/PR200183>
70. Baharum, Z., Hanif, M., Qureshi, M. I., Raidzuan, S. N. M., & Mahdin, H. (2018). Simulation model on movement of goods in sea freight for small and medium enterprise. *Indonesian Journal of Electrical Engineering and Computer Science*, 11(3), 1214–1222. <https://doi.org/10.11591/ijeecs.v11.i3.pp1214-1222>
71. Baharum, Z., Venkatesan, Y. R., Raidzuan, S. N. M., & Qureshi, M. I. (2018). The development of simulation model on environmental uncertainty factors for interval project completion. *International Journal of Engineering and Technology(UAE)*, 7(2), 62–66. <https://doi.org/10.14419/ijet.v7i2.29.13130>
72. Bashir, R. (2010). Microfinance Goes Macro: Impact on Poverty Alleviation in Pakistan. *Journal of Independent Studies and Research-Management, Social Sciences and Economics*, 8(1), 29–40. <https://doi.org/10.31384/jisrmsse/2010.08.1.3>
73. Bhatti, Mansoor Nazi, Qureshi, M. I., & Zaman, K. (2010). Future of Air Travel Industry: Relation of Growth and Consumer Satisfaction. *International Journal of Economics and Research*, 01(01), 19–37.
74. Bhatti, Mansoor Nazir. (2018). Relationship Between Personality Traits And Academic Stress Among Postgraduate Students In Pakistan. *The European Proceedings of Social & Behavioural Sciences*, 40, 583–591. <https://doi.org/10.15405/epsbs.2018.05.47>
75. Bhatti, Mansoor Nazir, Sami, A., & Qureshi, I. (2018). Personality and academic performance among graduate students. *Asia Proceedings of Social Sciences*, 2(3), 256–259. <https://doi.org/10.31580/apss.v2i3.454>
76. Bibi, S., Iftikhar, M., Qureshi, M. I., Khan, K., & Zaman, K. (2013). Exploring the relationship among professional competence , job satisfaction and Career development confidence of chefs : an empirical research in Pakistan, 60, 16489–16497.

77. Bhatia, L.C., Naik, R.H. Clinical profile of acute myocardial infarction in elderly patients (2013) *Journal of Cardiovascular Disease Research*, 4 (2), pp. 107-111.  
DOI: 10.1016/j.jcdr.2012.07.003
78. Sohrabi, Y., Hosseinnafez, A., Yarmohammadi, A., Mirzaei, N., Ahmadpour, M., Saleh, E., Ghadiri, S.K., Adabi, S. Investigating the level of consumable oils peroxide value in bistros (West of Iran) (2018) *International Journal of Pharmaceutical Research*, 10 (3), pp. 354-359.  
<https://www.scopus.com/inward/record.uri?eid=2s2.085049613194&partnerID=40&md5=bf5ae99a31cf6ca02a658df9d9744bdb>
79. Firas Hassan, Salam Abd AlQadeem Mohammed, Anil Philip, Ayah Abdul Hameed, Emad Yousif. "Gold (III) Complexes as Breast Cancer Drug." *Systematic Reviews in Pharmacy* 8.1 (2017), 76-79.  
Print. doi:10.5530/srp.2017.1.13